United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin

Soil Survey of Dunn County, Wisconsin

Subset of Major Land Resource Area 105

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How To Use This Soil Survey

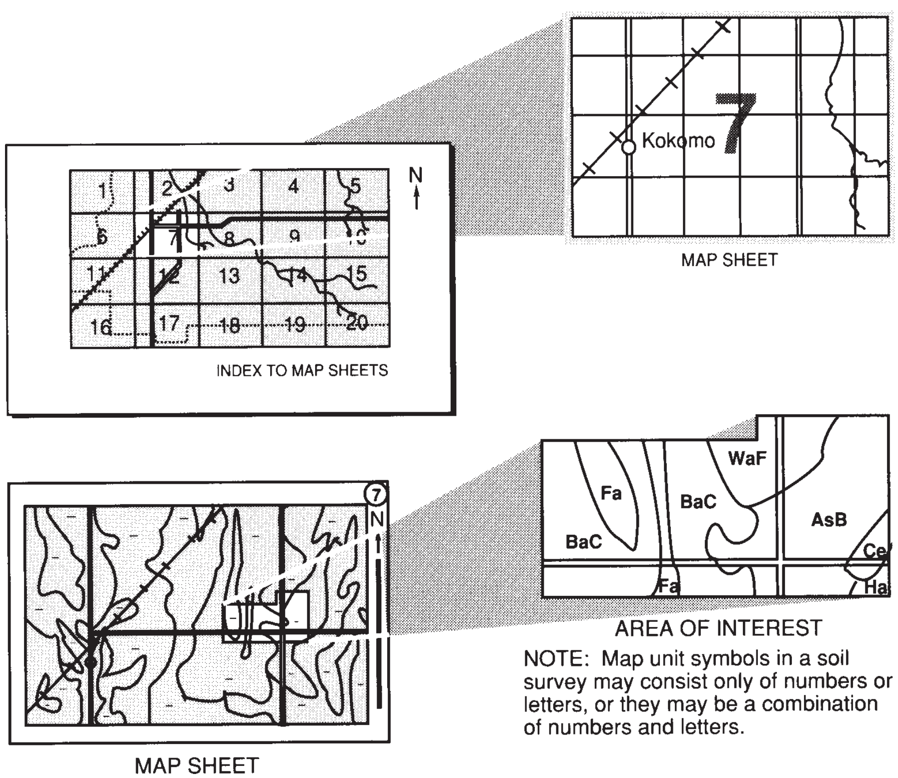
Soil Maps

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

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

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described. The map symbols and names also appear as bookmarks, which link directly to the appropriate page in the publication.

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



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

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

Major fieldwork for this soil survey was completed in 2000. Soil names and descriptions were approved in 2003. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2003. This survey was made cooperatively by the Natural Resources Conservation Service and the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin. The survey is part of the technical assistance furnished to the Dunn County Land Conservation Department. Technical and clerical assistance was provided by the Dunn County Land Conservation Department. The survey was partially funded by Dunn County.

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.

Cover: *Upper left*—View from the Elkmound observation tower of the historic prairie areas common in the Chippewa River Valley. Irrigation makes these soils highly productive for row crops, such as corn, kidney beans, potatoes, and soybeans. Although this area supports few dairy farms, cash cropping is the predominant land use. This area is particularly susceptible to wind erosion. *Upper right*—Dairy farming has been the mainstay of the agricultural economy in the survey area. Growing hay reduces the hazard of erosion on cropland and minimizes the sedimentation of rivers and streams. *Lower left*—A bald eagle soars above the Chippewa River. Dunn County is dissected by a number of river systems, including the Chippewa, Red Cedar, Hay, and Eau Galle Rivers. Three major impoundments in the county—Lake Menomin, Tainter Lake, and Lake Eau Galle—provide a variety of recreational opportunities. Sedimentation and algal blooms, caused by high levels of phosphorus, are major resource concerns. *Lower right*—The increase in industrial development and the proximity to Minneapolis/St. Paul have resulted in an increase in rural residential housing.

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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Where To Get Updated Information

The soil properties and interpretations included in this survey were current as of April 2003. More current information may be available from the Natural Resources Conservation Service (NRCS) Field Office Technical Guide at Menomonie, Wisconsin, or online at http://www.nrcs.usda.gov/technical/efotg. The data in the Field Office Technical Guide are updated periodically.

More current information may also be available through the NRCS Soil Data Mart Website at http://soildatamart.nrcs.usda.gov/

Additional information about soils and about NRCS is available through the Wisconsin NRCS Web page at http://www.wi.nrcs.usda.gov.

For further information, please contact:

USDA, Natural Resources Conservation Service
Menomonie Service Center
390 Red Cedar Street, Suite C
Menomonie, WI 54751-2265
Phone: 715-232-2614

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. 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. The location of each soil is shown on the soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Patricia S. Leavenworth
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Natural Resources Conservation Service

Location of Dunn County and MLRA 105 in Wisconsin.

Soil Survey of Dunn County, Wisconsin, Subset of Major Land Resource Area 105

By Theron A. Meyer, Natural Resources Conservation Service

Fieldwork by Deanna M. Anderson, Roger A. Dahl, Donna E. Ferren-Guy,
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United States Department of Agriculture, Natural Resources Conservation Service,
in cooperation with
the Dunn County Land Conservation Department and the Research Division of the
College of Agricultural and Life Sciences, University of Wisconsin

How This Survey Was Made

This survey was made to provide updated information about the soils and miscellaneous areas in the survey area, which includes Major Land Resource Area 105, Northern Mississippi Valley Loess Hills. The majority of MLRA 105 occurs in Wisconsin. The MLRA includes all or parts of 21 counties in western Wisconsin, 7 counties in southeastern Minnesota, 9 counties in northeastern Iowa, and 4 counties in northwestern Illinois.

Major Land Resource Areas (MLRAs) are geographically associated land resource units that share a common land use, elevation and topography, climate, water, soils, and vegetation (USDA, 1981). Dunn County is a subset of MLRA 105, Northern Mississippi Valley Loess Hills, but it is also characterized by landscapes in the northern part of the county that are more similar to MLRA 90, Central Wisconsin and Minnesota Thin Loess and Till; areas in the western part of the county that are more similar to MLRA 104, Eastern Iowa and Minnesota Till Prairies; and areas scattered throughout the central and southern parts of the county that are more similar to MLRA 91, Wisconsin and Minnesota Sandy Outwash. Map unit design is based on documentation of the occurrence of soil components throughout the MLRA.

The information includes a brief description of the soils and miscellaneous areas and interpretive tables showing soil properties and the subsequent effects on suitability, limitations, and management for specified uses. During the fieldwork for this survey, 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 landscape or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate 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 observed. The maximum depth of observation was about 80 inches (6.7 feet). Soil scientists noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil 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. Interpretations are modified as necessary 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 zone in which the soil moisture status is wet within certain depths in most years, but they cannot predict that this zone 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.

In some parts of the survey area, the soil scientists were denied access. The reliability of information on the maps in these areas is limited, since the soil lines were projected using remote sensing techniques.

This soil survey updates the survey of Dunn County published in 1975 (USDA, 1975). It provides additional information and has larger maps, which show the soils in greater detail. The descriptions, names, and delineations of the soils in this county may not fully agree with those of the soils in the earlier survey of Dunn County or 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.

The maps and soil descriptions in the 1975 survey were used as a reference for new soil map units and to plan soil transects. Before the fieldwork was begun, black-and-white aerial photographs, taken in the spring of 1992, and color aerial photographs, taken in the spring of 1995 and enlarged to a scale of 1:12,000, were studied. Soil scientists studied U.S. Geological Survey topographic maps to relate land and image features. Sample areas were selected to represent the major landscapes in the county. These areas were investigated more closely than the rest of the county. Extensive notes were taken on the composition of map units in these preliminary study areas.

Some areas required remapping, especially where the previous depth of observation did not describe important underlying soil materials, including bedrock, perched and apparent water tables, and contrasting textures. Adjustments of slope lines were made because of improvements in aerial photography and because some slope class ranges used in the past were too broad for current uses.

Formation and Classification of the Soils

This section relates the soils in the survey area to the major factors of soil formation and describes the system of soil classification.

Formation of the Soils

Soil is produced by the action of soil-forming processes on materials deposited or accumulated by geologic forces. The characteristics and properties of soil in a given area are determined by (1) the physical and mineralogical composition of the parent material; (2) the climate under which the soil material has accumulated and existed since accumulation; (3) the living organisms on and in the soil, mainly vegetation; (4) the relief, or lay of the land; and (5) the length of time the forces of soil formation have acted on the soil material. The relative effect of each of these factors is reflected in the soil profile.

The interaction of these factors during the transformation of the parent material into soil generates complex physical, chemical, and biological processes that cause minerals to become weathered and organic matter to accumulate. Material in suspension or in solution moves downward through the soil to form distinct layers, or horizons, in the soil. These layers—surface layer, subsurface layer, subsoil, and substratum—are defined in the Glossary.

In Dunn County, differences in parent material, vegetation, relief, and time account for most of the differences among the soils. Climate is fairly uniform throughout the county.

All five factors of soil formation are interrelated. When one factor changes, changes in the other four factors result. The following paragraphs describe the factors of soil formation as they relate to the soils in the survey area.

Climate

Climate influences soil formation by providing moisture and heat necessary for the weathering of parent material. Water dissolves soluble materials and transfers nutrients to the lower parts of the soil. Water also is needed to alter minerals to clay and transfer the clay to the lower layers. Reaction, or pH, is largely influenced by climate. Temperature affects the rate at which chemical reactions proceed. Chemical reactions are slower at freezing than at a higher temperature. Moisture and temperature affect the kinds of plants that grow on the soil. Further accumulation and decomposition or organic matter may be influenced by moisture and temperature and by vegetation.

The effects of climate are modified by landscape setting and parent material. Relatively large amounts of water are available for soil-forming processes in loess on the hill summits. Little is available for plants in outwash on the valley trains, where much of the rainfall passes through the soil rapidly or where slopes are steep and water runs off quickly. Climate may not remain constant throughout the development of the soil. When drastic climate changes take place, the soil-forming processes most likely are altered and a new cycle of soil formation begins. These climate changes can modify the time factor, as the age of the new soil development must be measured from the beginning of the climatic change. Dunn County's oldest landscapes have most likely seen several climatic changes and gone through several cycles of soil formation.

Wind can affect the development of soil by adding or removing fine particles of soil or organic matter. It affects the moisture content of soils by influencing the rate of evaporation.

Climate can also have more localized effects. For example, north- and east-facing slopes tend to be cooler and wetter than south- and west-facing slopes. Depressional areas generally have cooler temperatures for a longer part of the year than summits and slopes of hills.

Dunn County has a cool, subhumid continental climate that favors the growth of trees and the formation of leached, acid soils with a thin, dark surface layer and a clay-enriched subsoil. Present climatic differences within the county are too small to have resulted in major differences among the soils.

Living Organisms

Living organisms, both plants and animals, affect soil formation by providing organic matter and transferring nutrients from the lower layers of the soil to the upper layers. Plants influence the development of specific layers in the soil. Vegetation influences the rate at which clay is transferred from the surface layer to the subsoil. Plants and animals are related to other factors of soil formation, such as soil microclimate, parent material, and landscape setting, all of which collectively can determine the vegetation that grows on a soil.

At the time of settlement, forests covered most of Dunn County. Mean annual precipitation is sufficient for the growth of trees on any of the soils; however, natural fires on some soils, such as Finchford soils, were common and helped to maintain the grass vegetation. Native Americans who lived in the area and used these soils also used fire to maintain grass vegetation for ease of cultivation and for attracting game animals. When protected from fire, these soils would follow a succession from grass and forbs to shrubs and finally to oak and pine forest. Many soils on the broad valley trains along the Chippewa, Eau Galle, Hay, Mississippi, Red Cedar, and other rivers formed under tall grass prairie. Areas between the prairies and the deciduous forests were called savannas.

The most striking feature of a prairie or savanna soil profile is the thick layer of organic matter accumulation—commonly 15 inches or more—and the somewhat darkened subsoil beneath. Examples of this process are the thick, darkened A and AB horizons in the Finchford soils. Prairie soils contain as much as 120 tons of organic matter per acre, compared with 70 tons per acre for forested soils. A dense network of grass roots fills the profile, and most of the roots extend to a depth of 5 to 7 feet. Forb roots of various shapes and lengths are interspersed; some penetrate to a depth of 20 feet. In contrast to forest soils, where organic matter enters the soil from the surface and must be “plowed in” by earthworms, the organic matter deeply incorporated in prairie soils comes from the roots as they decay in place. There is little input from litter at the surface.

Mound-building ants play an important role in the development of prairie soils. They mix and aerate the soil as they build their tunnels and bring up nutrients and clay particles from the subsoil. Their activities increase the levels of potassium and phosphorus in the topsoil.

When a prairie burns, nitrogen in the litter is oxidized and escapes from the prairie ecosystem. Nitrogen is returned to the system through nitrogen-fixing bacteria in the root nodules of the plentiful prairie legumes and also through free-living nitrogen-fixing bacteria in the root zones of the prairie grasses.

It was the deep, rich prairie soils that eventually led to the nearly total conversion of tall grass prairie to cropland (Packard and Mutel, 1997).

Topography

Topography is an important factor in soil formation because it affects drainage, aeration, and erosion.

Because topography influences runoff and drainage, it can affect the types of vegetation present and the chemical changes on and in the soil. Soil profile development occurs most rapidly on well drained, gentle slopes. Profile development is very slow on steep slopes, where runoff is rapid, the rate of water infiltration is slow, and geologic erosion removes the surface soil almost as quickly as it forms. Excessive runoff reduces the amount of water that is available for leaching the soil and for use by plants, and it can increase the hazard of erosion. Topographic position on the landscape affects the drainage class of the soil. Drainage has a distinct influence on soil formation.

Differences in topography can account for the formation of different soils in similar kinds of parent material.

Parent Material and Landscape Evolution

Robert W. Baker, Ph.D., geologist, University of Wisconsin-River Falls, and Kent M. Syverson, Ph.D., geologist, University of Wisconsin-Eau Claire, helped prepare this section.

Parent material largely determines the physical and chemical properties of the soil, such as the capacity or ability of the soil to store water and nutrients for plants and the rate at which water can pass through the soil.

In Dunn County, the soils formed in a wide variety of parent materials. The evolution of the landscape played the major role in the resultant parent materials.

Ancient Seas.—The ridge-and-valley landscape of Dunn County is the eroded remnants of an ancient plain that covered Wisconsin and the adjacent states. The development of the ridges and valleys from the ancient plain has spanned eons of time. Geologists divide this time frame based on rock mineralogy and fossils. A sequence of events through these eons of time shaped the present-day landscape.

About 540 million years ago, a series of shallow seas began to invade or transgress the low-lying parts of the continent. The onset of this invasion marks the beginning of the Cambrian Period, the earliest part of the Paleozoic Era.

Later, during the Ordovician Period of the Paleozoic Era, another invasion of the sea took place and about 70 percent of North America was under water. During

Cambrian and Ordovician time, streams carried upland sediment to the seas. The kinds of minerals and particle size of the sediment were dependent upon the chemical and physical makeup of the upland material and on the nearness to the mineral source.

The source probably varied with time as surrounding lands were elevated or lowered by subsidence or erosion (Austin, 1972). During the Cambrian, dominantly sandy sediment was deposited. Clastic sediment supply decreased during the Ordovician Period, so the sediment was characterized dominantly by the deposition of limy mud, a mixture of minerals and the remains of teeming plant and animal life. Mollusks, brachiopods, corals, and crinoids, animals that build calcium-carbonate skeletons, were common.

The sediment was cemented and compressed into rock. The sandy sediment formed sandstone, and the limy mud formed limestone, dolostone, or shale.

Pre-Illinoian Ice Age.—The Pleistocene Epoch, known as the ice age, is a more recent major geological event that helped to shape the present-day landscape. During this period, ice fields formed in the polar and mountainous regions and glaciers advanced several times into western Wisconsin (Attig, 1993). This pre-Illinoian glacial history is sketchy because of erosion and truncation of deposits by later glacial events, postglacial erosion, and limited exposures of glacial deposits. The earliest known glacial advance in western Wisconsin was from the west and has been called the Reeve Advance (Johnson, 1986). During the Reeve Advance, the Des Moines Lobe flowed eastward from Minnesota into western Wisconsin. The minimum extent of the ice is defined by the eastern boundary of tills of the Pierce Formation. In the western part of Dunn County, a thin mantle of till persists. This till is formally known as the Hersey Member of the Pierce Formation. In the unweathered state, typically below the depths of observation in Dunn County, the Hersey Member is consistently dark gray to black loam and is strongly calcareous. The weathered till is typically noncalcareous, yellowish brown, dark yellowish brown, light olive brown, or olive brown loam or clay loam. The calcareous nature and the color, texture, and lithology of the unweathered Hersey Member are typical of glacial deposits in Iowa and Minnesota that have northwestern (Manitoba) sources. The Reeve Advance occurred during pre-Illinoian time at least 460,000 years ago and possibly as much as 770,000 years ago (Baker and others, 1983). Hersey soils are associated with these till remnants.

Recent research in Wisconsin and Minnesota indicates that the deeply incised valley of the Upper Mississippi River and its adjacent tributaries was in existence well before mid-Pleistocene time. Stratigraphic relationships and Uranium-series and paleomagnetic dating strongly suggest that the deep landscape incision had already occurred prior to the occurrence of the first glaciers in this region (Baker and others, 1997).

Illinoian and Wisconsinan Glaciation.—The next glacial units observed in west-central Wisconsin were deposited by the Superior and Chippewa Lobes during the Illinoian or Early Wisconsinan Glaciations and are found as far south as Pierce and Dunn Counties. This glacial sediment is part of the River Falls Formation and was deposited by the Baldwin Advance of the Superior Lobe and the Dallas Advance of the Chippewa Lobe (Johnson, 1986). These units probably were deposited during the Late Illinoian or Early Wisconsinan Glaciations, but no accurate dates have been obtained (Attig and others, 1988). This major episode of glacial advance was followed by glacial retreat, a period of weathering, and then several episodes of Late Wisconsinan Glaciation, which may have entered into the northwestern-most corner of Dunn County.

Glaciers may have covered all of Dunn County, based on glacial evidence found in other counties (Clayton and others, 1991). Recent research has uncovered evidence 3 to 5 kilometers into an area in Eau Claire County formerly considered part of the Driftless Area. Lithology of the erratics suggest a northern Wisconsin source and an ice advance from the northeast during pre-Wisconsinan time. This proposed ice margin is within 15 miles of the Pepin-Eau Claire County line (Bement and Syverson, 1995).

Even if these later ice advances never reached Dunn County, the frigid glacial climate undoubtedly accelerated erosional processes in the area. Permafrost is believed to have persisted in central Wisconsin during the last part of the Wisconsinan Glaciation when the Laurentide Ice Sheet stood at its maximum extent. Permafrost resulted in arrested soil development and accelerated erosion of the landscape well beyond the ice sheet. Since the end of permafrost, the landscape has been relatively stable. The landscape continued to be modified, however, by many geomorphic processes (Attig, 1993). Valleys continued to widen, deepen, and lengthen. Streams continued to carve their way headward into the landscape. They intercepted many solution cavities in the dolostone layers. Rock was easily removed from these settings. Gravitational forces along with water carried the rock downslope, reducing the fragments from stones and boulders to cobbles and pebbles. This cobbly loamy colluvium is coarser textured and thinner near the shoulder slope and is finer and thicker where deposited near the footslopes. Dorerton soils are associated with loamy colluvium derived from dolostone on steep backslopes.

Resultant Bedrock Landscape.—The remaining bedrock-controlled plain, or Prairie du Chien surface, is the uppermost surface in the county. The only remaining member of the Prairie du Chien Group, the Oneota dolostone, forms the bedrock surface at the highest elevations on the landscape.

The Prairie du Chien surface is thinly mantled, in most areas, with a dominantly reddish, clayey pedisediment that is thickest on the ridgetops and becomes thinner downslope. The pedisediment is believed to be derived from the weathering and associated erosion of the bedrock surfaces above the Prairie du Chien during the long period of time between the retreat of the seas and the onset of the glacial age. It is likely that glaciation has altered and contributed to this clayey material in Dunn County. Texture is extremely variable, ranging from sandy to very clayey. The sediment contains an abundance of chert channers and flagstones. NewGlarus and Pepin soils are associated with the dolostone and the clayey pedisediment.

The Oneota Formation and the underlying Upper Cambrian sandstones and siltstones—the Jordan, St. Lawrence, Lone Rock, and Wonewoc Formations—are the influential bedrock types in the county. Where ridges are thinly capped by the more resistant Oneota dolostone and underlain by the softer Jordan sandstone, the tops are narrow, craggy, and castellated and the valleys tend to be V-shaped. Gaphill and Rockbluff soils are associated with the Jordan sandstone. Where the ridges are capped by the relatively soft Lone Rock sandstone and siltstone, the crests are broad and well rounded and the valleys are a mile or more in width. Norden and Urne soils are associated with the Lone Rock sandstone and siltstone.

Sandstone of the Wonewoc Formation occurs at the lower elevations on hills and at various depths underlying the valley trains. Soils associated with the Wonewoc sandstone formation are Boone and Elevasil soils on hills and Boplain soils on sand sheets and valley trains.

Dry Winds.—Another significant landscape modifier was wind. During the latter stages of the most recent ice age, called the Wisconsin stage, intense winds carried loess onto the landscapes. On hillslopes the Peoria Formation, deposited between about 12,000 and 26,000 years before present (Ruhe, 1969), is typically the only loess unit present. The mostly silt-sized particles were deposited on the deeply dissected land surface, much like a blanket of snow during winter storms. The unweathered basal portion of the Peorian Formation is massive and calcareous, and the weathered upper portion is leached and noncalcareous (Leigh and Knox, 1994). Loess is generally coarsest and thickest near large river valleys, and it becomes finer and thinner with increasing distance from the valleys. The main source of the loess was the valley floors of the Mississippi River and its tributaries (Ruhe, 1969). The loess can be more than 6 feet thick, or even thicker, on the broader summits near the main sources; it becomes thinner as ridges narrow and slope increases. Seaton soils formed in very deep loess. Where slope gradient and width of ridges are equal, the loess is thinnest on northwest aspects and thickest on southeast aspects.

Wind also moved the coarser particles of sand size into dunes in places on the valley trains where air currents were able to generate sufficient energy. Chelsea soils formed in eolian sand on dunes. Near the Chippewa and Red Cedar Rivers and other larger perennial rivers and streams, many valleys have a surficial mantle of eolian sand that lacks both the coarser sands and gravel common to the valley train and the discernible slip faces that are common with dunes. The source of this finer eolian sand mantle is the valley train. Drammen soils formed in eolian sand on sand sheets.

Melting Ice.—During the latter stages of the Pleistocene, which ended about 9,500 years ago, massive ice fields to the north and west melted. Torrential flows of meltwater swelled streams that served as meltwater outlets. The Hay, Chippewa, Red Cedar, and Eau Galle Rivers and their tributaries carried the meltwater from receding ice sheets. Large quantities of gravel and sand carried from the ice fields were deposited as outwash, forming the valley trains. Later successive river incisement left these coarse textured materials as terraces. Finchford and Plainfield soils are associated with these valley train terraces. The oldest terraces may be mantled by younger sand dunes and thick eolian sand sheets in the main valley.

In some smaller tributaries, terraces at similar elevations formed from much finer material through a unique process. Sediment aggradation from glacial meltwaters in the adjacent major river channels hydraulically dammed tributary mouths. This damming resulted in periodic flooding of the lower reaches of the tributaries, between about 18,000 and 13,000 years before present, creating slackwater conditions. During this same period, the loess blanket covering the sediment on the ridges and footslopes was partially stripped by erosion. Much of the eroded loess was deposited in valleys below as a thin layer, mostly of silt. Also during this period, large floods produced by glacial lake outbursts passed down the valley repeatedly, backflooding the lower reaches of tributaries and adding to the slackwater conditions in the tributaries (Bettis and others, 1992). Superior-Basin source floods carried distinctive reddish brown silty clays, but western-source floodwaters did not. Alluvial deposits underlying the tributary-valley terraces are predominantly laminated and thinly bedded silt that, in areas closer to the major river channel, is interbedded with sand. The dominance of silt reflects the significant contributions from local loess deposition on adjacent landscapes and slope erosion as well as the large silt load of the glacier-fed rivers. Beds of reddish brown clay are commonly interstratified with the silt. These clays may be a result of the Superior-Basin source floods, the clayey pedisediment present on the nearby ridgetops, or both. Ella, Bearpen, and Plumcreek soils are underlain by slackwater deposits.

The lower younger terraces are dominantly sandy and gravelly outwash in the Mississippi Valley and correlative terraces in some tributaries. Some swales and paleochannels on the terrace surface have a veneer of finer textured sediment that may be overbank deposits from later floods (Bettis and others, 1992).

Stream Cutting.—When the glacial ice retreated and the sediment-laden torrential flows ceased, the water level in the Mississippi River and its tributaries fell and a new incisement cycle, enhanced by a much-reduced sediment load, began in the valleys. Tributary streams cut into their flood plains, adjusting to the lowered water level of the Mississippi River. In a relatively short time period, a large portion of the flood plains of glacial times was removed. Narrow, dissected terraces, mere remnants of the original valley train, are all that remain. Plainfield soils formed on the narrow, very steep, elongated terrace risers.

Recent Deposition.—During the past 9,500 years, sediment has continually been deposited on the floor of flood plains. However, a dramatic change in the environment took place about 150 years ago. Agricultural practices of the European settlers destroyed the protective covering of sod and forest litter and accelerated erosion processes. In some drainageways this postsettlement alluvium is quite significant. Deposits of 2 to more than 5 feet of alluvium are common. Arenzville, Orion, and Ettrick soils formed in post-settlement silty alluvium.

Time

Time is required by climate, by plants, and by animals to form soil from the parent material. Various soils have developed over periods of time ranging from a few years to many thousands of years. The effect of time on soil is modified by all the other factors of soil formation.

The length of time in which soils are exposed at the surface is a modifying factor in soil formation. Soils can be no older than the age of the landscape surface upon which they form (Ruhe, 1975). Not all the soils that form the surface of the landscape in Dunn County are the same age. Landscapes erode back from their base level along streams and rivers to near the landscape summit. The summit remains stable, little affected by erosive forces. Where carbonates were present in the loess, they are typically deeply leached, and the soils are well developed and are relatively older than the soils downslope. Downslope erosion over long periods of time has exposed fresh material. The Lone Rock sandstone, for example, was exposed to weathering much later in time than the sediment overlying the Oneota dolostone formation several hundred feet higher on the landscape. Urne soils formed in the Lone Rock Formation and are therefore younger than the NewGlarus soils that formed in the Oneota Formation.

Another factor modifying the effects of time is the rate at which parent material can be transformed into soils. The small particles in loess, for example, weather relatively rapidly. On the other hand, the larger particles in sandstone bedrock and in outwash on valley trains have a high proportion of slowly weatherable minerals, such as quartz, and are transformed very slowly into soils that have distinct layers.

Landscape setting modifies the time factor because rainfall runs rapidly off steep slopes. Only a small amount of water enters the soil to form clay or leach carbonates and other soluble material.

Time is also modified by the effects of climate. The soils of Dunn County formed in a climate that has varied during their formation. During the early stages of soil formation, the climate was cold because of the proximity to glacial ice to the west, north, and east. The early vegetation consisted of conifers followed briefly by oaks. These species were short lived following the retreat of glacial ice northward. The ensuing climate was warmer and drier and caused prairie plants to migrate eastward (Borchart, 1950).

About 4,000 to 5,000 years ago, the climate became cooler and more moist. The big woods spread westward once again. Aspect and topography were also factors in the expansion of the woodland. Timber probably became established first on the sheltered north- and east-facing footslopes. Trees may have even persisted here during the eastward migration of the prairie. From these sheltered sites, timber spread out onto the silty and loamy terraces and upward onto the ridgetops. Except for broad sandy areas along major rivers, the county at the time of settlement was covered with woodland.

The character of the soils encroached upon by woodland changed in response to processes generated by the timber. Forests produce little organic matter, most of which accumulates on the soil surface. In contrast, the prairie soils build up large amounts of organic matter and form a thick dark surface layer. The organic matter produced by the decay of leaves, limbs, and trunks is more acid than that produced by prairie vegetation. The strong acids formed by water percolating through the surface litter and into the soil increased the mobility of clay, organic matter, and oxides and allowed them to be leached away or to accumulate in the subsoil. The dark surface layer of soils that had previously formed under prairie vegetation gradually became thinner. As clay and organic matter were removed, a thin bleached subsurface layer began to form just below the thinning surface layer. Clay and organic matter accumulated as thin waxy films on blocky peds in the subsoil and along cracks and pores formerly occupied by roots. Fully developed forest soils, such as Seaton and Norden soils, have a black or very dark brown surface layer 2 to 4 inches thick; an ashy, grayish subsurface layer that is low in clay and organic matter and is 5 to 10 inches thick; and a subsoil with structural development and clay and organic matter on blocky structural surfaces. When the land was cleared and cultivated, the thin surface and subsurface layers were commonly lost to erosion, and in many places tillage mixed the remaining upper layers with material from the upper part of the subsoil.

Some soils, such as Forkhorn and Meridian soils, reflect the influence of both prairie and woodland because prairie did not persist long enough to alter the woodland soils completely.

Assuming all other factors are equal, soils form more rapidly in warmer, more humid conditions than those of the present climate affecting Dunn County. Soils are frozen to some depth, and the soil-forming process is drastically reduced for much of the year in this area.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 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 1 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 Mollisol.

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 Aquoll (*Aqu*, meaning water, plus *oll*, from Mollisol).

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; 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 Endoaquolls (*Endo*, meaning within, plus *aquoll*, the suborder of the Mollisols that has an aquic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic 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 known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Fluvaquentic Endoaquolls.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, frigid Fluvaquentic Endoaquolls.

SERIES. The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series. An example is the Vancecreek series.

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in Dunn County. These descriptions are available on the Web at http://soils.usda.gov.

Table 1.--Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series)

Soil name	Family or higher taxonomic class
Aldo	Mixed, mesic Typic Udipsamments
Algansee	Mixed, mesic Aquic Udipsamments
Almena	Fine-silty, mixed, superactive, frigid Aquic Glossudalfs
Amery	Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs
Arenzville	Coarse-silty, mixed, superactive, nonacid, mesic Typic Udifluvents
Arland	Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs
Bearpen	Fine-silty, mixed, superactive, mesic Aquic Argiudolls
Beavercreek	Loamy-skeletal, mixed, active, nonacid, mesic Typic Udifluvents
Bilson	Coarse-loamy, siliceous, superactive, mesic Mollic Hapludalfs
Boone	Mesic, uncoated Typic Quartzipsamments
Boplain	Mixed, mesic Typic Udipsamments
Burkhardt	Sandy, mixed, mesic Typic Hapludolls
Cathro	Loamy, mixed, euic, frigid Terric Haplosaprists
Chaseburg	Coarse-silty, mixed, superactive, nonacid, mesic Typic Udifluvents
Chelsea	Mixed, mesic Lamellic Udipsamments
Chetek	Coarse-loamy, mixed, superactive, frigid Inceptic Hapludalfs
Churchtown	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Dakota	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Argiudolls
Dobie	Fine-silty, mixed, superactive, frigid Haplic Glossudalfs
Dorerton	Loamy-skeletal, mixed, active, mesic Typic Hapludalfs
Doritty	Fine-silty, mixed, superactive, frigid Haplic Glossudalfs
Drammen	Sandy, mixed, mesic Lamellic Hapludalfs
Dunnbot	Coarse-loamy, mixed, superactive, nonacid, mesic Mollic Udifluvents
Elbaville	Fine-loamy, mixed, superactive, mesic Glossic Hapludalfs
Elevasil	Coarse-loamy, siliceous, active, mesic Ultic Hapludalfs
*Elevasil, frigid	Coarse-loamy, siliceous, active, frigid Ultic Hapludalfs
Elkmound	Loamy, mixed, superactive, mesic Lithic Dystrudepts
Ella	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Ettrick	Fine-silty, mixed, superactive, mesic Fluvaquentic Endoaquolls
Farrington	Sandy, mixed, mesic Aquic Hapludolls
Finchford	Sandy, mixed, mesic Entic Hapludolls
Fivepoints	Clayey over loamy-skeletal, mixed, superactive, mesic Typic Hapludalfs
Fordum	Coarse-loamy, mixed, superactive, nonacid, frigid Mollic Fluvaquents
Forkhorn	Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
Gaphill	Coarse-loamy, siliceous, active, mesic Typic Hapludalfs
Garne	Sandy over loamy, mixed, active, mesic Typic Hapludolls
Hayriver	Coarse-loamy, mixed, active, frigid Typic Hapludalfs
Hersey	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Hiles	Fine-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
Hixton	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
*Hixton, frigid	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Hapludalfs
*Hixton, thin solum	Coarse-loamy, mixed, superactive, frigid Ultic Hapludalfs
Hoopeston	Coarse-loamy, mixed, superactive, mesic Aquic Hapludolls
Houghton	Euic, mesic Typic Haplosaprists
*Humbird	Coarse-loamy over clayey, mixed, semiactive, frigid Oxyaquic Ultic Haplorthods
Kalmarville	Coarse-loamy, mixed, superactive, nonacid, mesic Mollic Fluvaquents
Kert	Fine-loamy, mixed, superactive, frigid Aquic Glossudalfs

Table 1.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Kevilar	Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
Komro	Sandy, mixed, mesic Entic Hapludolls
Lows	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Mollic Endoaquepts
Markey	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists
Meehan	Mixed, frigid Aquic Udipsamments
Menahga	Mixed, frigid Typic Udipsamments
Menomin	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Mollic Hapludalfs
Meridian	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Mollic Hapludalfs
*Merrillan	Coarse-loamy over clayey, mixed, semiactive, frigid Ultic Epiaquods
Moppet	Coarse-loamy, mixed, superactive, frigid Oxyaquic Dystrudepts
NewGlarus	Fine-silty over clayey, mixed, superactive, mesic Typic Hapludalfs
Newson	Mixed, frigid Humaqueptic Psammaquents
Norden	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Northbend	Coarse-loamy over sandy or sandy-skeletal, mixed, active, mesic Fluvaquentic Dystrudepts
Oesterle	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
Orion	Coarse-silty, mixed, superactive, nonacid, mesic Aquic Udifluvents
Palms	Loamy, mixed, euic, mesic Terric Haplosaprists
Pepin	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Plainbo	Mixed, frigid Typic Udipsamments
Plainfield	Mixed, mesic Typic Udipsamments
Plumcreek	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Poskin	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Aquic Glossudalfs
Prissel	Loamy, mixed, active, mesic Arenic Hapludalfs
Quarderer	Coarse-silty, mixed, superactive, frigid Typic Paleudolls
Rasset	Coarse-loamy, mixed, superactive, mesic Typic Argiudolls
Renova	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Rib	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Mollic Endoaqualfs
Rockbluff	Mesic, coated Typic Quartzipsamments
Rusktown	Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
Santiago	Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs
Scotah	Mixed, mesic Typic Udipsamments
Seaton	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Seelyeville	Euic, frigid Typic Haplosaprists
Shiffer	Fine-loamy over sandy or sandy-skeletal, superactive, mesic Aquollic Hapludalfs
Siouxcreek	Coarse-loamy over sandy or sandy-skeletal, mixed, active, frigid Aquic Hapludults
Spencer	Fine-silty, mixed, superactive, frigid Oxyaquic Glossudalfs
Tarr	Mesic, uncoated Typic Quartzipsamments
Tint	Mesic, uncoated Typic Quartzipsamments
Twinmound	Frigid, uncoated Typic Quartzipsamments
Udipsamments	Udipsamments
Udorthents	Udorthents
Urne	Coarse-loamy, mixed, active, mesic Dystric Eutrudepts
Vancecreek	Fine-silty, mixed, superactive, frigid Fluvaquentic Endoaquolls
Vasa	Fine-silty, superactive, mesic Aquollic Hapludalfs
Veedum	Fine-loamy, mixed, superactive, acid, frigid Humic Epiaquepts
Vlasaty	Fine-loamy, superactive, mesic Glossaquic Hapludalfs
Wickware	Fine-silty, mixed, superactive, frigid Haplic Glossudalfs

Soil Map Unit Descriptions

In this section, arranged in numerical order, are the soil map unit descriptions for the soil series mapped in Dunn County.

Characteristics of the soil and the material in which it formed are identified for each soil series. A brief description of the soil profile is provided in the map unit descriptions. For more information about a soil series, the official series description can be viewed or downloaded from the Web. The detailed descriptions follow standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in “Keys to Soil Taxonomy” (Soil Survey Staff, 1998).

The map units on the soil maps in this survey represent the soils or miscellaneous areas in the survey area. These soils or miscellaneous areas are listed as individual components in the map unit descriptions. 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. More information about each map unit is provided in the tables (see Contents).

A map unit delineation on the soil maps represents an area on the landscape. It is identified by differences in the properties and taxonomic classification of components and by the percentage of each component in the map unit.

Components that are dissimilar, or contrasting, are identified in the map unit description. Dissimilar components are those that have properties and behavioral characteristics divergent enough from those of the major components to affect use or to require different management. 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.

Components that are similar to the major components (noncontrasting) are not identified in the map unit description. Similar components are those that have properties and behavioral characteristics similar enough to those of the major components that they do not affect use or require different management.

The presence of multiple components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into 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 if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol is used for each map unit on the soil maps. This symbol precedes the map unit name in the map unit descriptions. Each description includes general information about the unit. The map unit descriptions include representative values in feet and the months in which a wet zone (a zone in which the soil moisture status is wet) is highest and lowest in the soil profile and ponding is shallowest and deepest on the soil surface. The descriptions also include the frequency of flooding (if it occurs) and the months in which flooding is most frequent and least frequent. Tables 27, 28, and 29 provide a complete display of this data for every month of the year. The available water capacity given in each map unit description is calculated for all horizons in the upper 60 inches of the soil profile. The organic matter content displayed in each map unit description is calculated for all horizons in the upper 10 inches of the soil profile, except those that represent the surface duff layer on forested soils. Table 25 provides a complete display of available water capacity and organic matter content by horizon.

The principal hazards and limitations to be considered in planning for specific uses are described in other sections of this survey.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer or of the underlying layers, 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 or of the underlying layers. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. The name of a soil phase commonly indicates a feature that affects use or management. For example, Elkmound loam, 1 to 6 percent slopes, is a phase of the Elkmound series.

A map unit is named for the component or components that make up a dominant percentage of the map unit. Many map units consist of one dominant component. These map units are consociations. Forkhorn sandy loam, 0 to 3 percent slopes, is an example.

Some map units are made up of two or more dominant components. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more components in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. Attempting to delineate the individual components of a complex would result in excessive clutter that could make the map illegible. The pattern and proportion of the components in a complex are somewhat similar in all areas. Dorerton, very stony-Elbaville complex, 30 to 60 percent slopes, is an example.

An *undifferentiated group* is made up of two or more components 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 components in a mapped area are not uniform. An area can be made up of only one of the dominant components, or it can be made up of all of them. Markey and Seelyeville mucks, 0 to 1 percent slopes, is an undifferentiated group in this survey area.

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

Table 2 gives the acreage and proportionate extent of each map unit. Other tables (see Contents) 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.

11A—Markey muck, flood plain, 0 to 1 percent slopes

Component Description

Markey, flood plain, undrained, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Backswamps on flood plains
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over sandy alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, October, November, December)
Highest frequency of flooding: Frequent (March, April, May, June)
Shallowest depth to wet zone: At the surface (January, February, March, April, May, October, November, December)
Deepest depth to wet zone: 1 foot (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, December)
Deepest ponding: 0.5 foot (March, April, May, October, November)
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa—0 to 27 inches; muck
Cg—27 to 60 inches; stratified loamy sand to coarse sand

Dissimilar Components

Kalmarville, undrained

Extent: 0 to 5 percent of the unit

Cathro, flood plain, undrained

Extent: 0 to 5 percent of the unit

Water

Extent: 0 to 5 percent of the unit

20A—Palms and Houghton mucks, 0 to 1 percent slopes

Component Description

Palms, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on stream terraces
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over loamy alluvium
Flooding: None

Shallowest depth to wet zone: At the surface (January, February, March, April, May, October, November, December)
Deepest depth to wet zone: 1 foot (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, December)
Deepest ponding: 0.5 foot (March, April, May, October, November)
Available water capacity to a depth of 60 inches: 19.4 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa—0 to 40 inches; muck
Cg—40 to 60 inches; silt loam

Houghton, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on stream terraces
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, July, September, October, November, December)
Deepest depth to wet zone: 0.5 foot (August)
Shallowest ponding: 0.5 foot (January, February, July, August, December)
Deepest ponding: 1 foot (March, April, May, June, September, October, November)
Available water capacity to a depth of 60 inches: 24.5 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa—0 to 22 inches; muck
Oe—22 to 28 inches; mucky peat
O´a—28 to 60 inches; muck

Dissimilar Components

Ettrick, undrained

Extent: 1 to 10 percent of the unit

Palms, drained

Extent: 0 to 5 percent of the unit

Water

Extent: 1 to 5 percent of the unit

40A—Markey and Seelyeville mucks, 0 to 1 percent slopes

Component Description

Markey, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, October, November, December)
Deepest depth to wet zone: 1 foot (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, December)
Deepest ponding: 0.5 foot (March, April, May, October, November)
Available water capacity to a depth of 60 inches: 12.5 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa—0 to 27 inches; muck
Cg—27 to 60 inches; stratified sand to gravelly coarse sand

Seelyeville, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, July, September, October, November, December)
Deepest depth to wet zone: 0.5 foot (August)
Shallowest ponding: 0.5 foot (January, February, July, August, December)
Deepest ponding: 1 foot (March, April, May, June, September, October, November)
Available water capacity to a depth of 60 inches: 23.9 inches

Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa1—0 to 12 inches; muck
Oa2—12 to 72 inches; muck

Dissimilar Components

Markey, drained

Extent: 0 to 5 percent of the unit

Cathro, undrained

Extent: 0 to 2 percent of the unit

Newson, undrained

Extent: 0 to 5 percent of the unit

Lows, undrained

Extent: 0 to 5 percent of the unit

Water

Extent: 0 to 5 percent of the unit

45A—Seelyeville and Cathro mucks, valley train, 0 to 1 percent slopes

Component Description

Seelyeville, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, July, September, October, November, December)
Deepest depth to wet zone: 0.5 foot (August)
Shallowest ponding: 0.5 foot (January, February, July, August, December)
Deepest ponding: 1 foot (March, April, May, June, September, October, November)
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa1—0 to 12 inches; muck
Oa2—12 to 72 inches; muck

Cathro, undrained, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 1 percent
Texture of the surface layer: Muck
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Very poorly drained
Parent material: Organic material over loamy alluvium
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, October, November, December)
Deepest depth to wet zone: 1 foot (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, December)
Deepest ponding: 0.5 foot (March, April, May, October, November)
Available water capacity to a depth of 60 inches: 17.1 inches
Content of organic matter in the upper 10 inches: 55 percent
Typical profile:
Oa1—0 to 16 inches; muck
Oa2—16 to 30 inches; muck
Cg—30 to 60 inches; silt loam

Dissimilar Components

Lows, undrained

Extent: 1 to 10 percent of the unit

Cathro, drained

Extent: 0 to 5 percent of the unit

Markey, undrained

Extent: 0 to 5 percent of the unit

Water

Extent: 0 to 5 percent of the unit

101B—Menahga sand, valley train, 0 to 6 percent slopes

Component Description

Menahga, valley train, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 6 percent

Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 33 inches; sand
C—33 to 80 inches; sand

Dissimilar Components

Plainbo soils

Extent: 0 to 10 percent of the unit

Forkhorn soils

Extent: 0 to 5 percent of the unit

Meehan soils

Extent: 0 to 5 percent of the unit

101C—Menahga sand, valley train, 6 to 12 percent slopes

Component Description

Menahga, valley train, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 6 to 12 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 33 inches; sand
C—33 to 80 inches; sand

Dissimilar Components

Plainbo soils

Extent: 0 to 10 percent of the unit

Forkhorn soils

Extent: 0 to 5 percent of the unit

101E—Menahga sand, valley train, 12 to 30 percent slopes

Component Description

Menahga, valley train, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 12 to 30 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 5 inches; sand
Bw—5 to 33 inches; sand
C—33 to 80 inches; sand

Dissimilar Components

Plainbo soils

Extent: 0 to 10 percent of the unit

Forkhorn soils

Extent: 0 to 5 percent of the unit

115B2—Seaton silt loam, 2 to 6 percent slopes, eroded

Component Description

Seaton and similar soils

Extent: 100 percent of the unit
Geomorphic component: Hills

Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: More than 60 inches
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 8 inches; silt loam
BE—8 to 13 inches; silt loam
Bt—13 to 55 inches; silt loam
BC—55 to 80 inches; silt loam

115C2—Seaton silt loam, 6 to 12 percent slopes, eroded

Component Description

Seaton and similar soils

Extent: 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: More than 60 inches
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 8 inches; silt loam
BE—8 to 13 inches; silt loam
Bt—13 to 55 inches; silt loam
BC—55 to 80 inches; silt loam

115D2—Seaton silt loam, 12 to 20 percent slopes, eroded

Component Description

Seaton and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 8 inches; silt loam
BE—8 to 13 inches; silt loam
Bt—13 to 55 inches; silt loam
BC—55 to 80 inches; silt loam

Dissimilar Components

Soils that have bedrock at a depth of less than 40 inches

Extent: 0 to 5 percent of the unit

115E2—Seaton silt loam, 20 to 30 percent slopes, eroded

Component Description

Seaton and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 8 inches; silt loam
BE—8 to 13 inches; silt loam
Bt—13 to 55 inches; silt loam
BC—55 to 80 inches; silt loam

Dissimilar Components

Soils that have bedrock at a depth of less than 40 inches

Extent: 0 to 10 percent of the unit

116C2—Churchtown silt loam, 6 to 12 percent slopes, eroded

Component Description

Churchtown and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Footslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 26 inches; silt loam
2Bt—26 to 63 inches; silt loam
2BC—63 to 80 inches; silt loam

Dissimilar Components

Norden soils

Extent: 0 to 5 percent of the unit

116D2—Churchtown silt loam, 12 to 20 percent slopes, eroded

Component Description

Churchtown and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Footslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 26 inches; silt loam
2Bt—26 to 63 inches; silt loam
2BC—63 to 80 inches; silt loam

Dissimilar Components

Norden soils

Extent: 0 to 10 percent of the unit

Beavercreek soils

Extent: 0 to 4 percent of the unit

116E2—Churchtown silt loam, 20 to 30 percent slopes, eroded

Component Description

Churchtown and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Footslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loess
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 26 inches; silt loam
2Bt—26 to 63 inches; silt loam
2BC—63 to 80 inches; silt loam

Dissimilar Components

Churchtown very stony silt loam

Extent: 0 to 5 percent of the unit

Norden soils

Extent: 0 to 15 percent of the unit

Beavercreek soils

Extent: 0 to 4 percent of the unit

125B2—Pepin silt loam, 2 to 6 percent slopes, eroded

Component Description

Pepin and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 45 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 5.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 48 inches; silt loam
2Bt—48 to 58 inches; clay
3Bt—58 to 66 inches; very flaggy loam
3Rt—66 to 80 inches; weathered bedrock

Dissimilar Components

NewGlarus soils

Extent: 1 to 5 percent of the unit

Hersey soils

Extent: 0 to 5 percent of the unit

Seaton soils

Extent: 1 to 5 percent of the unit

125C2—Pepin silt loam, 6 to 12 percent slopes, eroded

Component Description

Pepin and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 45 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 5.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 48 inches; silt loam
2Bt—48 to 58 inches; clay
3Bt—58 to 66 inches; very flaggy loam
3Rt—66 to 80 inches; weathered bedrock

Dissimilar Components

NewGlarus soils

Extent: 1 to 5 percent of the unit

Seaton soils

Extent: 1 to 5 percent of the unit

Hersey soils

Extent: 0 to 5 percent of the unit

125D2—Pepin silt loam, 12 to 20 percent slopes, eroded

Component Description

Pepin and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 45 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 5.5 feet all year
Ponding: None

Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 48 inches; silt loam
2Bt—48 to 58 inches; clay
3Bt—58 to 66 inches; very flaggy loam
3Rt—66 to 80 inches; weathered bedrock

Dissimilar Components

NewGlarus soils

Extent: 0 to 10 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

125E2—Pepin silt loam, 20 to 30 percent slopes, eroded

Component Description

Pepin and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 45 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 5.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 48 inches; silt loam
2Bt—48 to 58 inches; clay
3Bt—58 to 66 inches; very flaggy loam
3Rt—66 to 80 inches; weathered bedrock

Dissimilar Components

NewGlarus soils

Extent: 0 to 10 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

Fivepoints soils

Extent: 0 to 5 percent of the unit

135C2—Wickware silt loam, 6 to 12 percent slopes, eroded

Component Description

Wickware and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Backslopes and footslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess and/or silty slope alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.8 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap—0 to 10 inches; silt loam
B/E—10 to 17 inches; silt loam
Bt—17 to 36 inches; silt loam
C1,C2—36 to 71 inches; silt loam
C3—71 to 80 inches; stratified silt loam to sand

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Doritty soils

Extent: 0 to 5 percent of the unit

Spencer soils

Extent: 0 to 5 percent of the unit

135D2—Wickware silt loam, 12 to 20 percent slopes, eroded

Component Description

Wickware and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic component: Hills
Position on the landform: Backslopes and footslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess and/or silty slope alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.8 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap—0 to 10 inches; silt loam
B/E—10 to 17 inches; silt loam
Bt—17 to 36 inches; silt loam
C1,C2—36 to 71 inches; silt loam
C3—71 to 80 inches; stratified silt loam to sand

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Doritty soils

Extent: 0 to 5 percent of the unit

Spencer soils

Extent: 0 to 5 percent of the unit

135E2—Wickware silt loam, 20 to 30 percent slopes, eroded

Component Description

Wickware and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Footslopes and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess and/or silty slope alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.8 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Ap—0 to 10 inches; silt loam
B/E—10 to 17 inches; silt loam
Bt—17 to 36 inches; silt loam
C1,C2—36 to 71 inches; silt loam
C3—71 to 80 inches; stratified silt loam to sand

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Doritty soils

Extent: 0 to 5 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

136B—Doritty silt loam, 1 to 6 percent slopes

Component Description

Doritty and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Treads
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium and/or loess over sandy and silty alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E—9 to 12 inches; silt loam
B/E—12 to 18 inches; silt loam
Bt—18 to 38 inches; silt loam
C1—38 to 45 inches; silt loam

2C2—45 to 60 inches; stratified gravelly coarse sand to silt loam

Dissimilar Components

Quarderer soils

Extent: 0 to 10 percent of the unit

Wickware soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

136C2—Doritty silt loam, 6 to 12 percent slopes, eroded

Component Description

Doritty and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Risers
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium and/or loess over sandy and silty alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E—9 to 12 inches; silt loam
B/E—12 to 18 inches; silt loam
Bt—18 to 38 inches; silt loam
C1—38 to 45 inches; silt loam
2C2—45 to 60 inches; stratified gravelly coarse sand to silt loam

Dissimilar Components

Wickware soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

144B2—NewGlarus silt loam, 2 to 6 percent slopes, eroded

Component Description

NewGlarus and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 3.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
BE—9 to 13 inches; silt loam
Bt—13 to 23 inches; silty clay loam
2Bt—23 to 35 inches; clay
3Bt—35 to 45 inches; very channery loam
3Rt—45 to 60 inches; weathered bedrock

Dissimilar Components

Fivepoints soils

Extent: 1 to 5 percent of the unit

Pepin soils

Extent: 1 to 5 percent of the unit

Santiago soils

Extent: 0 to 5 percent of the unit

144C2—NewGlarus silt loam, 6 to 12 percent slopes, eroded

Component Description

NewGlarus and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills

Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 3.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
BE—9 to 13 inches; silt loam
Bt—13 to 23 inches; silty clay loam
2Bt—23 to 35 inches; clay
3Bt—35 to 45 inches; very channery loam
3Rt—45 to 60 inches; weathered bedrock

Dissimilar Components

Fivepoints soils

Extent: 1 to 5 percent of the unit

Pepin soils

Extent: 1 to 5 percent of the unit

Santiago soils

Extent: 0 to 5 percent of the unit

144D2—NewGlarus silt loam, 12 to 20 percent slopes, eroded

Component Description

NewGlarus and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 3.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
BE—9 to 13 inches; silt loam
Bt—13 to 23 inches; silty clay loam
2Bt—23 to 35 inches; clay
3Bt—35 to 45 inches; very channery loam
3Rt—45 to 60 inches; weathered bedrock

Dissimilar Components

Fivepoints soils

Extent: 1 to 5 percent of the unit

Pepin soils

Extent: 1 to 5 percent of the unit

Santiago soils

Extent: 0 to 5 percent of the unit

144E2—NewGlarus silt loam, 20 to 30 percent slopes, eroded

Component Description

NewGlarus and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 3.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
BE—9 to 13 inches; silt loam
Bt—13 to 23 inches; silty clay loam
2Bt—23 to 35 inches; clay
3Bt—35 to 45 inches; very channery loam
3Rt—45 to 60 inches; weathered bedrock

Dissimilar Components

Fivepoints soils

Extent: 1 to 5 percent of the unit

Pepin soils

Extent: 1 to 5 percent of the unit

Elbaville soils

Extent: 0 to 5 percent of the unit

161E—Fivepoints silt loam, 20 to 30 percent slopes

Component Description

Fivepoints and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over clayey pedisediment over loamy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; silt loam
Bt1—4 to 10 inches; silty clay loam
2Bt2—10 to 19 inches; clay
3Bt3—19 to 35 inches; very channery loam
3Rt—35 to 80 inches; weathered bedrock

Dissimilar Components

NewGlarus soils

Extent: 0 to 10 percent of the unit

Dorerton soils

Extent: 0 to 5 percent of the unit

Gaphill soils

Extent: 0 to 5 percent of the unit

Soils that have dolostone at a depth of less than 20 inches

Extent: 0 to 5 percent of the unit

208A—Siouxcreek silt loam, 0 to 3 percent slopes

Component Description

Siouxcreek and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Depressions on hills and pediments
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Parent material: Silty and loamy alluvium over loamy till over sandy residuum
Flooding: None
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 3.2 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 5.9 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; silt loam
E,E/B—8 to 14 inches; silt loam
B/E—14 to 22 inches; silt loam
2Bt—22 to 32 inches; fine sandy loam
3BC—32 to 38 inches; fine sand
3Cr—38 to 60 inches; weathered bedrock

Dissimilar Components

Arland soils

Extent: 0 to 5 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

Veedum, undrained

Extent: 0 to 5 percent of the unit

213B2—Hixton silt loam, 2 to 6 percent slopes, eroded

Component Description

Hixton and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Elevasil soils

Extent: 0 to 5 percent of the unit

Hixton, thin solum

Extent: 0 to 5 percent of the unit

213C2—Hixton silt loam, 6 to 12 percent slopes, eroded

Component Description

Hixton and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Elevasil soils

Extent: 0 to 5 percent of the unit

Hixton, thin solum

Extent: 0 to 5 percent of the unit

224B—Elevasil sandy loam, 2 to 6 percent slopes

Component Description

Elevasil and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 27 inches; sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Hixton soils

Extent: 1 to 5 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

Boone soils

Extent: 1 to 5 percent of the unit

Humbird, loamy subsoil

Extent: 0 to 5 percent of the unit

224C2—Elevasil sandy loam, 6 to 12 percent slopes, eroded

Component Description

Elevasil and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 27 inches; sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Boone soils

Extent: 0 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

Hixton soils

Extent: 0 to 5 percent of the unit

224D2—Elevasil sandy loam, 12 to 20 percent slopes, eroded

Component Description

Elevasil and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 27 inches; sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Boone soils

Extent: 0 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

Hixton soils

Extent: 0 to 5 percent of the unit

224E2—Elevasil sandy loam, 20 to 30 percent slopes, eroded

Component Description

Elevasil and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent

Texture of the surface layer: Sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 27 inches; sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Boone soils

Extent: 1 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

233C—Boone sand, 6 to 15 percent slopes

Component Description

Boone and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 15 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.5 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap—0 to 8 inches; sand
Bw—8 to 21 inches; sand
C—21 to 35 inches; sand
Cr—35 to 60 inches; weathered bedrock

Dissimilar Components

Tarr soils

Extent: 0 to 10 percent of the unit

243B2—Hixton silt loam, thin solum, 1 to 6 percent slopes, eroded

Component Description

Hixton, thin solum, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 18 to 25 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 1.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 15 inches; silt loam
2Bt—15 to 21 inches; channery loam
2Cr—21 to 60 inches; weathered bedrock

Dissimilar Components

Elkmound soils

Extent: 0 to 5 percent of the unit

Hixton soils

Extent: 0 to 5 percent of the unit

Hiles soils

Extent: 0 to 3 percent of the unit

243C2—Hixton silt loam, thin solum, 6 to 12 percent slopes, eroded

Component Description

Hixton, thin solum, and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 18 to 25 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 1.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 15 inches; silt loam
2Bt—15 to 21 inches; channery loam
2Cr—21 to 60 inches; weathered bedrock

Dissimilar Components

Elkmound soils

Extent: 1 to 5 percent of the unit

Kevilar soils

Extent: 1 to 5 percent of the unit

Hixton soils

Extent: 1 to 5 percent of the unit

244B—Elkmound loam, 1 to 6 percent slopes

Component Description

Elkmound and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 1 to 6 percent
Texture of the surface layer: Loam
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy residuum
Flooding: None
Depth to wet zone: More than 1 foot all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.2 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; loam
Bw—8 to 12 inches; channery loam
Cr—12 to 60 inches; weathered bedrock

Dissimilar Components

Humbird, loamy subsoil

Extent: 0 to 5 percent of the unit

Elkmound cobbly sandy loam

Extent: 0 to 5 percent of the unit

Hixton, thin solum

Extent: 0 to 5 percent of the unit

Elevasil soils

Extent: 0 to 5 percent of the unit

244C2—Elkmound loam, 6 to 12 percent slopes, eroded

Component Description

Elkmound and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Loam
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy residuum
Flooding: None
Depth to wet zone: More than 1 foot all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.2 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; loam
Bw—8 to 12 inches; channery loam
Cr—12 to 60 inches; weathered bedrock

Dissimilar Components

Hixton, thin solum

Extent: 0 to 5 percent of the unit

Elevasil soils

Extent: 0 to 5 percent of the unit

Elkmound cobbly sandy loam

Extent: 0 to 5 percent of the unit

Humbird, loamy subsoil

Extent: 0 to 5 percent of the unit

244D2—Elkmound loam, 12 to 20 percent slopes, eroded

Component Description

Elkmound and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Loam
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy residuum
Flooding: None
Depth to wet zone: More than 1 foot all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.2 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; loam
Bw—8 to 12 inches; channery loam
Cr—12 to 60 inches; weathered bedrock

Dissimilar Components

Elevasil soils

Extent: 0 to 5 percent of the unit

Hixton, thin solum

Extent: 0 to 5 percent of the unit

254B2—Norden silt loam, 2 to 6 percent slopes, eroded

Component Description

Norden and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 37 inches; fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 0 to 5 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

254C2—Norden silt loam, 6 to 12 percent slopes, eroded

Component Description

Norden and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 37 inches; fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 0 to 5 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

254D2—Norden silt loam, 12 to 20 percent slopes, eroded

Component Description

Norden and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 37 inches; fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 0 to 10 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

254E2—Norden silt loam, 20 to 30 percent slopes, eroded

Component Description

Norden and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 20 inches; silt loam
2Bt—20 to 37 inches; fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 0 to 10 percent of the unit

Churchtown soils

Extent: 0 to 5 percent of the unit

254F—Norden silt loam, 30 to 45 percent slopes

Component Description

Norden and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 30 to 45 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.9 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; silt loam
Bt—3 to 20 inches; silt loam

2Bt—20 to 37 inches; fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 0 to 10 percent of the unit

Norden very stony silt loam

Extent: 0 to 10 percent of the unit

Churchtown soils

Extent: 0 to 5 percent of the unit

255B2—Urne fine sandy loam, 2 to 6 percent slopes, eroded

Component Description

Urne and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bw1,Bw2—9 to 28 inches; fine sandy loam
Bw3—28 to 36 inches; fine sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Norden soils

Extent: 0 to 5 percent of the unit

Urne, shallow

Extent: 0 to 5 percent of the unit

255C2—Urne fine sandy loam, 6 to 12 percent slopes, eroded

Component Description

Urne and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bw1,Bw2—9 to 28 inches; fine sandy loam
Bw3—28 to 36 inches; fine sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Norden soils

Extent: 0 to 5 percent of the unit

Urne, shallow

Extent: 0 to 5 percent of the unit

255D2—Urne fine sandy loam, 12 to 20 percent slopes, eroded

Component Description

Urne and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained

Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bw1,Bw2—9 to 28 inches; fine sandy loam
Bw3—28 to 36 inches; fine sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Norden soils

Extent: 0 to 5 percent of the unit

Urne, shallow

Extent: 0 to 5 percent of the unit

255E2—Urne fine sandy loam, 20 to 30 percent slopes, eroded

Component Description

Urne and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bw1,Bw2—9 to 28 inches; fine sandy loam
Bw3—28 to 36 inches; fine sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Norden soils

Extent: 0 to 10 percent of the unit

Urne, shallow

Extent: 0 to 5 percent of the unit

255F—Urne fine sandy loam, 30 to 45 percent slopes

Component Description

Urne and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 30 to 45 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
A—0 to 2 inches; fine sandy loam
Bw1,Bw2—2 to 28 inches; fine sandy loam
Bw3—28 to 36 inches; fine sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Norden soils

Extent: 0 to 5 percent of the unit

Rockbluff soils

Extent: 0 to 5 percent of the unit

Urne, shallow

Extent: 0 to 5 percent of the unit

265B—Garne loamy sand, 2 to 6 percent slopes

Component Description

Garne and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 2 to 6 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Parent material: Eolian sands over loamy residuum
Flooding: None
Depth to wet zone: More than 2.8 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A—0 to 18 inches; loamy sand
AB—18 to 23 inches; loamy sand
Bw—23 to 27 inches; sand
2Bw—27 to 34 inches; very fine sandy loam
2Cr—34 to 60 inches; weathered bedrock

Dissimilar Components

Drammen soils

Extent: 1 to 5 percent of the unit

Finchford soils

Extent: 0 to 5 percent of the unit

Urne soils

Extent: 0 to 5 percent of the unit

265C—Garne loamy sand, 6 to 12 percent slopes

Component Description

Garne and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 6 to 12 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Parent material: Eolian sands over loamy residuum
Flooding: None
Depth to wet zone: More than 2.8 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A—0 to 18 inches; loamy sand
AB—18 to 23 inches; loamy sand
Bw—23 to 27 inches; sand
2Bw—27 to 34 inches; very fine sandy loam
2Cr—34 to 60 inches; weathered bedrock

Dissimilar Components

Urne soils

Extent: 1 to 5 percent of the unit

Drammen soils

Extent: 1 to 5 percent of the unit

Plainfield soils

Extent: 0 to 5 percent of the unit

266B—Hiles silt loam, 1 to 6 percent slopes

Component Description

Hiles and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills and pediments
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Parent material: Loess over mostly loamy residuum
Flooding: None
Shallowest depth to wet zone: 2 feet (April, May, November, December)
Deepest depth to wet zone: More than 2.4 feet (January, February, March, June, July, August, September, October)
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
B/E—9 to 19 inches; silt loam
2Bt—19 to 29 inches; loam
2Cr—29 to 60 inches; weathered bedrock

Dissimilar Components

Kert soils

Extent: 0 to 10 percent of the unit

Humbird, loamy subsoil

Extent: 0 to 5 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

268A—Kert silt loam, 0 to 3 percent slopes

Component Description

Kert and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Depressions on hills and pediments
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Parent material: Loess over mostly loamy alluvium
Flooding: None
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 2.8 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap—0 to 9 inches; silt loam
B/E—9 to 22 inches; silt loam
2Bt—22 to 34 inches; loam
2Cr—34 to 60 inches; weathered bedrock

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Veedum, undrained

Extent: 0 to 10 percent of the unit

Hiles soils

Extent: 0 to 5 percent of the unit

269A—Veedum muck, 0 to 2 percent slopes

Component Description

Veedum, undrained, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Depressions on pediments; depressions on hills
Slope range: 0 to 2 percent
Texture of the surface layer: Muck
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Poorly drained
Parent material: Thin organic material over silty alluvium over mostly loamy residuum
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 6 inches
Content of organic matter in the upper 10 inches: 30.1 percent
Typical profile:
Oa—0 to 5 inches; muck
A—5 to 7 inches; silt loam
Eg—7 to 9 inches; silt loam
Bg—9 to 20 inches; silt loam
2Bg—20 to 26 inches; clay loam
2Cr—26 to 60 inches; weathered bedrock

Dissimilar Components

Kert soils

Extent: 0 to 10 percent of the unit

Veedum, drained

Extent: 0 to 5 percent of the unit

273B2—Dobie and Hixton silt loams, 2 to 6 percent slopes, eroded

Component Description

Dobie and similar soils

Extent: 0 to 90 percent of the unit

Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E,Bt—8 to 26 inches; silt loam
2Bt—26 to 37 inches; very fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Hixton, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.3 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E—8 to 13 inches; silt loam
Bt—13 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Wickware soils

Extent: 0 to 15 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

273C2—Dobie and Hixton silt loams, 6 to 12 percent slopes, eroded

Component Description

Dobie and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E,Bt—8 to 26 inches; silt loam
2Bt—26 to 37 inches; very fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Hixton, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.3 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E—8 to 13 inches; silt loam
Bt—13 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Wickware soils

Extent: 0 to 15 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

273D2—Dobie and Hixton silt loams, 12 to 20 percent slopes, eroded

Component Description

Dobie and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E,Bt—8 to 26 inches; silt loam
2Bt—26 to 37 inches; very fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Hixton, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.3 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E—8 to 13 inches; silt loam
Bt—13 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Wickware soils

Extent: 0 to 15 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

273E2—Dobie and Hixton silt loams, 20 to 30 percent slopes, eroded

Component Description

Dobie and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loess over loamy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E,Bt—8 to 26 inches; silt loam
2Bt—26 to 37 inches; very fine sandy loam
2Cr—37 to 60 inches; weathered bedrock

Hixton, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 30 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained

Parent material: Loess over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.3 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
B/E—8 to 13 inches; silt loam
Bt—13 to 20 inches; silt loam
2Bt—20 to 32 inches; loam
3C—32 to 37 inches; channery sand
3Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Wickware soils

Extent: 0 to 15 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

275B2—Hayriver and Elevasil fine sandy loams, 2 to 6 percent slopes, eroded

Component Description

Hayriver and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 2.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; fine sandy loam
E—8 to 13 inches; fine sandy loam
Bt—13 to 30 inches; fine sandy loam
Cr—30 to 60 inches; weathered bedrock

Elevasil, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bt—9 to 27 inches; fine sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

Arland soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Twinmound soils

Extent: 0 to 5 percent of the unit

275C2—Hayriver and Elevasil fine sandy loams, 6 to 12 percent slopes, eroded

Component Description

Hayriver and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 2.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; fine sandy loam
E—8 to 13 inches; fine sandy loam
Bt—13 to 30 inches; fine sandy loam
Cr—30 to 60 inches; weathered bedrock

Elevasil, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bt—9 to 27 inches; fine sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

Arland soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Twinmound soils

Extent: 0 to 5 percent of the unit

275D2—Hayriver and Elevasil fine sandy loams, 12 to 20 percent slopes, eroded

Component Description

Hayriver and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 2.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; fine sandy loam
E—8 to 13 inches; fine sandy loam
Bt—13 to 30 inches; fine sandy loam
Cr—30 to 60 inches; weathered bedrock

Elevasil, frigid, and similar soils

Extent: 0 to 90 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 20 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5 inches
Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bt—9 to 27 inches; fine sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Dobie soils

Extent: 0 to 10 percent of the unit

Twinmound soils

Extent: 0 to 10 percent of the unit

276B—Humbird fine sandy loam, loamy subsoil, 1 to 6 percent slopes

Component Description

Humbird, loamy subsoil, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Pediments and hills
Slope range: 1 to 6 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over mostly loamy residuum
Flooding: None
Shallowest depth to wet zone: 2 feet (April, May, November, December)
Deepest depth to wet zone: More than 2.3 feet (January, February, March, June, July, August, September, October)
Ponding: None
Available water capacity to a depth of 60 inches: 4 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bt—9 to 15 inches; sandy loam
2Bt—15 to 27 inches; channery loam
2Cr—27 to 60 inches; weathered bedrock

Dissimilar Components

Merrillan, loamy subsoil

Extent: 0 to 5 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

278A—Merrillan fine sandy loam, loamy subsoil, 0 to 3 percent slopes

Component Description

Merrillan, loamy subsoil, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Pediments; depressions on hills
Slope range: 0 to 3 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Parent material: Loamy alluvium over mostly clayey residuum
Flooding: None
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 2.8 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
Bt—9 to 29 inches; fine sandy loam
2Bt—29 to 34 inches; channery loam
2Cr—34 to 60 inches; weathered bedrock

Dissimilar Components

Veedum, undrained

Extent: 0 to 10 percent of the unit

Humbird, loamy subsoil

Extent: 0 to 10 percent of the unit

282C—Twinmound fine sand, 6 to 15 percent slopes

Component Description

Twinmound and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent
Texture of the surface layer: Fine sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 1.6 inches
Content of organic matter in the upper 10 inches: 0.9 percent
Typical profile:
Ap—0 to 8 inches; fine sand
Bw—8 to 17 inches; fine sand
BC—17 to 26 inches; channery fine sand
Cr—26 to 60 inches; weathered bedrock

Dissimilar Components

Hayriver soils

Extent: 0 to 10 percent of the unit

Drammen soils

Extent: 0 to 10 percent of the unit

282F—Twinmound fine sand, 15 to 50 percent slopes

Component Description

Twinmound and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 15 to 50 percent
Texture of the surface layer: Fine sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; fine sand
Bw—3 to 17 inches; fine sand
BC—17 to 26 inches; channery fine sand
Cr—26 to 60 inches; weathered bedrock

Dissimilar Components

Hayriver soils

Extent: 1 to 10 percent of the unit

313D2—Plumcreek silt loam, 12 to 20 percent slopes, eroded

Component Description

Plumcreek and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Risers
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty and loamy slope alluvium over stratified silty to sandy slackwater deposits
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.8 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 28 inches; silt loam
2Bt—28 to 36 inches; stratified silty clay loam to sand
2C—36 to 60 inches; stratified silty clay loam to sand

Dissimilar Components

Ella soils

Extent: 1 to 10 percent of the unit

Meridian soils

Extent: 1 to 5 percent of the unit

313F—Plumcreek silt loam, 20 to 45 percent slopes

Component Description

Plumcreek and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Risers
Slope range: 20 to 45 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty and loamy slope alluvium over stratified silty to sandy slackwater deposits
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
A—0 to 4 inches; silt loam
E—4 to 7 inches; silt loam
Bt—7 to 28 inches; silt loam
2Bt—28 to 36 inches; stratified silty clay loam to sand
2C—36 to 60 inches; stratified silty clay loam to sand

Dissimilar Components

Ella soils

Extent: 1 to 10 percent of the unit

Seep areas

Extent: 0 to 10 percent of the unit

316B2—Ella silt loam, 1 to 6 percent slopes, eroded

Component Description

Ella and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Treads
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium over silty to sandy slackwater deposits
Flooding: None
Shallowest depth to wet zone: 4 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 55 inches; silt loam
2Bt—55 to 72 inches; stratified silty clay loam to sandy loam
2C—72 to 80 inches; stratified silty clay loam to sandy loam

Dissimilar Components

Well drained soils

Extent: 1 to 5 percent of the unit

Bearpen soils

Extent: 0 to 5 percent of the unit

Arenzville soils

Extent: 0 to 5 percent of the unit

316C2—Ella silt loam, 6 to 12 percent slopes, eroded

Component Description

Ella and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Risers
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium over silty to sandy slackwater deposits
Flooding: None
Shallowest depth to wet zone: 4 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)

Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 55 inches; silt loam
2Bt—55 to 72 inches; stratified silty clay loam to sandy loam
2C—72 to 80 inches; stratified silty clay loam to sandy loam

Dissimilar Components

Well drained soils

Extent: 1 to 5 percent of the unit

Arenzville soils

Extent: 0 to 5 percent of the unit

318A—Bearpen silt loam, 0 to 3 percent slopes

Component Description

Bearpen and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Silty alluvium over silty to sandy slackwater deposits
Months in which flooding does not occur: January, February, November, December
Highest frequency of flooding: Rare (March, April, May, June, July, August, September, October)
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap—0 to 18 inches; silt loam
Bt—18 to 41 inches; silt loam
2Bt—41 to 50 inches; stratified silty clay loam to sandy loam
2C—50 to 60 inches; stratified silty clay loam to sandy loam

Dissimilar Components

Ettrick, undrained

Extent: 0 to 5 percent of the unit

Ella soils

Extent: 0 to 5 percent of the unit

Orion soils

Extent: 0 to 5 percent of the unit

349A—Rib silt loam, valley train, 0 to 2 percent slopes

Component Description

Rib, valley train, undrained, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 2 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Silty and loamy alluvium over sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 8.3 inches
Content of organic matter in the upper 10 inches: 5.8 percent
Typical profile:
A—0 to 8 inches; silt loam
Btg—8 to 32 inches; silt loam
2Btg—32 to 36 inches; gravelly loam
3C—36 to 60 inches; stratified sand to extremely gravelly coarse sand

Dissimilar Components

Poskin soils

Extent: 0 to 10 percent of the unit

Rib, drained

Extent: 0 to 5 percent of the unit

Cathro soils

Extent: 0 to 5 percent of the unit

378A—Poskin silt loam, valley train, 0 to 3 percent slopes

Component Description

Poskin, valley train, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Silty and loamy alluvium over sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E—9 to 12 inches; silt loam
E/B—12 to 19 inches; silt loam
Bt—19 to 36 inches; silt loam
2Bt—36 to 39 inches; sandy loam
3C—39 to 60 inches; stratified sand to extremely gravelly coarse sand

Dissimilar Components

Rib soils

Extent: 1 to 5 percent of the unit

Menomin soils

Extent: 0 to 5 percent of the unit

403A—Dakota silt loam, 0 to 3 percent slopes

Component Description

Dakota and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8 inches
Content of organic matter in the upper 10 inches: 3.5 percent
Typical profile:
Ap—0 to 10 inches; silt loam
AB—10 to 13 inches; silt loam
Bt—13 to 35 inches; silt loam
2Bt—35 to 38 inches; loamy sand
2C—38 to 60 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Rasset soils

Extent: 0 to 10 percent of the unit

Dakota, loamy substratum

Extent: 0 to 5 percent of the unit

413A—Rasset sandy loam, 0 to 3 percent slopes

Component Description

Rasset and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.9 inches
Content of organic matter in the upper 10 inches: 3 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
A,AB—10 to 18 inches; sandy loam
Bt—18 to 30 inches; sandy loam
2Bt,2BC—30 to 50 inches; loamy sand
2C—50 to 60 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Dakota soils

Extent: 0 to 5 percent of the unit

Burkhardt soils

Extent: 0 to 5 percent of the unit

Finchford soils

Extent: 0 to 5 percent of the unit

Rasset, loamy substratum

Extent: 0 to 5 percent of the unit

413B—Rasset sandy loam, 2 to 6 percent slopes

Component Description

Rasset and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.9 inches
Content of organic matter in the upper 10 inches: 3 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
A,AB—10 to 18 inches; sandy loam
Bt—18 to 30 inches; sandy loam
2Bt,2BC—30 to 50 inches; loamy sand
2C—50 to 60 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Finchford soils

Extent: 1 to 5 percent of the unit

Burkhardt soils

Extent: 0 to 5 percent of the unit

Rasset, loamy substratum

Extent: 0 to 5 percent of the unit

416A—Menomin silt loam, 0 to 3 percent slopes

Component Description

Menomin and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium over sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 7.6 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt—9 to 32 inches; loam
2BC—32 to 55 inches; loamy coarse sand
2C—55 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Meridian soils

Extent: 0 to 5 percent of the unit

Shiffer soils

Extent: 0 to 5 percent of the unit

Rusktown soils

Extent: 1 to 5 percent of the unit

423A—Meridian silt loam, 0 to 3 percent slopes

Component Description

Meridian and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt1–Bt3—9 to 28 inches; silt loam
Bt4—28 to 32 inches; sandy loam
2BC—32 to 41 inches; loamy coarse sand
2C—41 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Forkhorn soils

Extent: 1 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

423B2—Meridian silt loam, 2 to 6 percent slopes, eroded

Component Description

Meridian and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt1–Bt3—9 to 28 inches; silt loam
Bt4—28 to 32 inches; sandy loam
2BC—32 to 41 inches; loamy coarse sand
2C—41 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Forkhorn soils

Extent: 1 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

423C2—Meridian silt loam, 6 to 12 percent slopes, eroded

Component Description

Meridian and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 6 to 12 percent

Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bt1–Bt3—9 to 28 inches; silt loam
Bt4—28 to 32 inches; sandy loam
2BC—32 to 41 inches; loamy coarse sand
2C—41 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Forkhorn soils

Extent: 1 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

428A—Shiffer loam, 0 to 3 percent slopes

Component Description

Shiffer and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loamy alluvium over sandy outwash
Months in which flooding does not occur: January, February, July, August, September, October, November, December
Highest frequency of flooding: Rare (March, April, May, June)
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 6.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 7 inches; loam
Bt—7 to 24 inches; loam
2Bt,2BC—24 to 32 inches; sandy loam
2C—32 to 60 inches; sand

Dissimilar Components

Shiffer, loamy substratum

Extent: 0 to 10 percent of the unit

Lows soils

Extent: 0 to 5 percent of the unit

Hoopeston soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

429A—Lows loam, 0 to 2 percent slopes

Component Description

Lows, undrained, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Drainageways on valley trains
Slope range: 0 to 2 percent
Texture of the surface layer: Loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Loamy alluvium over sandy alluvium
Months in which flooding does not occur: January, February, November, December
Highest frequency of flooding: Rare (March, April, May, June, July, August, September, October)
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, November, December)

Deepest ponding: 0.5 foot (March, April, May)
Available water capacity to a depth of 60 inches: 7.1 inches
Content of organic matter in the upper 10 inches: 4.4 percent
Typical profile:
A—0 to 6 inches; loam
Eg—6 to 13 inches; loam
Bg—13 to 28 inches; loam
2Cg—28 to 60 inches; sand

Dissimilar Components

Lows, loamy substratum

Extent: 1 to 15 percent of the unit

Hoopeston soils

Extent: 1 to 5 percent of the unit

Markey, undrained

Extent: 0 to 5 percent of the unit

Lows, drained

Extent: 0 to 5 percent of the unit

Veedum, undrained

Extent: 0 to 5 percent of the unit

432A—Kevilar sandy loam, 0 to 3 percent slopes

Component Description

Kevilar and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Valley trains
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over sandy alluvium over stratified loamy to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, October, November)
Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 29 inches; loam
2BC—29 to 50 inches; sand
3Bt—50 to 80 inches; stratified silt loam to sand

Dissimilar Components

Bilson soils

Extent: 1 to 5 percent of the unit

Kevilar, sandstone substratum

Extent: 1 to 5 percent of the unit

Hoopeston soils

Extent: 0 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

432B—Kevilar sandy loam, 2 to 6 percent slopes

Component Description

Kevilar and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over sandy alluvium over stratified loamy to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, October, November)
Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam

Bt—9 to 29 inches; loam
2BC—29 to 50 inches; sand
3Bt—50 to 80 inches; stratified silt loam to sand

Dissimilar Components

Bilson soils

Extent: 1 to 10 percent of the unit

Kevilar, sandstone substratum

Extent: 1 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

Hoopeston soils

Extent: 0 to 5 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

432C2—Kevilar sandy loam, 6 to 12 percent slopes, eroded

Component Description

Kevilar and similar soils

Extent: 80 to 90 percent of the unit
Geomorphic component: Valley trains
Slope range: 6 to 12 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over sandy alluvium over stratified loamy to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, October, November)
Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 29 inches; loam
2BC—29 to 50 inches; sand
3Bt—50 to 80 inches; stratified silt loam to sand

Dissimilar Components

Bilson soils

Extent: 1 to 10 percent of the unit

Kevilar, sandstone substratum

Extent: 1 to 5 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

432D2—Kevilar sandy loam, 12 to 20 percent slopes, eroded

Component Description

Kevilar and similar soils

Extent: 80 to 90 percent of the unit
Geomorphic component: Valley trains
Slope range: 12 to 20 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over sandy alluvium over stratified loamy to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, October, November)
Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 7.7 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 29 inches; loam
2BC—29 to 50 inches; sand
3Bt—50 to 80 inches; stratified silt loam to sand

Dissimilar Components

Bilson soils

Extent: 1 to 10 percent of the unit

Kevilar, sandstone substratum

Extent: 1 to 5 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

433A—Forkhorn sandy loam, 0 to 3 percent slopes

Component Description

Forkhorn and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 25 inches; sandy loam
2Bt—25 to 32 inches; gravelly loamy sand
2BC,2C—32 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Rusktown soils

Extent: 0 to 5 percent of the unit

Forkhorn, sandstone substratum

Extent: 0 to 5 percent of the unit

Plainfield soils

Extent: 0 to 5 percent of the unit

433B—Forkhorn sandy loam, 2 to 6 percent slopes

Component Description

Forkhorn and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 25 inches; sandy loam
2Bt—25 to 32 inches; gravelly loamy sand
2BC,2C—32 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Rusktown soils

Extent: 0 to 5 percent of the unit

Plainfield soils

Extent: 0 to 10 percent of the unit

Forkhorn, sandstone substratum

Extent: 0 to 5 percent of the unit

433C2—Forkhorn sandy loam, 6 to 12 percent slopes, eroded

Component Description

Forkhorn and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 6 to 12 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches

Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 25 inches; sandy loam
2Bt—25 to 32 inches; gravelly loamy sand
2BC,2C—32 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Plainfield soils

Extent: 0 to 10 percent of the unit

Forkhorn, sandstone substratum

Extent: 0 to 5 percent of the unit

Forkhorn, loamy substratum

Extent: 0 to 5 percent of the unit

433D2—Forkhorn sandy loam, 12 to 20 percent slopes, eroded

Component Description

Forkhorn and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 12 to 20 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.3 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 25 inches; sandy loam
2Bt—25 to 32 inches; gravelly loamy sand
2BC,2C—32 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Plainfield soils

Extent: 0 to 10 percent of the unit

Forkhorn, sandstone substratum

Extent: 0 to 5 percent of the unit

Forkhorn, loamy substratum

Extent: 0 to 5 percent of the unit

434B—Bilson sandy loam, 1 to 6 percent slopes

Component Description

Bilson and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Stream terraces
Position on the landform: Treads
Slope range: 1 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy alluvium over sandy and loamy alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; sandy loam
Bt—8 to 32 inches; sandy loam
2C1—32 to 38 inches; stratified sand to loamy sand
2C2—38 to 60 inches; stratified sand to sandy loam

Dissimilar Components

Kevilar soils

Extent: 0 to 10 percent of the unit

Elevasil soils

Extent: 0 to 5 percent of the unit

436A—Rusktown sandy loam, 0 to 3 percent slopes

Component Description

Rusktown and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium over sandy outwash
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 5.8 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bt—9 to 25 inches; loam
2Bt—25 to 38 inches; loamy sand
2BC,2C—38 to 72 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Forkhorn soils

Extent: 1 to 5 percent of the unit

Hoopeston soils

Extent: 1 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Rusktown, sandstone substratum

Extent: 0 to 5 percent of the unit

Aldo soils

Extent: 0 to 5 percent of the unit

438A—Hoopeston sandy loam, 0 to 3 percent slopes

Component Description

Hoopeston and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loamy alluvium over sandy outwash
Flooding: None
Shallowest depth to wet zone: 1.5 feet (April, May, November)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 6.4 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap,A—0 to 13 inches; sandy loam
Bw1—13 to 22 inches; fine sandy loam
Bw2,Bw3—22 to 37 inches; loamy sand
2C—37 to 72 inches; sand

Dissimilar Components

Lows soils

Extent: 1 to 5 percent of the unit

Rusktown soils

Extent: 1 to 5 percent of the unit

Hoopeston, loamy substratum

Extent: 0 to 5 percent of the unit

Hoopeston, sandstone substratum

Extent: 0 to 5 percent of the unit

Farrington soils

Extent: 0 to 5 percent of the unit

453A—Burkhardt sandy loam, 0 to 3 percent slopes

Component Description

Burkhardt and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
Bt—10 to 17 inches; sandy loam
2BC—17 to 19 inches; loamy sand
2C—19 to 60 inches; stratified sand to very gravelly coarse sand

Dissimilar Components

Finchford soils

Extent: 1 to 5 percent of the unit

Rasset soils

Extent: 1 to 5 percent of the unit

453B—Burkhardt sandy loam, 2 to 6 percent slopes

Component Description

Burkhardt and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
Bt—10 to 17 inches; sandy loam
2BC—17 to 19 inches; loamy sand
2C—19 to 60 inches; stratified sand to very gravelly coarse sand

Dissimilar Components

Finchford soils

Extent: 1 to 5 percent of the unit

Rasset soils

Extent: 1 to 5 percent of the unit

454B—Chetek sandy loam, kame terrace, 2 to 6 percent slopes

Component Description

Chetek, kame terrace, and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Kame terraces on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
Bt1—10 to 16 inches; sandy loam
2Bt2—16 to 20 inches; stratified very gravelly coarse sand to loamy sand
2C—20 to 60 inches; stratified very gravelly coarse sand to sand

Dissimilar Components

Chetek stony sandy loam

Extent: 1 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 1 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

454C2—Chetek sandy loam, kame terrace, 6 to 12 percent slopes, eroded

Component Description

Chetek, kame terrace, and similar soils

Extent: 85 to 90 percent of the unit

Geomorphic component: Kame terraces on hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
Bt1—10 to 16 inches; sandy loam
2Bt2—16 to 20 inches; stratified very gravelly coarse sand to loamy sand
2C—20 to 60 inches; stratified very gravelly coarse sand to sand

Dissimilar Components

Chetek stony sandy loam

Extent: 1 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 1 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

454D2—Chetek sandy loam, kame terrace, 12 to 20 percent slopes, eroded

Component Description

Chetek, kame terrace, and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Kame terraces on hills
Position on the landform: Backslopes and shoulders
Slope range: 12 to 20 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 10 inches; sandy loam
Bt1—10 to 16 inches; sandy loam
2Bt2—16 to 20 inches; stratified very gravelly coarse sand to loamy sand
2C—20 to 60 inches; stratified very gravelly coarse sand to sand

Dissimilar Components

Chetek stony sandy loam

Extent: 1 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 1 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

454E—Chetek sandy loam, kame terrace, 20 to 35 percent slopes

Component Description

Chetek, kame terrace, and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Kame terraces on hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 35 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Loamy alluvium over sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.1 inches
Content of organic matter in the upper 10 inches: 1 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; sandy loam
E—4 to 11 inches; sandy loam

Bt1—11 to 16 inches; sandy loam
2Bt2—16 to 20 inches; stratified very gravelly coarse sand to loamy sand
2C—20 to 60 inches; stratified very gravelly coarse sand to sand

Dissimilar Components

Chetek stony sandy loam

Extent: 1 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 1 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

468A—Oesterle sandy loam, valley train, 0 to 3 percent slopes

Component Description

Oesterle, valley train, and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loamy alluvium over sandy outwash
Flooding: None
Shallowest depth to wet zone: 1.5 feet (April, May, November)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; sandy loam
E—8 to 11 inches; sandy loam
B/E,Bt—11 to 25 inches; sandy loam
2Bt—25 to 31 inches; loamy sand
2C—31 to 60 inches; stratified sand to very gravelly coarse sand

Dissimilar Components

Rusktown soils

Extent: 0 to 5 percent of the unit

Rib soils

Extent: 0 to 5 percent of the unit

501A—Finchford loamy sand, 0 to 3 percent slopes

Component Description

Finchford and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A1—0 to 15 inches; loamy sand
A2—15 to 19 inches; loamy sand
Bw—19 to 26 inches; sand
C—26 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Rasset soils

Extent: 0 to 10 percent of the unit

Chelsea soils

Extent: 0 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

501B—Finchford loamy sand, 2 to 6 percent slopes

Component Description

Finchford and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads

Slope range: 2 to 6 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A1—0 to 15 inches; loamy sand
A2—15 to 19 inches; loamy sand
Bw—19 to 26 inches; sand
C—26 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Chelsea soils

Extent: 0 to 10 percent of the unit

Burkhardt soils

Extent: 0 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

502B2—Chelsea fine sand, 2 to 6 percent slopes, eroded

Component Description

Chelsea and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Dunes on valley trains
Slope range: 2 to 6 percent
Texture of the surface layer: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Eolian sands
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.5 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap—0 to 9 inches; fine sand
Bw—9 to 30 inches; fine sand
E and Bt—30 to 80 inches; stratified fine sand to fine sandy loam

Dissimilar Components

Finchford soils

Extent: 0 to 10 percent of the unit

Rasset soils

Extent: 0 to 5 percent of the unit

502C2—Chelsea fine sand, 6 to 15 percent slopes, eroded

Component Description

Chelsea and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Dunes on valley trains
Slope range: 6 to 15 percent
Texture of the surface layer: Fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Eolian sands
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.5 inches
Content of organic matter in the upper 10 inches: 0.7 percent
Typical profile:
Ap—0 to 9 inches; fine sand
Bw—9 to 30 inches; fine sand
E and Bt—30 to 80 inches; stratified fine sand to fine sandy loam

Dissimilar Components

Finchford soils

Extent: 0 to 5 percent of the unit

506A—Komro loamy sand, 0 to 3 percent slopes

Component Description

Komro and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent

Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, June, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 4.4 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A—0 to 14 inches; loamy sand
AB—14 to 18 inches; sand
Bw—18 to 38 inches; sand
C—38 to 72 inches; stratified sand to very gravelly coarse sand

Dissimilar Components

Farrington soils

Extent: 1 to 10 percent of the unit

Finchford soils

Extent: 1 to 10 percent of the unit

Komro, loamy substratum

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

508A—Farrington loamy sand, 0 to 3 percent slopes

Component Description

Farrington and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Sandy outwash
Flooding: None
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 4.2 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap,A—0 to 14 inches; loamy sand
AB—14 to 18 inches; loamy sand
Bw—18 to 41 inches; loamy sand
C—41 to 72 inches; coarse sand

Dissimilar Components

Komro soils

Extent: 1 to 10 percent of the unit

Farrington, loamy substratum

Extent: 0 to 5 percent of the unit

Newson, undrained

Extent: 0 to 5 percent of the unit

510B—Boplain sand, 0 to 6 percent slopes

Component Description

Boplain and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 0 to 6 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Eolian sands or sandy outwash over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 32 inches; sand
2C—32 to 37 inches; sand
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Drammen soils

Extent: 1 to 10 percent of the unit

Moderately well drained soils

Extent: 0 to 10 percent of the unit

510C—Boplain sand, 6 to 15 percent slopes

Component Description

Boplain and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 6 to 15 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Eolian sands or sandy outwash over sandy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 32 inches; sand
2C—32 to 37 inches; sand
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Drammen soils

Extent: 1 to 10 percent of the unit

Elevasil soils

Extent: 0 to 10 percent of the unit

511A—Plainfield sand, 0 to 3 percent slopes

Component Description

Plainfield and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 32 inches; sand
C—32 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Prissel soils

Extent: 0 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

Aldo soils

Extent: 0 to 5 percent of the unit

Chelsea soils

Extent: 0 to 5 percent of the unit

511B—Plainfield sand, 2 to 6 percent slopes

Component Description

Plainfield and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 32 inches; sand
C—32 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Prissel soils

Extent: 0 to 5 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

511C—Plainfield sand, 6 to 15 percent slopes

Component Description

Plainfield and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 6 to 15 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 32 inches; sand
C—32 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

511F—Plainfield sand, 15 to 60 percent slopes

Component Description

Plainfield and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 15 to 60 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy and gravelly outwash
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; sand
Bw—4 to 32 inches; sand
C—32 to 80 inches; stratified gravelly coarse sand to sand

Dissimilar Components

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

Seep areas

Extent: 0 to 5 percent of the unit

512B—Drammen loamy sand, 1 to 6 percent slopes

Component Description

Drammen and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Sand sheets
Slope range: 1 to 6 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained
Parent material: Eolian sands and/or sandy alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 44 inches; sand
E and Bt—44 to 65 inches; stratified sand to loamy fine sand
C—65 to 72 inches; sand

Dissimilar Components

Boplain soils

Extent: 1 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

Aldo soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

512C—Drammen loamy sand, 6 to 12 percent slopes

Component Description

Drammen and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Sand sheets
Slope range: 6 to 12 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Eolian sands and/or sandy alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 44 inches; sand
E and Bt—44 to 65 inches; stratified sand to loamy fine sand
C—65 to 72 inches; sand

Dissimilar Components

Boplain soils

Extent: 0 to 5 percent of the unit

Urne soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

512D—Drammen loamy sand, 12 to 20 percent slopes

Component Description

Drammen and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Sand sheets
Slope range: 12 to 20 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Parent material: Eolian sands and/or sandy alluvium
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 44 inches; sand
E and Bt—44 to 65 inches; stratified sand to loamy fine sand
C—65 to 72 inches; sand

Dissimilar Components

Boone soils

Extent: 1 to 5 percent of the unit

Urne soils

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

516A—Aldo sand, 0 to 3 percent slopes

Component Description

Aldo and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy and gravelly outwash
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap—0 to 7 inches; sand
Bw—7 to 42 inches; sand
C—42 to 80 inches; sand

Dissimilar Components

Drammen soils

Extent: 1 to 5 percent of the unit

Prissel soils

Extent: 0 to 5 percent of the unit

Farrington soils

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

546A—Prissel loamy sand, 0 to 3 percent slopes

Component Description

Prissel and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 0 to 3 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy alluvium over stratified silty to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 3 feet (May, October)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 48 inches; loamy sand
2Bt—48 to 56 inches; stratified silt loam to sand
3BC,3C—56 to 72 inches; sand

Dissimilar Components

Drammen soils

Extent: 1 to 5 percent of the unit

Hoopeston, loamy substratum

Extent: 0 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

Farrington soils

Extent: 0 to 2 percent of the unit

546B—Prissel loamy sand, 2 to 6 percent slopes

Component Description

Prissel and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Treads
Slope range: 2 to 6 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained

Parent material: Sandy alluvium over stratified silty to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 3 feet (May, October)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 48 inches; loamy sand
2Bt—48 to 56 inches; stratified silt loam to sand
3BC,3C—56 to 72 inches; sand

Dissimilar Components

Drammen soils

Extent: 1 to 5 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 5 percent of the unit

Kevilar soils

Extent: 0 to 5 percent of the unit

546C—Prissel loamy sand, 6 to 15 percent slopes

Component Description

Prissel and similar soils

Extent: 80 to 90 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 6 to 15 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy alluvium over stratified silty to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 3 feet (May, October)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; loamy sand
Bw—9 to 48 inches; loamy sand
2Bt—48 to 56 inches; stratified silt loam to sand
3BC,3C—56 to 72 inches; sand

Dissimilar Components

Kevilar soils

Extent: 0 to 10 percent of the unit

Drammen soils

Extent: 0 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 10 percent of the unit

546F—Prissel loamy sand, 15 to 60 percent slopes

Component Description

Prissel and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Valley trains
Position on the landform: Risers
Slope range: 15 to 60 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy alluvium over stratified silty to sandy alluvium
Flooding: None
Shallowest depth to wet zone: 3 feet (May, October)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, December)
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; loamy sand
Bw—4 to 48 inches; loamy sand
2Bt—48 to 56 inches; stratified silt loam to sand
3BC,3C—56 to 72 inches; sand

Dissimilar Components

Plainfield soils

Extent: 1 to 10 percent of the unit

Seep areas

Extent: 0 to 10 percent of the unit

Soils that have sandstone at a depth of less than 60 inches

Extent: 0 to 10 percent of the unit

555A—Fordum silt loam, 0 to 2 percent slopes

Component Description

Fordum, frequently flooded, and similar soils

Extent: 75 to 100 percent of the unit
Geomorphic component: Flood plains
Slope range: 0 to 2 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Silty or loamy alluvium underlain by sandy and gravelly alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)
Highest frequency of flooding: Frequent (April, May)
Shallowest depth to wet zone: At the surface (April, May, November)
Deepest depth to wet zone: 2.5 feet (February, August)
Months in which ponding does not occur: January, February, March, June, July, August, September, October, November, December
Deepest ponding: 0.5 foot (April, May)
Available water capacity to a depth of 60 inches: 7.2 inches
Content of organic matter in the upper 10 inches: 7.4 percent
Typical profile:
A—0 to 6 inches; silt loam
Cg1—6 to 18 inches; silt loam
Cg2—18 to 30 inches; fine sandy loam
2Cg—30 to 60 inches; sand

Dissimilar Components

Somewhat poorly drained soils that are subject to occasional flooding

Extent: 0 to 15 percent of the unit

Cathro, flooded

Extent: 0 to 10 percent of the unit

Moppet soils

Extent: 0 to 5 percent of the unit

561B—Tarr sand, 1 to 6 percent slopes

Component Description

Tarr and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Pediments
Position on the landform: Toeslopes
Slope range: 1 to 6 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy pedisediment over sandy residuum
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 34 inches; sand
C—34 to 62 inches; sand

Dissimilar Components

Boone soils

Extent: 0 to 5 percent of the unit

Tint soils

Extent: 0 to 2 percent of the unit

566A—Tint sand, 0 to 3 percent slopes

Component Description

Tint and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Pediments
Position on the landform: Toeslopes
Slope range: 0 to 3 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Moderately well drained
Parent material: Sandy pedisediment
Flooding: None
Shallowest depth to wet zone: 4 feet (April, May, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Ap—0 to 9 inches; sand
Bw—9 to 34 inches; sand
C—34 to 60 inches; sand

Dissimilar Components

Tarr soils

Extent: 1 to 10 percent of the unit

Moderately well drained soils

Extent: 0 to 10 percent of the unit

573B—Plainbo sand, sand sheet, 0 to 6 percent slopes

Component Description

Plainbo, sand sheet, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 0 to 6 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Eolian sand or outwash over sandy residuum
Flooding: None
Depth to wet zone: More than 3.1 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.9 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap—0 to 8 inches; sand
Bw—8 to 32 inches; sand
2BC—32 to 37 inches; sand
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Drammen soils

Extent: 0 to 10 percent of the unit

573C—Plainbo sand, sand sheet, 6 to 15 percent slopes

Component Description

Plainbo, sand sheet, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Sand sheets on hills
Slope range: 6 to 15 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Eolian sand or outwash over sandy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.9 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
Ap—0 to 8 inches; sand
Bw—8 to 32 inches; sand
2BC—32 to 37 inches; sand
2Cr—37 to 60 inches; weathered bedrock

Dissimilar Components

Drammen soils

Extent: 0 to 10 percent of the unit

Hayriver soils

Extent: 0 to 10 percent of the unit

588A—Meehan loamy sand, valley train, 0 to 3 percent slopes

Component Description

Meehan, valley train, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Valley trains
Slope range: 0 to 3 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Somewhat poorly drained
Parent material: Sandy outwash
Flooding: None
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
Ap—0 to 8 inches; loamy sand
Bw—8 to 28 inches; sand
C—28 to 60 inches; sand

Dissimilar Components

Aldo soils

Extent: 0 to 10 percent of the unit

Newson soils

Extent: 0 to 5 percent of the unit

Meehan, loamy substratum

Extent: 0 to 5 percent of the unit

589A—Newson mucky loamy sand, 0 to 2 percent slopes

Component Description

Newson, undrained, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Depressions on valley trains
Slope range: 0 to 2 percent
Texture of the surface layer: Mucky loamy sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Sandy alluvium and/or sandy outwash
Flooding: None
Shallowest depth to wet zone: At the surface (January, February, March, April, May, November, December)
Deepest depth to wet zone: 2 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, November, December)
Deepest ponding: 0.5 foot (March, April, May)
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 7.2 percent
Typical profile:
A1—0 to 3 inches; mucky loamy sand
A2—3 to 8 inches; loamy sand
Bg,BCg—8 to 22 inches; sand
C—22 to 60 inches; sand

Dissimilar Components

Markey, undrained

Extent: 1 to 5 percent of the unit

Meehan soils

Extent: 0 to 5 percent of the unit

Newson, loamy substratum

Extent: 1 to 5 percent of the unit

Newson, drained

Extent: 1 to 5 percent of the unit

601C—Beavercreek cobbly fine sandy loam, 3 to 12 percent slopes

Component Description

Beavercreek and similar soils

Extent: 95 to 100 percent of the unit
Geomorphic component: Alluvial fans
Slope range: 3 to 12 percent
Texture of the surface layer: Cobbly fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Cobbly loamy alluvium and colluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, June, July, August, September, December)
Highest frequency of flooding: Occasional (March, April, May, October, November)
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
A—0 to 5 inches; cobbly fine sandy loam
C1—5 to 12 inches; stratified cobbly fine sandy loam to silt loam
2C2—12 to 60 inches; stratified very cobbly silt loam to extremely gravelly sand

Dissimilar Components

Arenzville soils

Extent: 0 to 5 percent of the unit

616B—Chaseburg silt loam, 1 to 4 percent slopes

Component Description

Chaseburg and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Hills
Position on the landform: Toeslopes
Slope range: 1 to 4 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Silty slope alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, September, December)
Highest frequency of flooding: Occasional (March, April, May, June, October, November)
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 12.7 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap—0 to 9 inches; silt loam
C—9 to 60 inches; silt loam

Dissimilar Components

Arenzville soils

Extent: 1 to 5 percent of the unit

Soils that are not subject to flooding

Extent: 1 to 5 percent of the unit

619A—Vancecreek silt loam, 0 to 2 percent slopes

Component Description

Vancecreek, undrained, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Depressions on stream terraces; drainageways on stream terraces
Slope range: 0 to 2 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Rare (January, December)
Highest frequency of flooding: Frequent (March, April, May)
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 12.8 inches
Content of organic matter in the upper 10 inches: 7 percent
Typical profile:
A—0 to 16 inches; silt loam
Bg—16 to 49 inches; silt loam
Cg—49 to 60 inches; stratified very fine sand to silt loam

Dissimilar Components

Orion soils

Extent: 0 to 5 percent of the unit

Cathro, flood plain, undrained

Extent: 0 to 5 percent of the unit

Fordum, undrained

Extent: 0 to 5 percent of the unit

Vancecreek, drained

Extent: 0 to 5 percent of the unit

626A—Arenzville silt loam, 0 to 3 percent slopes

Component Description

Arenzville and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Drainageways on stream terraces
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)

Drainage class: Moderately well drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, September, December)
Highest frequency of flooding: Occasional (March, April, May, June, October, November)
Shallowest depth to wet zone: 4 feet (April, May, June, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 12.5 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
A—0 to 10 inches; silt loam
C—10 to 25 inches; silt loam
Ab—25 to 40 inches; silt loam
C´—40 to 60 inches; stratified silt loam to very fine sand

Dissimilar Components

Soils that are not subject to flooding

Extent: 0 to 5 percent of the unit

Orion soils

Extent: 0 to 5 percent of the unit

Ettrick soils

Extent: 0 to 2 percent of the unit

Arenzville, loamy-skeletal substratum

Extent: 0 to 10 percent of the unit

628A—Orion silt loam, 0 to 3 percent slopes

Component Description

Orion and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Drainageways on stream terraces
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, September, December)
Highest frequency of flooding: Occasional (March, April, May, June, October, November)
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 12.4 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 8 inches; silt loam
C—8 to 32 inches; silt loam
Ab—32 to 40 inches; silt loam
Cg—40 to 60 inches; stratified silt loam to very fine sand

Dissimilar Components

Arenzville soils

Extent: 0 to 10 percent of the unit

Ettrick, undrained

Extent: 1 to 5 percent of the unit

Soils that are not subject to flooding

Extent: 1 to 5 percent of the unit

Orion, loamy-skeletal substratum

Extent: 0 to 5 percent of the unit

629A—Ettrick silt loam, 0 to 2 percent slopes

Component Description

Ettrick, undrained, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Drainageways on stream terraces
Slope range: 0 to 2 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Poorly drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Rare (January, December)
Highest frequency of flooding: Frequent (March, April, May)
Shallowest depth to wet zone: At the surface (March, April, May, November)
Deepest depth to wet zone: 2 feet (August)

Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 14.4 inches
Content of organic matter in the upper 10 inches: 8 percent
Typical profile:
Ap,A—0 to 16 inches; silt loam
Bg—16 to 35 inches; silt loam
Cg—35 to 60 inches; stratified silt loam to fine sand

Dissimilar Components

Orion soils

Extent: 0 to 5 percent of the unit

Palms, undrained

Extent: 0 to 5 percent of the unit

Ettrick, drained

Extent: 0 to 5 percent of the unit

636A—Quarderer silt loam, 0 to 3 percent slopes

Component Description

Quarderer and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Drainageways on stream terraces
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, September, December)
Highest frequency of flooding: Occasional (March, April, May, June, October, November)
Shallowest depth to wet zone: 4 feet (April, May, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 13 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
Ap,A—0 to 13 inches; silt loam
C—13 to 22 inches; silt loam
Ab—22 to 29 inches; silt loam
Btb—29 to 55 inches; silt loam
C´—55 to 72 inches; silt loam

Dissimilar Components

Orion soils

Extent: 0 to 10 percent of the unit

Doritty soils

Extent: 0 to 10 percent of the unit

Vancecreek, undrained

Extent: 0 to 5 percent of the unit

646A—Dunnbot fine sandy loam, 0 to 3 percent slopes

Component Description

Dunnbot and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Natural levees on flood plains; flats on flood plains
Slope range: 0 to 3 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Stratified loamy alluvium over sandy alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, July, August, September, October, November, December)
Highest frequency of flooding: Occasional (March, April)
Shallowest depth to wet zone: 4 feet (March, April, May, June, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 8.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Ap—0 to 9 inches; fine sandy loam
A—9 to 36 inches; stratified sandy loam to silt loam
Bw—36 to 45 inches; stratified sandy loam to silt loam

C—45 to 72 inches; stratified loamy fine sand to gravelly coarse sand

Dissimilar Components

Algansee soils

Extent: 0 to 5 percent of the unit

Rusktown soils

Extent: 0 to 5 percent of the unit

Scotah soils

Extent: 0 to 5 percent of the unit

Kalmarville soils

Extent: 0 to 5 percent of the unit

656A—Scotah loamy fine sand, 0 to 3 percent slopes

Component Description

Scotah and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Natural levees on flood plains; flats on flood plains
Slope range: 0 to 3 percent
Texture of the surface layer: Loamy fine sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Sandy alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, August, September, October, November, December)
Highest frequency of flooding: Occasional (March, April, May)
Shallowest depth to wet zone: 4 feet (April, May, June, November)
Deepest depth to wet zone: 5.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
A—0 to 4 inches; loamy fine sand
Bw—4 to 22 inches; fine sand
C—22 to 60 inches; stratified loamy fine sand to gravelly coarse sand

Dissimilar Components

Algansee soils

Extent: 0 to 10 percent of the unit

Soils that are not subject to flooding

Extent: 0 to 5 percent of the unit

Kalmarville soils

Extent: 0 to 5 percent of the unit

766A—Moppet fine sandy loam, 0 to 3 percent slopes

Component Description

Moppet, occasionally flooded, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Flood plains
Slope range: 0 to 3 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loamy alluvium underlain by sandy and gravelly alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, February, July, August, December)
Highest frequency of flooding: Occasional (April, May)
Shallowest depth to wet zone: 2.5 feet (April)
Deepest depth to wet zone: 4.5 feet (August)
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
A—0 to 4 inches; fine sandy loam
E—4 to 10 inches; fine sandy loam
Bw—10 to 39 inches; fine sandy loam
2C—39 to 60 inches; gravelly sand

Dissimilar Components

Somewhat poorly drained soils that are subject to frequent flooding

Extent: 0 to 15 percent of the unit

Fordum soils

Extent: 0 to 5 percent of the unit

804B2—Arland fine sandy loam, 2 to 6 percent slopes, eroded, dissected

Component Description

Arland, dissected, and similar soils

Extent: 85 to 100 percent of the unit

Geomorphic component: Ground moraines on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy till over loamy and/or sandy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; fine sandy loam
E—8 to 10 inches; sandy loam
E/B—10 to 15 inches; sandy loam
B/E—15 to 23 inches; sandy loam
Bt—23 to 36 inches; sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Hayriver soils

Extent: 1 to 10 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

Amery soils

Extent: 0 to 5 percent of the unit

804C2—Arland fine sandy loam, 6 to 12 percent slopes, eroded, dissected

Component Description

Arland, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy till over loamy and/or sandy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; fine sandy loam
E—8 to 10 inches; sandy loam
E/B—10 to 15 inches; sandy loam
B/E—15 to 23 inches; sandy loam
Bt—23 to 36 inches; sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Hayriver soils

Extent: 1 to 10 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

Amery soils

Extent: 0 to 5 percent of the unit

804D—Arland fine sandy loam, 12 to 25 percent slopes, dissected

Component Description

Arland, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Shoulders and backslopes
Slope range: 12 to 25 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy till over loamy and/or sandy residuum
Flooding: None
Depth to wet zone: More than 3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.8 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; fine sandy loam
E—4 to 10 inches; sandy loam
E/B—10 to 15 inches; sandy loam
B/E—15 to 23 inches; sandy loam

Bt—23 to 36 inches; sandy loam
Cr—36 to 60 inches; weathered bedrock

Dissimilar Components

Hayriver soils

Extent: 1 to 10 percent of the unit

Amery soils

Extent: 0 to 5 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

814D2—Renova silt loam, 12 to 20 percent slopes, eroded, dissected

Component Description

Renova, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Backslopes and shoulders
Slope range: 12 to 20 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
Ap—0 to 8 inches; silt loam
E—8 to 10 inches; silt loam
Bt—10 to 19 inches; silty clay loam
2Bt,2BCt—19 to 52 inches; loam
2C—52 to 60 inches; loam

Dissimilar Components

Vlasaty soils

Extent: 0 to 10 percent of the unit

NewGlarus soils

Extent: 0 to 10 percent of the unit

816B2—Vlasaty silt loam, 2 to 6 percent slopes, eroded, dissected

Component Description

Vlasaty, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 2 feet (March, April)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap—0 to 7 inches; silt loam
E—7 to 9 inches; silt loam
B/E—9 to 16 inches; silt loam
2Bt—16 to 42 inches; clay loam
2C—42 to 60 inches; loam

Dissimilar Components

Hersey soils

Extent: 0 to 10 percent of the unit

Sargeant soils

Extent: 0 to 5 percent of the unit

NewGlarus soils

Extent: 0 to 5 percent of the unit

816C2—Vlasaty silt loam, 6 to 12 percent slopes, eroded, dissected

Component Description

Vlasaty, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 2 feet (March, April)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.6 percent
Typical profile:
Ap—0 to 7 inches; silt loam
E—7 to 9 inches; silt loam
B/E—9 to 16 inches; silt loam
2Bt—16 to 42 inches; clay loam
2C—42 to 60 inches; loam

Dissimilar Components

NewGlarus soils

Extent: 0 to 10 percent of the unit

Sargeant soils

Extent: 0 to 5 percent of the unit

Hersey soils

Extent: 0 to 5 percent of the unit

826B2—Hersey silt loam, 2 to 6 percent slopes, eroded

Component Description

Hersey and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 3 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 58 inches; silt loam
2Bt—58 to 115 inches; clay loam

Dissimilar Components

Pepin soils

Extent: 0 to 5 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

Vasa soils

Extent: 0 to 5 percent of the unit

Vlasaty soils

Extent: 0 to 5 percent of the unit

826C2—Hersey silt loam, 6 to 12 percent slopes, eroded

Component Description

Hersey and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Shoulders and backslopes
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 3 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 12.6 inches

Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
Ap—0 to 8 inches; silt loam
Bt—8 to 58 inches; silt loam
2Bt—58 to 115 inches; clay loam

Dissimilar Components

Pepin soils

Extent: 0 to 10 percent of the unit

Seaton soils

Extent: 0 to 5 percent of the unit

Vlasaty soils

Extent: 0 to 5 percent of the unit

828B—Vasa silt loam, 1 to 6 percent slopes, dissected

Component Description

Vasa and similar soils

Extent: 90 to 100 percent of the unit
Geomorphic component: Till plains on hills
Position on the landform: Head slopes
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loess over loamy till
Months in which flooding does not occur: January, February, March, June, July, August, September, October, November, December
Highest frequency of flooding: Rare (April, May)
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 12.2 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap—0 to 9 inches; silt loam
Bw—9 to 13 inches; silt loam
Bt—13 to 60 inches; silt loam
2BCt—60 to 70 inches; loam

Dissimilar Components

Sargeant soils

Extent: 0 to 5 percent of the unit

Hersey soils

Extent: 0 to 5 percent of the unit

Soils that are subject to occasional flooding

Extent: 0 to 5 percent of the unit

Poorly drained soils

Extent: 0 to 3 percent of the unit

836B2—Spencer silt loam, 2 to 6 percent slopes, eroded, dissected

Component Description

Spencer, dissected, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 3 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E,E/B—9 to 22 inches; silt loam
B/E,Bt—22 to 42 inches; silt loam
2Bt—42 to 48 inches; loam
2C—48 to 72 inches; sandy loam

Dissimilar Components

Almena soils

Extent: 0 to 5 percent of the unit

Pepin soils

Extent: 0 to 5 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

836C2—Spencer silt loam, 6 to 12 percent slopes, eroded, dissected

Component Description

Spencer, dissected, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Backslopes and shoulders
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Moderately well drained
Parent material: Loess over loamy till
Flooding: None
Shallowest depth to wet zone: 3 feet (March, April, May, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 10.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E,E/B—9 to 22 inches; silt loam
B/E,Bt—22 to 42 inches; silt loam
2Bt—42 to 48 inches; loam
2C—48 to 72 inches; sandy loam

Dissimilar Components

Pepin soils

Extent: 0 to 5 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

Santiago soils

Extent: 0 to 3 percent of the unit

838B—Almena silt loam, 1 to 6 percent slopes, dissected

Component Description

Almena, dissected, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Head slopes
Slope range: 1 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Loess over loamy till
Months in which flooding does not occur: January, February, March, June, July, August, September, October, November, December
Highest frequency of flooding: Rare (April, May)
Shallowest depth to wet zone: 1.5 feet (March, April, May, June, October, November, December)
Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September)
Ponding: None
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
Ap—0 to 9 inches; silt loam
E/B—9 to 13 inches; silt loam
B/E—13 to 21 inches; silt loam
Bt—21 to 42 inches; silt loam
2C—42 to 60 inches; sandy loam

Dissimilar Components

Spencer soils

Extent: 0 to 10 percent of the unit

Soils that are subject to occasional flooding

Extent: 0 to 10 percent of the unit

Poorly drained soils

Extent: 0 to 3 percent of the unit

870B2—Santiago silt loam, 2 to 6 percent slopes, eroded, dissected

Component Description

Santiago, dissected, and similar soils

Extent: 85 to 95 percent of the unit

Geomorphic component: Ground moraines on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.3 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 10 inches; silt loam
E/B—10 to 15 inches; silt loam
B/E—15 to 23 inches; silt loam
2Bt—23 to 87 inches; gravelly sandy loam
2Cd—87 to 102 inches; sandy loam

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Arland soils

Extent: 0 to 5 percent of the unit

Amery soils

Extent: 0 to 5 percent of the unit

Santiago stony loam

Extent: 0 to 5 percent of the unit

870C2—Santiago silt loam, 6 to 12 percent slopes, eroded, dissected

Component Description

Santiago, dissected, and similar soils

Extent: 85 to 90 percent of the unit
Geomorphic component: Ground moraines on hills
Position on the landform: Backslopes and shoulders
Slope range: 6 to 12 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loess over loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.3 inches
Content of organic matter in the upper 10 inches: 2 percent
Typical profile:
Ap—0 to 10 inches; silt loam
E/B—10 to 15 inches; silt loam
B/E—15 to 23 inches; silt loam
2Bt—23 to 87 inches; gravelly sandy loam
2Cd—87 to 102 inches; sandy loam

Dissimilar Components

Dobie soils

Extent: 0 to 5 percent of the unit

Arland soils

Extent: 0 to 5 percent of the unit

Amery soils

Extent: 0 to 5 percent of the unit

Santiago stony loam

Extent: 0 to 5 percent of the unit

875B—Amery sandy loam, 2 to 6 percent slopes, dissected

Component Description

Amery, dissected, and similar soils

Extent: 85 to 100 percent of the unit
Geomorphic component: Moraines on hills
Position on the landform: Summits
Slope range: 2 to 6 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.6 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bw—9 to 22 inches; sandy loam
E/B—22 to 34 inches; gravelly sandy loam
B/E—34 to 41 inches; gravelly sandy loam
Bt—41 to 71 inches; sandy loam
2Cd—71 to 80 inches; sandy loam

Dissimilar Components

Arland soils

Extent: 0 to 5 percent of the unit

Santiago soils

Extent: 0 to 5 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

Moderately well drained soils

Extent: 0 to 5 percent of the unit

875C2—Amery sandy loam, 6 to 12 percent slopes, eroded, dissected

Component Description

Amery, dissected, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Moraines on hills
Position on the landform: Backslopes and shoulders
Slope range: 6 to 12 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.6 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
Ap—0 to 9 inches; sandy loam
Bw—9 to 22 inches; sandy loam
E/B—22 to 34 inches; gravelly sandy loam
B/E—34 to 41 inches; gravelly sandy loam
Bt—41 to 71 inches; sandy loam
2Cd—71 to 80 inches; sandy loam

Dissimilar Components

Arland soils

Extent: 0 to 5 percent of the unit

Santiago soils

Extent: 0 to 5 percent of the unit

Hayriver soils

Extent: 0 to 5 percent of the unit

Moderately well drained soils

Extent: 0 to 5 percent of the unit

875D—Amery sandy loam, 12 to 25 percent slopes, dissected

Component Description

Amery, dissected, and similar soils

Extent: 85 to 95 percent of the unit
Geomorphic component: Moraines on hills
Position on the landform: Backslopes and shoulders
Slope range: 12 to 25 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Well drained
Parent material: Loamy till
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.6 inches
Content of organic matter in the upper 10 inches: 1.1 percent
Typical profile:
A—0 to 3 inches; sandy loam
Bw—3 to 22 inches; sandy loam
E/B—22 to 34 inches; gravelly sandy loam
B/E—34 to 41 inches; gravelly sandy loam
Bt—41 to 71 inches; sandy loam
2Cd—71 to 80 inches; sandy loam

Dissimilar Components

Arland soils

Extent: 0 to 10 percent of the unit

Hayriver soils

Extent: 0 to 10 percent of the unit

1125F—Dorerton, very stony-Elbaville complex, 30 to 60 percent slopes

Component Description

Dorerton and similar soils

Extent: 55 to 65 percent of the unit
Geomorphic component: Hills
Position on the landform: Backslopes
Slope range: 30 to 60 percent
Texture of the surface layer: Loam

Depth to restrictive feature: 45 to 70 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loamy colluvium over loamy residuum
Flooding: None
Depth to wet zone: More than 5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.6 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
A—0 to 3 inches; loam
E—3 to 15 inches; loam
BE,Bt—15 to 18 inches; loam
2Bt—18 to 30 inches; very channery clay loam
2C—30 to 60 inches; extremely flaggy loamy sand

Elbaville and similar soils

Extent: 20 to 30 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders
Slope range: 30 to 45 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: 60 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Parent material: Loess over loamy and clayey colluvium over loamy and sandy residuum
Flooding: None
Depth to wet zone: More than 5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 7.5 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 11 inches; silt loam
B/E,Bt—11 to 21 inches; silt loam
2Bt—21 to 26 inches; silty clay
3Bt—26 to 37 inches; very flaggy silty clay loam
3C—37 to 60 inches; extremely flaggy sandy loam

Dissimilar Components

Churchtown soils

Extent: 0 to 10 percent of the unit

Dorerton, nonstony

Extent: 0 to 5 percent of the unit

Gaphill soils

Extent: 0 to 5 percent of the unit

Rockbluff soils

Extent: 0 to 5 percent of the unit

1145F—Gaphill-Rockbluff complex, 30 to 60 percent slopes

Component Description

Gaphill and similar soils

Extent: 45 to 55 percent of the unit
Geomorphic component: Hills
Position on the landform: Backslopes and shoulders
Slope range: 30 to 60 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: 40 to 80 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy colluvium and/or loamy slope alluvium over sandy colluvium and/or sandy residuum
Flooding: None
Depth to wet zone: More than 4.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.7 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
Oe—0 to 2 inches; moderately decomposed plant material
A—2 to 5 inches; sandy loam
E—5 to 11 inches; sandy loam
Bt—11 to 32 inches; sandy loam
2BC—32 to 50 inches; sand
2C—50 to 56 inches; sand
2Cr—56 to 80 inches; weathered bedrock

Rockbluff and similar soils

Extent: 30 to 40 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 30 to 60 percent
Texture of the surface layer: Loamy sand
Depth to restrictive feature: 40 to 80 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy colluvium and/or sandy slope alluvium over sandy residuum
Flooding: None

Depth to wet zone: More than 4.3 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Oe—0 to 2 inches; moderately decomposed plant material
A—2 to 4 inches; loamy sand
E—4 to 9 inches; loamy sand
Bw—9 to 35 inches; sand
C—35 to 52 inches; sand
Cr—52 to 80 inches; weathered bedrock

Dissimilar Components

Gaphill very stony sandy loam

Extent: 0 to 10 percent of the unit

Dorerton soils

Extent: 0 to 5 percent of the unit

Rock outcrop

Extent: 0 to 3 percent of the unit

Churchtown soils

Extent: 0 to 5 percent of the unit

1224F—Boone-Elevasil complex, 15 to 50 percent slopes

Component Description

Boone and similar soils

Extent: 55 to 65 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders
Slope range: 15 to 50 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; sand
E,Bw—3 to 21 inches; sand
C—21 to 35 inches; sand
Cr—35 to 60 inches; weathered bedrock

Elevasil and similar soils

Extent: 25 to 35 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 15 to 50 percent
Texture of the surface layer: Sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 3.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.4 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; sandy loam
Bt—3 to 27 inches; sandy loam
2BC—27 to 31 inches; loamy sand
2C—31 to 39 inches; sand
2Cr—39 to 60 inches; weathered bedrock

Dissimilar Components

Tarr soils

Extent: 1 to 10 percent of the unit

Urne soils

Extent: 0 to 10 percent of the unit

Elkmound soils

Extent: 0 to 5 percent of the unit

1233F—Boone-Tarr sands, 15 to 50 percent slopes

Component Description

Boone and similar soils

Extent: 50 to 60 percent of the unit

Geomorphic component: Hills
Position on the landform: Shoulders
Slope range: 15 to 50 percent
Texture of the surface layer: Sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.9 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; sand
E,Bw—3 to 21 inches; sand
C—21 to 35 inches; sand
Cr—35 to 60 inches; weathered bedrock

Tarr and similar soils

Extent: 25 to 35 percent of the unit
Geomorphic component: Hills
Position on the landform: Footslopes and backslopes
Slope range: 15 to 45 percent
Texture of the surface layer: Sand
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 6.7 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
Oe—0 to 2 inches; moderately decomposed plant material
A—2 to 6 inches; sand
Bw—6 to 34 inches; sand
C—34 to 62 inches; sand

Dissimilar Components

Elevasil soils

Extent: 0 to 15 percent of the unit

Rock outcrop

Extent: 0 to 5 percent of the unit

1275F—Hayriver-Twinmound complex, 15 to 50 percent slopes

Component Description

Hayriver and similar soils

Extent: 40 to 60 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 20 to 50 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Parent material: Loamy slope alluvium over sandy and/or loamy residuum
Flooding: None
Depth to wet zone: More than 2.5 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; fine sandy loam
E—4 to 13 inches; fine sandy loam
Bt—13 to 30 inches; fine sandy loam
Cr—30 to 60 inches; weathered bedrock

Twinmound and similar soils

Extent: 25 to 40 percent of the unit
Geomorphic component: Hills
Position on the landform: Shoulders and backslopes
Slope range: 15 to 50 percent
Texture of the surface layer: Fine sand
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Parent material: Sandy slope alluvium over sandy residuum
Flooding: None
Depth to wet zone: More than 2.2 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; fine sand
Bw—3 to 17 inches; fine sand
BC—17 to 26 inches; channery fine sand
Cr—26 to 60 inches; weathered bedrock

Dissimilar Components

Elkmound soils

Extent: 1 to 10 percent of the unit

Drammen soils

Extent: 0 to 5 percent of the unit

Dobie soils

Extent: 0 to 5 percent of the unit

1648A—Northbend-Ettrick silt loams, 0 to 3 percent slopes

Component Description

Northbend and similar soils

Extent: 55 to 65 percent of the unit
Geomorphic component: Flats on flood plains
Slope range: 0 to 3 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Parent material: Silty and loamy alluvium over sandy alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, February, August, December)
Highest frequency of flooding: Frequent (March, April, May, June)
Shallowest depth to wet zone: 1.5 feet (April, May, June)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 8.3 inches
Content of organic matter in the upper 10 inches: 5.9 percent
Typical profile:
A—0 to 7 inches; silt loam
Bw—7 to 34 inches; silt loam
2BC—34 to 36 inches; loamy fine sand
2C—36 to 60 inches; sand

Ettrick, flood plain, undrained, and similar soils

Extent: 25 to 35 percent of the unit
Geomorphic component: Drainageways on flood plains; depressions on flood plains
Slope range: 0 to 1 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: More than 60 inches
Drainage class: Poorly drained
Parent material: Silty alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, February, August, December)
Highest frequency of flooding: Frequent (March, April, May, June)
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 14.4 inches
Content of organic matter in the upper 10 inches: 8 percent
Typical profile:
A—0 to 16 inches; silt loam
Bg—16 to 35 inches; silt loam
Cg—35 to 60 inches; stratified fine sand to silt loam

Dissimilar Components

Palms, flood plain, undrained

Extent: 1 to 10 percent of the unit

Dunnbot soils

Extent: 0 to 5 percent of the unit

Water

Extent: 0 to 5 percent of the unit

1658A—Algansee-Kalmarville complex, 0 to 3 percent slopes

Component Description

Algansee and similar soils

Extent: 50 to 60 percent of the unit
Geomorphic component: Flats on flood plains
Slope range: 0 to 3 percent
Texture of the surface layer: Fine sandy loam
Depth to restrictive feature: Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained

Parent material: Thin mantle of loamy alluvium over sandy alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, February, August, December)
Highest frequency of flooding: Frequent (March, April, May, June)
Shallowest depth to wet zone: 1.5 feet (April, May)
Deepest depth to wet zone: 3 feet (July, August)
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.1 percent
Typical profile:
A—0 to 4 inches; fine sandy loam
Bw—4 to 31 inches; loamy fine sand
C—31 to 60 inches; stratified gravelly coarse sand to loamy fine sand

Kalmarville, undrained, and similar soils

Extent: 25 to 35 percent of the unit
Geomorphic component: Drainageways on flood plains; depressions on flood plains
Slope range: 0 to 1 percent
Texture of the surface layer: Silt loam
Depth to restrictive feature: More than 60 inches
Drainage class: Poorly drained
Parent material: Silty and loamy alluvium over sandy alluvium
Lowest frequency of flooding (if it occurs): Very rare (January, February, August, December)
Highest frequency of flooding: Frequent (March, April, May, June)
Shallowest depth to wet zone: At the surface (January, February, March, April, May, June, October, November, December)
Deepest depth to wet zone: 1.5 feet (August)
Shallowest ponding: 0.3 foot (January, February, June, July, August, September, October, December)
Deepest ponding: 0.5 foot (March, April, May, November)
Available water capacity to a depth of 60 inches: 8.4 inches
Content of organic matter in the upper 10 inches: 4.2 percent
Typical profile:
A1—0 to 6 inches; silt loam
A2—6 to 37 inches; stratified sandy loam to silt loam
Cg—37 to 42 inches; stratified sandy loam to silt loam
2Cg—42 to 60 inches; stratified coarse sand to fine sand

Dissimilar Components

Scotah soils

Extent: 1 to 10 percent of the unit

Palms, flood plain, undrained

Extent: 0 to 5 percent of the unit

Water

Extent: 1 to 5 percent of the unit

Riverwash

Extent: 1 to 2 percent of the unit

Markey, flood plain, undrained

Extent: 0 to 5 percent of the unit

2002—Udorthents, earthen dams

Component Description

• This map unit generally consists of silty, loamy, and clayey soils. Service roads, spillways, very steep side slopes, dikes, levees, and small concrete or steel dam structures may be included. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

2003A—Riverwash

Component Description

Riverwash

Extent: 90 to 100 percent of the unit
Geomorphic component: Flood plains
Definition: Riverwash consists of unstable sediments that are reworked frequently by rivers. The sediments are typically sandy and gravelly, but they are silty and clayey in some areas. The areas of this map unit along the major rivers are frequently flooded. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

Dissimilar Components

Kalmarville soils

Extent: 0 to 5 percent of the unit

Water

Extent: 0 to 5 percent of the unit

Algansee soils

Extent: 0 to 5 percent of the unit

2013—Pits, gravel

Component Description

• This map unit consists of open excavations from which sand and/or rock fragments (mostly gravel and cobbles) have been removed. Bedrock or other material is exposed in some places. Stockpiles, service roads, and vertical side slopes may be included. Many pits have been excavated down to or below the level of the ground water and may have intermittent or deep ponds of water. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

2014—Pits, quarry, hard bedrock

Component Description

• This map unit consists of open excavations from which dolostone, quartzite, granite, or other indurated bedrock has been removed. Drilling, blasting, and crushing of material are generally required to remove and use the bedrock. Stockpiles, service roads, and vertical slopes may be included. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

2016—Pits, quarry, soft bedrock

Component Description

• This map unit consists of open excavations from which sandstone or shale bedrock has been removed. Backhoes or front-end loaders can generally be used to dig and remove bedrock. Stockpiles, service roads, and vertical side slopes may be included. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

2030—Udorthents and Udipsamments, cut or fill

Component Description

Udorthents, cut or fill

Extent: 0 to 100 percent of the unit
Depth to restrictive feature: Very deep (more than 60 inches)
Flooding: None
Ponding: None
Definition: Areas where the original silty, loamy, or clayey soil profile has been altered by the addition or removal of more than about a foot of soil material. Roads, landscaped areas, and steep slopes may be included. Because of the variability of this component, interpretations for specific uses are not available. Onsite investigation is needed.

Udipsamments, cut or fill

Extent: 0 to 100 percent of the unit
Depth to restrictive feature: Very deep (more than 60 inches)
Flooding: None
Ponding: None
Definition: Areas where the original sandy soil profile has been altered by the addition or removal of more than about a foot of soil material. Roads, landscaped areas, and steep slopes may be included. Because of the variability of this component, interpretations for specific uses are not available. Onsite investigation is needed.

2050—Landfill

Component Description

• This map unit consists of areas of accumulated waste products of human habitation. The areas can be above or below natural ground level. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

M-W—Miscellaneous water

Component Description

• This map unit consists of manmade areas that are used for industrial, sanitary, or mining applications and that contain water most of the year. Included are narrow dikes that surround the water areas. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

W—Water

Component Description

• This map unit consists of rivers, streams, lakes, reservoirs, and ponds. These areas are covered with water in most years, at least during the period that is warm enough for plants to grow. Many areas are covered throughout the year. Small islands, areas of flood plain, or riverwash may be included.

Table 2.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
11A	Markey muck, flood plain, 0 to 1 percent slopes	965	0.2
20A	Palms and Houghton mucks, 0 to 1 percent slopes	237	*
40A	Markey and Seelyeville mucks, 0 to 1 percent slopes	15,074	2.7
45A	Seelyeville and Cathro mucks, valley train, 0 to 1 percent slopes	1,452	0.3
101B	Menahga sand, valley train, 0 to 6 percent slopes	1,947	0.4
101C	Menahga sand, valley train, 6 to 12 percent slopes	19	*
101E	Menahga sand, valley train, 12 to 30 percent slopes	30	*
115B2	Seaton silt loam, 2 to 6 percent slopes, eroded	379	*
115C2	Seaton silt loam, 6 to 12 percent slopes, eroded	6,465	1.2
115D2	Seaton silt loam, 12 to 20 percent slopes, eroded	6,986	1.3
115E2	Seaton silt loam, 20 to 30 percent slopes, eroded	140	*
116C2	Churchtown silt loam, 6 to 12 percent slopes, eroded	370	*
116D2	Churchtown silt loam, 12 to 20 percent slopes, eroded	1,312	0.2
116E2	Churchtown silt loam, 20 to 30 percent slopes, eroded	2,261	0.4
125B2	Pepin silt loam, 2 to 6 percent slopes, eroded	964	0.2
125C2	Pepin silt loam, 6 to 12 percent slopes, eroded	3,384	0.6
125D2	Pepin silt loam, 12 to 20 percent slopes, eroded	966	0.2
125E2	Pepin silt loam, 20 to 30 percent slopes, eroded	33	*
135C2	Wickware silt loam, 6 to 12 percent slopes, eroded	4,632	0.8
135D2	Wickware silt loam, 12 to 20 percent slopes, eroded	1,851	0.3
135E2	Wickware silt loam, 20 to 30 percent slopes, eroded	63	*
136B	Doritty silt loam, 1 to 6 percent slopes	4,409	0.8
136C2	Doritty silt loam, 6 to 12 percent slopes, eroded	150	*
144B2	NewGlarus silt loam, 2 to 6 percent slopes, eroded	897	0.2
144C2	NewGlarus silt loam, 6 to 12 percent slopes, eroded	2,456	0.4
144D2	NewGlarus silt loam, 12 to 20 percent slopes, eroded	2,288	0.4
144E2	NewGlarus silt loam, 20 to 30 percent slopes, eroded	534	*
161E	Fivepoints silt loam, 20 to 30 percent slopes	177	*
208A	Siouxcreek silt loam, 0 to 3 percent slopes	45	*
213B2	Hixton silt loam, 2 to 6 percent slopes, eroded	136	*
213C2	Hixton silt loam, 6 to 12 percent slopes, eroded	139	*
224B	Elevasil sandy loam, 2 to 6 percent slopes	4,908	0.9
224C2	Elevasil sandy loam, 6 to 12 percent slopes, eroded	6,242	1.1
224D2	Elevasil sandy loam, 12 to 20 percent slopes, eroded	1,061	0.2
224E2	Elevasil sandy loam, 20 to 30 percent slopes, eroded	221	*
233C	Boone sand, 6 to 15 percent slopes	1,303	0.2
243B2	Hixton silt loam, thin solum, 1 to 6 percent slopes, eroded	4,860	0.9
243C2	Hixton silt loam, thin solum, 6 to 12 percent slopes, eroded	522	*
244B	Elkmound loam, 1 to 6 percent slopes	2,233	0.4
244C2	Elkmound loam, 6 to 12 percent slopes, eroded	1,016	0.2
244D2	Elkmound loam, 12 to 20 percent slopes, eroded	309	*
254B2	Norden silt loam, 2 to 6 percent slopes, eroded	4,444	0.8
254C2	Norden silt loam, 6 to 12 percent slopes, eroded	5,837	1.1
254D2	Norden silt loam, 12 to 20 percent slopes, eroded	6,419	1.2
254E2	Norden silt loam, 20 to 30 percent slopes, eroded	4,171	0.8
254F	Norden silt loam, 30 to 45 percent slopes	149	*
255B2	Urne fine sandy loam, 2 to 6 percent slopes, eroded	4,657	0.8
255C2	Urne fine sandy loam, 6 to 12 percent slopes, eroded	7,901	1.4
255D2	Urne fine sandy loam, 12 to 20 percent slopes, eroded	8,974	1.6
255E2	Urne fine sandy loam, 20 to 30 percent slopes, eroded	5,566	1.0
255F	Urne fine sandy loam, 30 to 45 percent slopes	10,557	1.9
265B	Garne loamy sand, 2 to 6 percent slopes	81	*
265C	Garne loamy sand, 6 to 12 percent slopes	217	*
266B	Hiles silt loam, 1 to 6 percent slopes	135	*
268A	Kert silt loam, 0 to 3 percent slopes	137	*
269A	Veedum muck, 0 to 2 percent slopes	126	*
273B2	Dobie and Hixton silt loams, 2 to 6 percent slopes, eroded	4,927	0.9
273C2	Dobie and Hixton silt loams, 6 to 12 percent slopes, eroded	7,783	1.4
273D2	Dobie and Hixton silt loams, 12 to 20 percent slopes, eroded	5,694	1.0
273E2	Dobie and Hixton silt loams, 20 to 30 percent slopes, eroded	1,876	0.3
275B2	Hayriver and Elevasil fine sandy loams, 2 to 6 percent slopes, eroded	3,747	0.7
275C2	Hayriver and Elevasil fine sandy loams, 6 to 12 percent slopes, eroded	8,899	1.6
275D2	Hayriver and Elevasil fine sandy loams, 12 to 20 percent slopes, eroded	8,893	1.6

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
276B	Humbird fine sandy loam, loamy subsoil, 1 to 6 percent slopes	436	*
278A	Merrillan fine sandy loam, loamy subsoil, 0 to 3 percent slopes	269	*
282C	Twinmound fine sand, 6 to 15 percent slopes	1,657	0.3
282F	Twinmound fine sand, 15 to 50 percent slopes	798	0.1
313D2	Plumcreek silt loam, 12 to 20 percent slopes, eroded	197	*
313F	Plumcreek silt loam, 20 to 45 percent slopes	2,221	0.4
316B2	Ella silt loam, 1 to 6 percent slopes, eroded	10,507	1.9
316C2	Ella silt loam, 6 to 12 percent slopes, eroded	371	*
318A	Bearpen silt loam, 0 to 3 percent slopes	3,387	0.6
349A	Rib silt loam, valley train, 0 to 2 percent slopes	352	*
378A	Poskin silt loam, valley train, 0 to 3 percent slopes	702	0.1
403A	Dakota silt loam, 0 to 3 percent slopes	2,751	0.5
413A	Rasset sandy loam, 0 to 3 percent slopes	9,559	1.7
413B	Rasset sandy loam, 2 to 6 percent slopes	2,422	0.4
416A	Menomin silt loam, 0 to 3 percent slopes	196	*
423A	Meridian silt loam, 0 to 3 percent slopes	1,451	0.3
423B2	Meridian silt loam, 2 to 6 percent slopes, eroded	1,120	0.2
423C2	Meridian silt loam, 6 to 12 percent slopes, eroded	10	*
428A	Shiffer loam, 0 to 3 percent slopes	3,134	0.6
429A	Lows loam, 0 to 2 percent slopes	8,213	1.5
432A	Kevilar sandy loam, 0 to 3 percent slopes	8,285	1.5
432B	Kevilar sandy loam, 2 to 6 percent slopes	28,996	5.2
432C2	Kevilar sandy loam, 6 to 12 percent slopes, eroded	5,119	0.9
432D2	Kevilar sandy loam, 12 to 20 percent slopes, eroded	35	*
433A	Forkhorn sandy loam, 0 to 3 percent slopes	5,036	0.9
433B	Forkhorn sandy loam, 2 to 6 percent slopes	5,158	0.9
433C2	Forkhorn sandy loam, 6 to 12 percent slopes, eroded	573	0.1
433D2	Forkhorn sandy loam, 12 to 20 percent slopes, eroded	16	*
434B	Bilson sandy loam, 1 to 6 percent slopes	931	0.2
436A	Rusktown sandy loam, 0 to 3 percent slopes	3,510	0.6
438A	Hoopeston sandy loam, 0 to 3 percent slopes	7,646	1.4
453A	Burkhardt sandy loam, 0 to 3 percent slopes	781	0.1
453B	Burkhardt sandy loam, 2 to 6 percent slopes	1,305	0.2
454B	Chetek sandy loam, kame terrace, 2 to 6 percent slopes	124	*
454C2	Chetek sandy loam, kame terrace, 6 to 12 percent slopes, eroded	832	0.2
454D2	Chetek sandy loam, kame terrace, 12 to 20 percent slopes, eroded	549	*
454E	Chetek sandy loam, kame terrace, 20 to 35 percent slopes	11	*
468A	Oesterle sandy loam, valley train, 0 to 3 percent slopes	527	*
501A	Finchford loamy sand, 0 to 3 percent slopes	11,426	2.1
501B	Finchford loamy sand, 2 to 6 percent slopes	6,862	1.2
502B2	Chelsea fine sand, 2 to 6 percent slopes, eroded	379	*
502C2	Chelsea fine sand, 6 to 15 percent slopes, eroded	376	*
506A	Komro loamy sand, 0 to 3 percent slopes	1,364	0.2
508A	Farrington loamy sand, 0 to 3 percent slopes	1,465	0.3
510B	Boplain sand, 0 to 6 percent slopes	1,643	0.3
510C	Boplain sand, 6 to 15 percent slopes	87	*
511A	Plainfield sand, 0 to 3 percent slopes	10,957	2.0
511B	Plainfield sand, 2 to 6 percent slopes	9,234	1.7
511C	Plainfield sand, 6 to 15 percent slopes	1,962	0.4
511F	Plainfield sand, 15 to 60 percent slopes	5,306	1.0
512B	Drammen loamy sand, 1 to 6 percent slopes	25,159	4.6
512C	Drammen loamy sand, 6 to 12 percent slopes	7,293	1.3
512D	Drammen loamy sand, 12 to 20 percent slopes	139	*
516A	Aldo sand, 0 to 3 percent slopes	4,346	0.8
546A	Prissel loamy sand, 0 to 3 percent slopes	6,731	1.2
546B	Prissel loamy sand, 2 to 6 percent slopes	7,100	1.3
546C	Prissel loamy sand, 6 to 15 percent slopes	323	*
546F	Prissel loamy sand, 15 to 60 percent slopes	1,389	0.3
555A	Fordum silt loam, 0 to 2 percent slopes	205	*
561B	Tarr sand, 1 to 6 percent slopes	102	*
566A	Tint sand, 0 to 3 percent slopes	3	*
573B	Plainbo sand, sand sheet, 0 to 6 percent slopes	1,160	0.2
573C	Plainbo sand, sand sheet, 6 to 15 percent slopes	827	0.1

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
588A	Meehan loamy sand, valley train, 0 to 3 percent slopes	2,354	0.4
589A	Newson mucky loamy sand, 0 to 2 percent slopes	5,577	1.0
601C	Beavercreek cobbly fine sandy loam, 3 to 12 percent slopes	220	*
616B	Chaseburg silt loam, 1 to 4 percent slopes	1,701	0.3
619A	Vancecreek silt loam, 0 to 2 percent slopes	2,001	0.4
626A	Arenzville silt loam, 0 to 3 percent slopes	3,900	0.7
628A	Orion silt loam, 0 to 3 percent slopes	6,547	1.2
629A	Ettrick silt loam, 0 to 2 percent slopes	3,311	0.6
636A	Quarderer silt loam, 0 to 3 percent slopes	1,712	0.3
646A	Dunnbot fine sandy loam, 0 to 3 percent slopes	7,313	1.3
656A	Scotah loamy fine sand, 0 to 3 percent slopes	6,209	1.1
766A	Moppet fine sandy loam, 0 to 3 percent slopes	14	*
804B2	Arland fine sandy loam, 2 to 6 percent slopes, eroded, dissected	55	*
804C2	Arland fine sandy loam, 6 to 12 percent slopes, eroded, dissected	943	0.2
804D	Arland fine sandy loam, 12 to 25 percent slopes, dissected	568	0.1
814D2	Renova silt loam, 12 to 20 percent slopes, eroded, dissected	86	*
816B2	Vlasaty silt loam, 2 to 6 percent slopes, eroded, dissected	193	*
816C2	Vlasaty silt loam, 6 to 12 percent slopes, eroded, dissected	256	*
826B2	Hersey silt loam, 2 to 6 percent slopes, eroded	3,226	0.6
826C2	Hersey silt loam, 6 to 12 percent slopes, eroded	2,870	0.5
828B	Vasa silt loam, 1 to 6 percent slopes, dissected	134	*
836B2	Spencer silt loam, 2 to 6 percent slopes, eroded, dissected	6,273	1.1
836C2	Spencer silt loam, 6 to 12 percent slopes, eroded, dissected	3,188	0.6
838B	Almena silt loam, 1 to 6 percent slopes, dissected	598	0.1
870B2	Santiago silt loam, 2 to 6 percent slopes, eroded, dissected	3,568	0.6
870C2	Santiago silt loam, 6 to 12 percent slopes, eroded, dissected	2,312	0.4
875B	Amery sandy loam, 2 to 6 percent slopes, dissected	330	*
875C2	Amery sandy loam, 6 to 12 percent slopes, eroded, dissected	1,056	0.2
875D	Amery sandy loam, 12 to 25 percent slopes, dissected	631	0.1
1125F	Dorerton, very stony-Elbaville complex, 30 to 60 percent slopes	10,968	2.0
1145F	Gaphill-Rockbluff complex, 30 to 60 percent slopes	3,061	0.6
1224F	Boone-Elevasil complex, 15 to 50 percent slopes	607	0.1
1233F	Boone-Tarr sands, 15 to 50 percent slopes	165	*
1275F	Hayriver-Twinmound complex, 15 to 50 percent slopes	35,449	6.4
1648A	Northbend-Ettrick silt loams, 0 to 3 percent slopes	1,683	0.3
1658A	Algansee-Kalmarville complex, 0 to 3 percent slopes	13,637	2.5
2002	Udorthents, earthen dams	7	*
2003A	Riverwash	732	0.1
2013	Pits, gravel	703	0.1
2014	Pits, quarry, hard bedrock	126	*
2016	Pits, quarry, soft bedrock	32	*
2030	Udorthents and Udipsamments, cut or fill	76	*
2050	Landfill	48	*
M-W	Miscellaneous water	75	*
W	Water	8,557	1.5
	Total	552,723	100.0

* Less than 0.1 percent.

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 forest land; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; as sites 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.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited.* The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair, poor,* and *very poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and for hay and pasture is suggested in this section. Climate information for the survey area is provided, the estimated yields of the main crops and hay 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 obtaining specific information from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Climate

Table 3 gives data on temperature and precipitation for the survey area as recorded at Menomonie during the period from 1961 to 1990. Table 4 shows probable dates of the first freeze in fall and the last freeze in spring. Table 5 provides data on length of the growing season.

In winter, the average temperature is 16.8 degrees F and the average daily minimum temperature is 6.7 degrees. The lowest temperature on record, which occurred on February 3, 1996, is -40 degrees. In summer, the average temperature is 69.7 degrees and the average daily maximum temperature is 82.4 degrees. The highest temperature, which occurred on August 2, 1964, is 101 degrees.

Growing degree days are shown in table 3. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is 29.29 inches. Of this total, 18.8 inches, or 64 percent, usually falls in April through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 4.72 inches on August 31, 1977. Thunderstorms occur on about 37 days each year, and most occur between May and August.

The average seasonal snowfall is 41.9 inches. The greatest snow depth at any one time during the period of record was 40 inches on February 5, 1971. On an average, 98 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 11.7 inches on December 19, 1968.

Cropland Management Considerations

The management concerns affecting the use of the soil map units in the survey area for crops are shown in table 6. The main concerns in managing nonirrigated cropland are conserving moisture, controlling wind erosion and water erosion, and maintaining soil fertility.

Conserving moisture consists primarily of reducing the evaporation and runoff rates and increasing the water infiltration rate. Applying conservation tillage and conservation cropping systems, farming on the contour, stripcropping, establishing field windbreaks, and leaving crop residue on the surface conserve moisture.

Generally, a combination of several practices is needed to control *wind erosion* and *water erosion.* Conservation tillage, stripcropping, field windbreaks, contour farming, conservation cropping systems, crop residue management, terraces, diversions, and grassed waterways help to prevent excessive soil loss.

Measures that are effective in maintaining *soil fertility* include applying fertilizer, both organic and inorganic, including manure; incorporating crop residue or green manure crops into the soil; and using proper crop rotations. Controlling erosion helps to prevent the loss of organic matter and plant nutrients and thus helps to maintain productivity, although the level of fertility can be reduced even in areas where erosion is controlled. All soils used for nonirrigated crops respond well to applications of fertilizer.

Some of the considerations shown in the table cannot be easily overcome. These are channels, flooding, gullies, and ponding.

Additional considerations are as follows:

Lime content, limited available water capacity, limited content of organic matter, potential poor tilth and compaction, and *restricted permeability.*—These limitations can be minimized by incorporating green manure crops, manure, or crop residue into the soil; applying a system of conservation tillage; and using conservation cropping systems. Also, crops may respond well to additions of phosphate fertilizer to soils that have a high content of lime.

Potential for ground-water contamination.—The proper use of nutrients and pesticides can reduce the risk of ground-water contamination.

Potential for surface-water contamination.—The risk of surface-water contamination can be reduced by the proper use of nutrients and pesticides and by conservation farming practices that reduce the runoff rate.

Surface crusting.—This limitation retards seedling development after periods of heavy rainfall.

Surface rock fragments.—This limitation causes rapid wear of tillage equipment. It cannot be easily overcome.

Surface stones.—Stones or boulders on or near the surface can hinder normal tillage unless they are removed.

Salt content.—In areas where this is a limitation, only salt-tolerant crops should be grown.

On irrigated soils the main management concerns are efficient water use, nutrient management, control of erosion, pest and weed control, and timely planting and harvesting for a successful crop. An irrigation system that provides optimum control and distribution of water at minimum cost is needed. Overirrigation wastes water, leaches plant nutrients, and causes erosion. Also, it can increase wetness and soil salinity.

Explanation of Criteria

Acid soil.—The pH is less than 6.1.

Channeled.—The word “channeled” is included in the map unit name.

Dense layer.—The bulk density is 1.80 g/cc or greater within the soil profile.

Depth to rock.—The depth to bedrock is less than 40 inches.

Eroded.—The word “eroded” is included in the map unit name.

Excessive permeability.—Saturated hydraulic conductivity is 42 micrometers per second or more within the soil profile.

Flooding.—Flooding is occasional, frequent, or very frequent.

Gullied.—The word “gullied” is included in the map unit name.

High content of organic matter.—The surface layer has more than 20 percent organic matter.

Lime content.—The pH is 7.4 or more in the surface layer, or the wind erodibility group is 4L.

Limited available water capacity.—The available water capacity calculated to a depth of 60 inches or to a root-limiting layer is 6 inches or less.

Limited content of organic matter.—The content of organic matter is 2 percent or less in the surface layer.

Ponding.—Ponding duration is assigned to the soil. Water is above the surface.

Potential poor tilth and compaction.—The content of clay is 27 percent or more in the surface layer.

Potential for ground-water contamination (by nutrients or pesticides).—The depth to a zone in which the soil moisture status is wet is 4 feet or less, the saturated hydraulic conductivity of any layer is more than 42 micrometers per second, or the depth to bedrock is less than 60 inches.

Potential for surface-water contamination (by nutrients or pesticides).—The soil is occasionally, frequently, or very frequently flooded, is subject to ponding, is assigned to hydrologic group C or D and has a slope of more than 2 percent, is assigned to hydrologic group A and has a slope of more than 6 percent, or is assigned to hydrologic group B, has a slope of 3 percent or more, and has a K factor of more than 0.17.

Previously eroded.—The word “eroded” is included in the map unit name.

Restricted permeability.—Saturated hydraulic conductivity is less than 0.42 micrometer per second within the soil profile.

Salt content.—The electrical conductivity is 4 or more in the surface layer or 8 or more within a depth of 30 inches.

Slope (equipment limitation).—The slope is more than 15 percent.

Surface crusting.—The content of clay is 27 percent or more and the content of organic matter is 2 percent or less in the surface layer.

Surface rock fragments (equipment limitation).—The terms describing the texture of the surface layer include any rock fragment modifier, except for gravelly, channery, stony, very stony, extremely stony, bouldery, very bouldery, and extremely bouldery.

Surface stones (equipment limitation).—The word “stony” or “bouldery” is included in the description of the surface layer, or 0.01 percent or more of the surface is covered by boulders.

Water erosion.—Either the slope is 6 percent or more, or the slope is more than 3 percent and less than 6 percent and the surface layer is not sandy.

Wet soil moisture status.—A zone in which the soil moisture status is wet is within 2.5 feet of the surface.

Wind erosion.—The wind erodibility group is 1, 2, 3, or 4L.

Hydrologic groups are described under the heading “Water Features.” Erosion factors (e.g., K factor) and wind erodibility groups are described under the heading “Physical Properties.”

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops and hay and pasture plants under a high level of management are shown in tables 7 and 8. In any given year, yields may be higher or lower than those indicated in the tables 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 tables.

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-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.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the tables are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Pasture and Hayland Interpretations

Under good management, proper grazing is essential for the production of high-quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and pasture renovation also are important management practices.

Yield estimates are often provided in animal unit months (AUM), or the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about forage yields other than those shown in the yields tables.

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 take into account 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 forest land or for engineering purposes.

In the capability system, soils generally are grouped at three levels—capability class, subclass, and unit (USDA, 1961). These categories indicate the degree and kinds of limitations affecting mechanized farming systems that produce the more commonly grown field crops, such as corn, small grain, cotton, hay, and field-grown vegetables. Only class and subclass are used in this survey.

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.

If properly managed, soils in classes 1, 2, 3, and 4 are suitable for the mechanized production of commonly grown field crops and for pasture and forest land. The degree of the soil limitations affecting the production of cultivated crops increases progressively from class 1 to class 4. The limitations can affect levels of production and the risk of permanent soil deterioration caused by erosion and other factors.

Soils in classes 5, 6, and 7 are generally not suited to the mechanized production of commonly grown field crops without special management, but they are suitable for plants that provide a permanent cover, such as grasses and trees. The severity of the soil limitations affecting crops increases progressively from class 5 to class 7.

Areas in class 8 are generally not suitable for crops, pasture, or forest land without a level of management that is impractical. These areas may have potential for other uses, such as recreational facilities and wildlife habitat.

Capability subclasses identify the dominant kind of limitation in the 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 a 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.

There are no subclasses in class 1 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 mainly to pasture, forest land, wildlife habitat, or recreation.

The capability classification of map units in the survey area is given in the yields tables.

Prime Farmland

Prime farmland is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation’s prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, feed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, or forest land or for other purposes. They either are used for food and fiber or are available for these uses. Urban or built-up land, public land, and water areas cannot be considered prime farmland. Urban or built-up land is any contiguous unit of land 10 acres or more in size that is used for such purposes as housing, industrial, and commercial sites, sites for institutions or public buildings, small parks, golf courses, cemeteries, railroad yards, airports, sanitary landfills, sewage treatment plants, and water-control structures. Public land is land not available for farming in national forests, national parks, military reservations, and state parks.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable, and the level of acidity or alkalinity and the content of salts and sodium are acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods, and they are not frequently flooded during the growing season or are protected from flooding. Slopes range mainly from 0 to 6 percent.

Soils in which a zone with a wet soil moisture status is high in the profile or soils that are subject to flooding may qualify as prime farmland where these limitations are overcome by drainage measures or flood control. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

About 175,000 acres, or nearly 32 percent of the survey area, meets the requirements for prime farmland.

The map units in the survey area that meet the requirements for prime farmland are listed in table 9. This list does not constitute a recommendation for a particular land use. On some soils included in the table, measures that overcome limitations are needed. The need for these measures is indicated in parentheses after the map unit name. The location of each map unit is shown on the soil maps. The soil qualities that affect use and management are described in the section “Soil Map Unit Descriptions.”

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low- and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Windbreaks are often planted on land that did not originally support trees. Knowledge of how trees perform on such land can be gained only by observing and recording the performance of trees that have been planted and have survived. Many popular windbreak species are not indigenous to the areas in which they are planted.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters, a tree or shrub may grow well or grow poorly, depending on the characteristics of the soil. Each tree or shrub has definable potential heights in a given physiographic area and under a given climate. Accurate definitions of potential heights are necessary when a windbreak is planned and designed.

Table 10 shows the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates in this table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from local offices of the Natural Resources Conservation Service or the Cooperative Extension Service or from a nursery.

Conservation Tree/Shrub Suitability Groups

Conservation tree/shrub suitability groups consist of soils in which the kinds and degrees of the hazards and limitations that affect the survival and growth of trees and shrubs in conservation plantings are about the same. The conservation tree/shrub suitability groups assigned to the soils in the survey area are listed in table 11. Descriptions of the groups are provided in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Forest Land Management

Information about the hazards and limitations that should be considered in areas used as forest land are given in tables 12 through 15.

Forest Land Harvest Equipment Considerations

Table 12 provides information regarding the use of harvest equipment in areas used as forest land.

For most soils spring is the most limiting season. Alternate thawing and freezing during snowmelt cause saturation and low strength of the surface soil layers. When thawing is complete, saturation continues for short periods in well drained soils to nearly all year in very poorly drained soils in depressions. Degrees of wetness are generally proportionate to the depth at which a zone of saturation occurs. This zone generally is lower in summer during the heavy use of moisture by vegetation and is nearer the surface during periods when absorbed precipitation is greater than the vegetation requires. Harvesting during periods of saturation usually results in severe soil damage, except when the soil is frozen. The preferred season for timber harvest on many soils is winter, when wetness and low soil strength can be overcome by freezing.

Considerations shown in table 12 are as follows:

Slope.—The upper slope limit is more than 15 percent.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 10 inches.

Rubbly surface.—The word “rubbly” is in the map unit name.

Surface stones.—The words “extremely stony” are in the map unit name.

Surface boulders.—The word “bouldery” is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Poor traction (loose sandy material).—The USDA texture includes sands or loamy sands in any layer at a depth of 10 inches or less.

Forest Haul Road Considerations

Table 13 provides information regarding the use of the soils as haul roads. Haul roads serve as transportation routes from log landings to primary roads. Generally, haul roads are unpaved, but some are graveled.

Considerations shown in the table are as follows:

Slope.—The slope is 8 percent or more.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Depth to soft rock.—The depth to soft bedrock is less than 20 inches.

Surface boulders.—The word “bouldery” is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Low bearing strength.—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word “rubbly” is in the map unit name.

Forest Log Landing Considerations

Table 14 provides information regarding the use of the soils as log landings. Log landings are areas where logs are assembled for transportation. Areas that require little or no cutting, filling, or surface preparation are desired.

Considerations shown in the table are as follows:

Slope.—The slope is more than 3 percent.

Flooding.—The soil is occasionally flooded or frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Surface boulders.—The word “bouldery” is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word “rubbly” is in the map unit name.

Forest Land Site Preparation and Planting Considerations

Table 15 provides information regarding considerations affecting site preparation and planting in areas used as forest land.

Considerations shown in the table are as follows:

Slope.—The upper slope limit is more than 15 percent.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Surface stones.—The word “stony” is in the map unit name.

Surface boulders.—The word “bouldery” is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Water erosion.—The slope is 8 percent or more.

Potential poor tilth and compaction.—The AASHTO classification is A-6 or A-7 in the upper 10 inches.

Rubbly surface.—The word “rubbly” is in the map unit name.

Cobbly surface.—The word “cobbly” is in the map unit name.

Forest Habitat Types

John Kotar, senior scientist, Department of Forestry, University of Wisconsin-Madison, helped prepare this section.

Modern forest management requires site classification that is based on ecological principles. It is not adequate to simply provide information on the trees that are suitable for planting on a particular soil map unit. Most trees can grow on a wide range of soils under intensive management. Intensive management is costly, however, and in the U.S. is practiced only under special conditions. Also, other natural attributes of forests, such as wildlife (including nongame species), recreation, esthetics, and biodiversity, are becoming increasingly more important.

Classifying sites or landscape units according to their biological potential helps to address these concerns. Such classification should be in terms of potential vegetation, which includes all plant species, and not only in terms of productivity of the commercially important tree species. Such a system, known as the Habitat Type Classification System, has been developed for Wisconsin’s forests and is in wide use by forest managers. The forest habitat types of Dunn County are derived from both Zone 1 of “A Guide to Forest Communities and Habitat Types of Northern Wisconsin” (Kotar, Kovach, and Burger, 2002) and Zone 6 of “A Guide to Forest Communities and Habitat Types of Central and Southern Wisconsin” (Kotar and Burger, 1996).

A habitat type is any land unit that is capable of supporting a particular type of climax plant community. Habitat types are identified by the presence of groups of so-called diagnostic species. The fully developed climax association need not be present for habitat type identification.

Although soil map units do not coincide exactly with habitat types, there are strong correlations between them. Therefore, habitat types can provide valuable interpretation of soil map units for forest resource management.

The field guides provide the following information: (1) Keys to habitat identification, based on presence and absence of diagnostic understory species; (2) a description of each habitat type in terms of understory species composition, prevalent forest cover types (successional stages), and expected successional trends; and (3) a summary of management implications of each habitat type. This summary, in combination with various tables and diagrams, identifies species best suited for management on a particular habitat type. This information takes into account the potential influence of competing vegetation as well as the inherent site capability. A short summary of principal ecological characteristics of selected tree species is included in the guides. The nature of forest vegetation of central and southern Wisconsin differs considerably from that in the north. In many areas, forests have been under continuous disturbance since, and even prior to, Euro-American settlement. Disturbance included fires, grazing and other uses, and logging. For these reasons the application of the classification to specific sites can be difficult, particularly the use of the identification keys in the field guide. As much floristic and descriptive information as possible was included, however, so that users should be able to interpret the major management implications of most communities and sites.

Not every community and site type is included in these classifications. The habitat types described are based on stands or woodlots that had acceptable conditions for sampling. For example, recently grazed or otherwise disturbed stands or low-density stands were not sampled. In some areas, the most productive soils are used entirely for agriculture and no forest was available for sampling. Particularly lacking were communities on the poorest sites, such as steep slopes and ridges with shallow soils, because these sites tend to be the most disturbed. Some of the habitat types that are described in this survey may not have been sampled in Dunn County.

Habitat types have been determined for most of the soils in Dunn County. Presently, habitat types have not been developed for the poorly drained (Npd) and very poorly drained (Nvpd) soils or the moderately well drained and somewhat poorly drained soils that are subject to occasional or frequent flooding (Nfld). The vegetation on many of the very poorly drained soils, such as Markey soils, consists of grasses, sedges, and brush and only a few patches of poorly formed trees. The soils that are subject to occasional or frequent flooding, such as Orion and Algansee soils, commonly are forested, but sufficient information for placing them in a habitat type classification is not available at this time. Other miscellaneous areas (Nma) that are not commonly forested or for which there is not sufficient information are not assigned a habitat type classification.

A single habitat type is considered *dominant* if it constitutes more than 60 percent coverage (one habitat type that has more than 60 percent occurrence). If no habitat types are dominant but two types with 25 to 59 percent occurrence add up to more than 70 percent, then they would be considered *codominant.*

Habitat types for the soil map units in the county are shown in table 16. The following paragraphs briefly describe the habitat types that have been assigned to the soils in the county. The types are listed generally in order from the poorest and least productive to the most productive.

PVGy—Pinus strobus/Vaccinium-Gaylussacia (White pine/Blueberry-Huckleberry). Similar habitat types include PVCr and PVHa. The landform in areas of PVGy consists of nearly level sand plains with sandstone buttes. The soils are sand or loamy sand and are typically more than 3 or 4 feet deep. They are well drained to excessively drained. Examples are Tarr and Boone soils. The moisture regime is very dry or dry. The nutrient regime is poor. This type is typically on flats and the lower slopes. On the steep upper slopes, on south-southwest aspects, and on narrow ridges, a xeric subtype is recognized. No plants consistently reflect these xeric conditions, but tree growth is strongly limited in these areas.

Common forest cover types: These include various mixtures of jack pine, red pine, white pine, pin oak, black oak, and white oak. Pines exhibit normal growth, but oaks attain only small stature and poor form. Red maple occurs mainly as saplings. In the literature, these communities are commonly referred to as pine and oak barrens.

Shrub and small tree layer: This layer is absent or poorly developed, except for huckleberry. Serviceberry, black cherry, blackberries, and raspberries are common but make up low coverage. Red maple and black cherry are commonly dominant.

Ground flora characteristics: Except for bracken fern, herbs are largely absent or are only sparsely distributed. The most common species are common milkweed, whorled loose strife, and wild lily-of-the-valley. Other species include wild sarsaparilla, false Solomon’s seal, and starflower. Because only the species that are most tolerant of drought and low-nutrient conditions occur on the most extreme end of this gradient, plants cannot be used to further distinguish between “normal” and even more xeric sites. Therefore, when vegetation keys out to PVGy on steep upper slopes, south-southwest aspects, or narrow ridges, the site must be considered as a xeric subtype of PVGy.

Disturbance and succession: All tree species occurring on this type are adapted to fire disturbance. In the absence of fire, white pine appears to be best suited for reproduction in the understory and could be expected to dominate undisturbed stands. It is not yet very abundant in present stands, but where a seed source is present it shows vigorous development in the seedling and sapling layers. White oak also appears to regenerate well enough to remain as a permanent associate. Red pine, jack pine, and black oak would become less common. Red maple and black cherry are typically well represented in the sapling layer but attain only small tree size on this type and can be expected to persist as understory associates.

PVHa—Pinus/Vaccinium-Hamamelis (White pine/Blueberry-Witch hazel). Similar habitat types include PVRh and PVGy. The PVHa habitat type is represented by two different types of substrate. The first consists of sandy to clayey loams over shaly sandstone. Bedrock is typically within a depth of 3 or 4 feet. A moist or mottled layer is common in the lower part of the C horizon. The second substrate consists of loamy sand (shaly-clay in places) typically more than 4 feet deep. There is a pronounced increase in moisture content in the lower strata. Both conditions are classified in a dry moisture regime and in a poor or medium nutrient regime.

Common forest cover types: Composition is similar to that of PVRh. White pine, red maple, and pin oak are most common, but white oak, red oak, and aspen also occur. The quality of stands varies greatly, reflecting differences in past use, but all of these species show good growth in some stands.

Shrub and small tree layer: This layer is generally not dense. In terms of constancy values, the following species are most common: serviceberry, huckleberry, mapleleaf viburnum, black cherry, blackberries, raspberries, witch hazel, and beaked hazel. Although their constancies are only moderate, mapleleaf viburnum and especially witch hazel are strong indicators of PVHa. Some stands on ridges, in areas of shallow soils, or on other extreme xeric sites may key out to PVHa by virtue of the presence of mapleleaf viburnum (but not witch hazel). Such sites most likely represent a xeric subtype of PVGy.

Ground flora characteristics: With the exception of bracken fern and wild sarsaparilla, herbs do not have high coverage. Other common species are blueberries, wintergreen, sessile bellwort, and bigleaf aster. There is a sporadic occurrence of some species that more strongly characterize the PVRh type. These include starflower, swamp dewberry, partridgeberry, and winterberry.

Disturbance and succession: White pine is regenerating in all cover types if a seed source is present. This species is therefore considered as a potential permanent and dominant component of any forest type. Red maple is probably the strongest potential associate, but only in the secondary canopy layer. White oak and red oak are likely to decrease in importance if there is no large-scale disturbance.

PArVAm—Pinus-Acer rubrum/Vaccinium-Amphicarpa (Pinus strobus-Acer rubrum/Vaccinium angustifolium-Amphicarpa bracteata) (White pine-Red maple/Blueberries-Hog peanut). This habitat type is associated primarily with outwash areas but also occurs on lake plains and moraines where water-worked sands have accumulated. It occurs primarily on somewhat excessively drained or excessively drained loamy sands and sands, but the drainage class can range to moderately well drained. The moisture regime is dry or dry-mesic, and the nutrient regime is poor or medium.

Common forest cover types: Aspen is the best represented cover type. Common associates in aspen stands are jack pine, red pine, white pine, red oak, pin oak, bur oak, white oak, white birch, and red maple. Stands composed of mixtures of any of these species also occur.

Shrub and small tree layer: This layer typically is well developed. Hazel is typically the dominant shrub. Other well represented species include juneberry, bush honeysuckle, blueberries, and blackberries.

Ground flora characteristics: Bracken fern and bigleaf aster typically are the dominant herbs. Other common but less abundant species include hog peanut, wild lily of-the-valley, wild sarsaparilla, false Solomon's seal, northern bedstraw, and small-flowered bellwort.

Management implications: This habitat type is suitable for management of all early successional species occurring in this region. White pine is the most stable forest type and was the principal species of the old growth stands. The frequency of residual white pines and the natural reproduction of pine are the highest on this habitat type in Region 1.

Mixtures of oaks also represent a high percentage of present stands on this habitat type. If oak management is desirable for either forestry or wildlife purposes, it is important to note that four species of oak commonly occur on this type—pin oak, bur oak, white oak, and red oak. Because each of these species has different regeneration requirements, many strategies may be possible for maintaining an oak cover type. However, for optimal oak production, habitat types of group 3 (dry-mesic) offer higher potentials. This type is particularly suitable for management of pines (such as jack pine, red pine, and white pine) because growth potentials are high and competition pressure from shade-tolerant hardwoods is relatively low. Aspen and white birch are productive and can be considered for timber and wildlife benefits. Management of mesic hardwoods is not recommended on this type, even though these hardwoods can occur here as invaders.

Disturbance and succession: Most tree species commonly occurring on this habitat type are adapted to fire disturbance. Jack pine, red pine, aspen, white birch, and, to a lesser degree, red oak are dependent on fire for regeneration. Historically, pure and mixed stands of pines were most prevalent. In particular, white pine was well represented. Red oak and red maple were common associates. Aspen stands were less common than they are today. On this habitat type, white pine is not dependent on fire for regeneration because it is sufficiently shade tolerant to regenerate in the understory of most communities that typically develop. Many current stands are dominated by red oak and red maple because a white pine seed source has been eliminated through logging and fires in the past. Red maple and red oak do not compete with white pine in the main canopy layer, but they constitute a second canopy layer.

PVCr—Pinus strobus/Vaccinium-Cornus racemosa (White pine/Blueberry-Gray dogwood). Similar habitat types include PVGy and PVHa. The PVCr habitat type occurs in areas of rolling to hilly topography with sandstone outcrops. The soils are loam or silt loam. They are shallow over either deep sand or bedrock. The moisture regime is dry, and the nutrient regime is medium.

Common forest cover types: Mixtures of white oak, black oak, pin oak, and white pine are most common. Jack pine occurs in many stands. Red oak is generally absent. Red maple is common and grows better on this habitat type than it does on PVGy but less well than on ArDe-V. Black cherry occurs in most stands as saplings but does not develop well into larger sizes.

Shrub and small tree layer: This layer is much better represented on this type than it is on PVGy. Most diagnostic in this respect are gray dogwood and chokecherry. Black cherry is also better represented on PVCr than on other types. Other important species are blackberries, raspberries, hazel, and serviceberry.

Ground flora characteristics: The herbaceous layer is poorly developed on this type. A few species are better represented on this type than they are on the PGy and are useful for identification. These are wild sarsaparilla, true Solomon's seal, and Virginia creeper.

Disturbance and succession: All tree species occurring on this type are adapted to fire disturbance. The relative frequency and intensity of fire probably controlled community composition in presettlement time. There is no evidence to suggest that in the absence of fire the same species, with the exception of jack pine, could not maintain themselves on this type. White pine, because of its much larger stature and longer life span than other species, is presumed to be a potential dominant species.

PVRh—Pinus strobus/Vaccinium-Rubus hispidus (White pine/Blueberry-Dewberry). Similar habitat types include PVGy and PVHa. The PVRh habitat type occurs in areas of nearly level sand plains with sandstone buttes. The topography and soil textures are similar to those described for PVGy, but the ground-water influence is near the surface in areas of PVRh (typically within a depth of 3 feet). In spite of the ground-water influence, the vegetation on these sandy soils is decidedly xerophytic. The moisture regime of the PVRh type is dry-mesic, and the nutrient regime is poor.

Common forest cover types: White pine, red maple, and pin oak, in various mixtures, are the most common dominant species in current stands. White oak and jack pine are common associates. Red oak generally does not occur.

Shrub and small tree layer: This layer is generally absent or is only poorly developed. Huckleberry is common, but other species have low coverage. Those with high constancy are black cherry, serviceberry, and winterberry (Ilex). Winterberry is best represented on this type. Conspicuously rare are gray dogwood, chokecherry, and hazel. All of these species are typically well represented on dry and dry-mesic sites.

Ground flora characteristics: Several species with moderate individual constancy values readily distinguish this type from other types in this region. These species include partridgeberry, swamp dewberry, starflower, ground pine (Lycopodium obscurum), goldthread, bunchberry, and yellow beadlily. They are characteristic members of northern forests and are rarely found in southern habitat types. Cinnamon fern dominates the herb layer in places, especially where ground water is near the surface.

Disturbance and succession: Records of presettlement conditions show white pine as the dominant species on this habitat type. Red maple and pin oak were probably always present, but they assumed dominance after white pine was logged off. Since then, the white pine seed source has slowly increased, and white pine regeneration is now common in many stands.

AVDe—Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum (Sugar maple/Blueberry-Pointed-leaf tick trefoil). This habitat type is associated primarily with end moraines or recessional moraines, but it also occurs in outwash areas and on coarse, rolling ground moraines. The soils are primarily well drained sandy loams and loamy sands. The moisture regime is dry-mesic. The nutrient regime is medium.

Common forest cover types: Stands dominated by aspen, red oak, white oak, or red maple are common. Sugar maple is also common in many areas and will probably increase in the future. Additional associates include white pine, white birch, and basswood.

Shrub and small tree layer: This layer typically is moderately well developed and characterized by a diversity of species. Mapleleaf viburnum and hazel are typically best represented. Other common species with lower coverages are blueberries, bush honeysuckle, blackberries, and alternate-leaved dogwood.

Ground flora characteristics: Bracken fern and large-leaved aster typically are the dominant herbs. Other well represented species include wild sarsaparilla, hog peanut, early meadowrue, interrupted fern, pointed-leaf tick trefoil, false Solomon's seal, and sessile bellwort.

Management implications: This type is suitable for management of most early successional species for fiber, wildlife, or other purposes. Stands of red oak and white oak are common, and regeneration potential appears to be high. Although sugar maple, basswood, and ironwood occur in areas of this habitat type, they do not grow well enough to compete with the oaks. However, seedlings and saplings of these species, together with several shrub species, contribute to the vertical structure of the stands. Such structure is considered desirable for wildlife. This habitat type offers some of the best opportunities for enhancement of vegetation structure and diversity.

Disturbance and succession: This habitat type typically represents conditions where the soils marginally support sugar maple but where historically fire also played an important role. White pine was a prominent species in many presettlement forests. Current stands typically are dominated by red oak, white oak, red maple, or aspen, but reinvasion of white pine is occurring where a seed source is present. In the absence of disturbance or management, however, shade-tolerant mesic species are likely to dominate future stands.

ArDe-V—Acer rubrum/Desmodium (Vaccinium) (Red maple/Pointed-leaf tick trefoil-Blueberry variant). Similar habitat types include PVCr. Areas of the ArDe-V habitat type are characterized by rolling to hilly topography and sandstone or dolomitic bedrock. The soils are sandy loam or loam. Hixton loam is an example. This habitat type represents a distinct transition between dry and dry-mesic sites.

Major forest cover types: White oak and red maple are the most common dominants in stands that were sampled, but red oak occurs in some areas. Pin oak and black oak are much less common than they are on the PVCr type. White pine is common.

Shrub and small tree layer: This layer is generally well represented. The major species, in decreasing order of average coverage, are hazel, blackberries and raspberries, serviceberry, black cherry, gray dogwood, and bush honeysuckle. Red maple saplings commonly dominate this layer.

Ground flora characteristics: The number of species and the total herb coverage are higher than on other dry habitat types of this region. Blueberry occurs here with small coverage and helps to distinguish ArDe-V from ArCi and other dry-mesic and mesic types. The species that best distinguishes this type from drier types is pointed-leaf tick trefoil. Other diagnostic species with lower constancies are sweet cicely, wild geranium, and hog peanut. The best represented species are bracken fern, bigleaf aster, tick trefoil, wild sarsaparilla, and Virginia creeper.

Disturbance and succession: The pattern of presettlement fires favored the development of oak communities. Red oak is not reproducing adequately in current stands, even where it is dominant in the overstory. White oak, however, shows some ability to persist. The most successfully reproducing species is red maple. Based on understory composition and soil characteristics, it appears that sugar maple is not a potential climax dominant on this type. Red maple is the most shade-tolerant species that is well adapted to these sites and is presumed to occur as a climax species. White pine could possibly become a permanent member of communities on this type if it can be established as a seed source. The competitive relationship between white pine and red maple on this type has not been established; however, it appears that under a disturbance regime of moderate fire frequency, the two species would coexist.

AArVb—Acer saccharum-Acer rubrum/Viburnum acerifolium (Sugar maple-red maple/mapleleaf viburnum). Similar habitat types include ArDe-V. The AArVb type occurs on the outwash terraces (valley trains) of major rivers in this region, where a layer of loam or silt loam covers sand and gravel. The habitat type may also occur on moraines in areas where these soils occur. The moisture regime is dry-mesic, and the nutrient regime is medium.

Major forest cover types: Areas of this habitat type are dominantly used as cropland, and a limited number of sites are available for sampling. Only seven stands were sampled. They are dominated by red oak and white oak, but red maple and sugar maple also occur.

Shrub and small tree layer: Most characteristic is mapleleaf viburnum. Other species, in order of decreasing average coverage, are hazel, black cherry, chokecherry, fly honeysuckle, and bush honeysuckle, but ironwood and red maple dominate this layer in many areas.

Ground flora characteristics: Species of dry-mesic habitats, such as mapleleaf viburnum, hazel, bigleaf aster, wild sarsaparilla, pointed-leaf tick trefoil, and bracken fern, are dominant. The presence of blueberry (72 percent constancy) is also noteworthy because it underscores the trend toward a drier site type.

Disturbance and succession: Maps of presettlement vegetation show a complex pattern in the area where this habitat type was identified. Oak, pine, prairie, and maple-basswood communities occurred. It is clear that fire has played a major role. In the absence of fire, oak stands readily succeed to either red maple or sugar maple. It appears that sugar maple is not outcompeting red maple on this type; therefore, both species are included in the habitat type name.

AAt—Acer saccharum/Athyrium filix-femina (Sugar maple/Lady fern). This habitat type is associated predominantly with moraines and loess deposits. It occurs primarily in areas of well drained and moderately well drained loam, silt loam, and sandy loam. The moisture regime is dry-mesic, and the nutrient regime is medium or rich.

Common forest cover types: Stands dominated by red oak, white oak, red maple, sugar maple, and aspen are most common. White pine, basswood, white ash, and white birch are common associates.

Shrub and small tree layer: This layer typically is moderately well developed. The best represented species are mapleleaf viburnum, hazel, and alternate-leaved dogwood.

Ground flora characteristics: Large-leaved aster is the best represented herb. Bracken fern is abundant in some areas, but it is considerably less important in areas of this habitat type than it is on drier habitat types. Other common species are sweet cicely, trillium, early meadowrue, hog peanut, wild sarsaparilla, sessile bellwort, starflower, tick trefoil, wild geranium, interrupted fern, and lady fern.

Management implications: Together with ACaCi, this is the principal habitat type in Region 1 for effective hardwood management. It differs considerably from the related types in other regions by the complete absence of hemlock and yellow birch and by a strong representation of red oak and red maple in early and mid-successional stands. Potential for oak management is high. Aspen and white birch also demonstrate excellent growth and vigor. Mesic hardwoods (sugar maple, red maple, basswood, and white ash) offer another alternative. Although this is not an optimal habitat type, potential growth and quality are good.

Disturbance and succession: This habitat type represents conditions where soils support shade-tolerant mesic hardwoods, such as sugar maple, basswood, and yellow birch. Historically, there was sufficient windthrow and fire disturbance to maintain significant presence of white pine, oaks, and other less shade-tolerant species. White pine does not typically occur today, but stands dominated by oak are relatively common. In the absence of disturbance or management, however, shade-tolerant mesic hardwoods are likely to dominate future stands.

ArCi and ArCi-Ph—Acer rubrum/Circaea and Acer rubrum/Circaea (Phryma) (Red maple/Enchanters nightshade and Red maple/Enchanters nightshade-Lopseed variant). Similar habitat types include ATiDe and ATiDe(Pr).

The ArCi and ArCi-Ph types occur in areas of rolling to hilly sandstone and dolostone terrain. ArCi is commonly in areas that have a thin mantle of silt loam or in areas of loamy soils. ArCi-Ph is in areas where the soils have a thicker mantle of silt loam. The moisture regime for both types is dry-mesic, and the nutrient regime is medium or rich.

Major forest cover types: Red oak, white oak, and red maple, in relatively pure stands or in mixtures, are most common. Mesic hardwoods (sugar maple, basswood, or white ash) or shagbark hickory occurs in some stands on the ArCi-Ph type.

Shrub and small tree layer: This layer is typically well developed. The principal species, in descending order of average coverage, are blackberry/ raspberry, hazel, gooseberry, gray dogwood, serviceberry, and chokecherry, but red maple and black cherry saplings commonly dominate this layer.

Ground flora characteristics: Both types are distinguished from drier types of this region by the general absence of blueberry and huckleberry. Similarly, they are distinguished from the mesic types by a general lack of the blue cohosh ecological species group (see ATiCa type). The most characteristic species are nightshade, Virginia creeper, sweet cicely, wild geranium, and gooseberries. ArCi-Ph is generally distinguishable from ArCi by the presence of lopseed (Phryma). Other floristic differences between the two variants are subtle. ArCi supports several species of predominantly northern distribution, and ArCi-Ph supports many species of predominantly southern distribution.

Disturbance and succession: The climax nature of these two community types has not been adequately studied. The soils do not appear to be different from those that support shade-tolerant mesic species in other parts of the region. However, these species are generally not found in these community types, and red maple is presently the most common species capable of reproducing in present oak stands. For these reasons, these types are referred to as community types rather than habitat types, and red maple can perhaps be viewed as a pseudo-climax species until a sugar maple seed source again becomes common on sites where fire once controlled community dynamics.

ACaCi—Acer saccharum/Caulophyllum thalictroides-Circaea spp. (Sugar maple/Blue cohosh-Enchanter's nightshade). This type is associated predominantly with moraines and loess deposits. It typically occurs in areas of well drained or moderately well drained silt loams, but it also occurs in areas of loams and sandy loams. The moisture regime is mesic or dry-mesic. The nutrient regime is rich or very rich.

Common forest cover types: Stands dominated by aspen, red oak, white oak, and sugar maple are most common. Common associates are red maple, white birch, black cherry, basswood, and white ash. Less common associates include bitternut hickory and butternut.

Shrub and small tree layer: This layer is not well developed. Most frequently occurring are gooseberries and blackberries. Other species with low frequency of occurrence include hazel, mapleleaf viburnum, and alternate-leaved dogwood.

Ground flora characteristics: The herb layer is well developed and characterized by a rich diversity of species. The best represented species include large-leaved aster, wild geranium, early meadowrue, sweet cicely, and downy/smooth yellow violet. Other common species include enchanter's nightshade, false Solomon's seal, zig-zag goldenrod, sessile bellwort, wood anemone, hog peanut, Virginia creeper, blue cohosh, and bloodroot.

Management implications: This habitat type is well suited to the management of northern hardwoods. It is important to note, however, that although sugar maple is the most shade-tolerant species occurring on this type, its competitive advantage does not appear to be sufficient to completely dominate mature stands as it does on the mesic habitat types in other regions. Many current stands are dominated by other hardwood species (red oak, white oak, basswood, or red maple), and sugar maple represents only a small percentage of the total composition. For this reason, ACaCi offers the best opportunity for management of northern hardwoods where species other than sugar maple can be favored. Aggressive practices are necessary to control maple competition and facilitate the establishment of mid-tolerant species.

Disturbance and succession: This habitat type represents conditions where soils support near optimal growth of, and therefore intense competition by, shade-tolerant mesic hardwoods, primarily sugar maple, red maple, and basswood. Other less shade-tolerant species (white ash, red oak, and white oak) also grow exceptionally well, but in the absence of major disturbance, their regeneration is limited to canopy gaps. Historically, fire was an important disturbance factor in this region and maintained a significant presence of oak and white pine. In the absence of disturbance, however, stands dominated by intolerant and mid-tolerant species readily succeed to sugar maple, red maple, and basswood wherever seed sources exist. The longer the period without major disturbance, the stronger the dominance of sugar maple.

ASaI—Acer/Sanguinaria-Impatiens (Sugar maple/Bloodroot-Jewelweed). This type is associated predominantly with moraines and loess deposits. It occurs in areas of somewhat poorly drained loams. The moisture regime is mesic or wet-mesic, and the nutrient regime is rich.

Common forest cover types: Stands dominated by aspen and red maple are most common. Principal associates are basswood, white birch, red oak, white oak, and bur oak. Sugar maple is not well represented in most stands, but regeneration can occur.

Shrub and small tree layer: This layer typically is poorly developed. Only gooseberries commonly occur.

Ground flora characteristics: The herb layer is well developed and characterized by a diversity of species. Ferns typically are well represented. The best represented species are jewelweed, early meadowrue, lady fern, interrupted fern, maidenhair fern, sensitive fern, large-leaved aster, hog peanut, wild geranium, Virginia creeper, and sweet cicely.

Management implications: This type is similar to the ACaCi habitat type. It is strongly associated with silt loams and is commonly subject to a perched seasonal high water table. These factors have a strong influence on productivity and site operability. The soils are among the richest in soil nutrients, and yet they typically support hardwood stands of only moderate yield and poor tree form. There is evidence that heavy cutting on such soils may cause a rise in the water table because of reduced transpiration. This condition can result in “swamping” of a site. Some seasonal restrictions on logging may be necessary on such sites.

Disturbance and succession: This habitat type represents conditions where soils support growth of many native mesic hardwoods (sugar maple, red maple, basswood, and white ash). Red maple advance reproduction is most abundant. Black ash and green ash are common. The somewhat poorly drained conditions are less than optimal for sugar maple, but because of its strong shade tolerance, this species remains the primary competitor in late successional stands. Forest dynamics on this habitat type are similar to those described for ACaCi, but windthrow frequency may be higher here because of the wetter soils. The longer the period without major disturbance, the stronger the dominance of sugar maple.

ATiCa-La and ATiSa-De—Acer-Tilia/Caulophyllum (Laportea) and Acer-Tilia/Sanguinaria (Desmodium) (Sugar maple-Basswood/Blue cohosh-Wood nettle variant and Sugar maple-Basswood/Bloodroot-Pointed-leaf tick trefoil variant). Similar habitat types include ACaCi (Region 2, northern). These habitat types occur in areas of moderately deep to very deep loess or silty slope alluvium over clay, till, or colluvial subsoil on glaciated bedrock-controlled landscapes (ground moraines). ATiCa-La is most common on gentle slopes, flats, or broad summits in areas of deep soils, mainly on north and east aspects. ATiSa-De is typically on the steeper slopes on south and west aspects. The moisture regime is mesic, and the nutrient regime is very rich.

Common forest cover types: Both types are typically dominated by sugar maple and basswood. Red oak and bitternut hickory are common associates. White oak, ironwood, and red maple are more common on ATiSa-De than on ATiCa-La. White ash is rare on these types in comparison with mesic forests in other regions.

Shrub and small tree layer: The shrub layer is not well developed on either of these two variants when the tree canopy is closed. The most common species are gooseberry, chokecherry, and alternate-leaved dogwood. Ironwood is commonly abundant in areas of the ATiSa-De type.

Ground flora characteristics: The mesic-rich site species group is well represented in both variants, although total herb coverage tends to be low. The most characteristic species are bloodroot, blue cohosh, sharp-lobed hepatica, wild ginger, and trillium. Wood nettle was found on about half of the study stands on the ATiCa-La type, but coverages were high (10 to 20 percent). Pointed-leaf tick trefoil, wild geranium, bigleaf aster, black snakeroot, green briar, and zig-zag goldenrod are better represented in areas of the ATiSa-De type.

Disturbance and succession: In presettlement time, the area described here was dominated by sugar maple-basswood forest and was surrounded by oak openings, oak savanna, or prairie. There are no consistent soil differences among these presettlement vegetation types that might account for the variation. Fire history appears to be the primary cause. Maple-basswood forests appear to be stable on these habitat types. Stands dominated by any other species, especially oaks, are also being replaced by maple-basswood wherever adequate seed sources exist.

Recreation

The soils of the survey area are rated in tables 17a and 17b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 17a and 17b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a zone in which the soil moisture status is wet, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 18, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

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, soybeans, wheat, oats, and barley.

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 bromegrass, timothy, orchardgrass, clover, alfalfa, and wheatgrass.

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 bluestems, indiangrass, blueberry, goldenrod, lambsquarters, dandelions, blackberry, ragweed, and wheatgrass.

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, hickory, birch, maple, green ash, willow, and American elm. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian-olive 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, 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 smartweeds, wild millet, rushes, sedges, bulrushes, wild rice, arrowhead, waterplantain, cattail, prairie cordgrass, bluejoint grass, asters, and beggarticks.

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 waterfowl feeding areas, wildlife watering developments, beaver ponds, and other wildlife 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 Hungarian partridge, ring-necked pheasant, bobwhite quail, sharp-tailed grouse, meadowlark, field sparrow, killdeer, cottontail rabbit, and red fox.

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 wild turkey, ruffed grouse, thrushes, woodpeckers, owls, tree squirrels, porcupine, raccoon, white-tailed deer, and black 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, herons, bitterns, rails, kingfishers, 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, agricultural waste management, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a zone in which the soil moisture status is wet, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; evaluate alternative sites for waste management facilities; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 19a and 19b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a zone in which the soil moisture status is wet, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to a seasonal zone in which the soil moisture status is wet, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to a zone in which the soil moisture status is wet, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 20a and 20b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

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 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if a saturated zone is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a zone in which the soil moisture status is wet, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or a saturated zone is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a zone in which the soil moisture status is wet, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or a saturated zone to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 21a and 21b show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a saturated zone, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a saturated zone, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a saturated zone, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a saturated zone, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a saturated zone, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Construction Materials

Tables 22a and 22b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

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 22a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of gravel or sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair,* or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a zone in which the soil moisture status is wet, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a zone in which the soil moisture status is wet, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a zone in which the soil moisture status is wet, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 23 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the 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. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of 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, organic matter, or salts or sodium. A wet zone high in the soil profile 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 zone in which the soil moisture status is wet, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Table 3.--Temperature and Precipitation

(Recorded in the period 1961-90 at Menomonie, Wisconsin)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have-- Maximum temperature higher than--	2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days*	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snowfall
	^oF	^oF	^oF	^oF	^oF	Units	In	In	In		In
January----	23.6	2.5	13.0	47	-31	0	0.82	0.28	1.27	2	11.5
February---	29.7	7.5	18.6	52	-27	0	.60	.20	.97	2	7.4
March------	42.1	20.8	31.5	71	-12	6	1.56	.92	2.14	4	8.2
April------	59.1	33.9	46.5	84	14	74	2.62	1.44	3.66	5	1.6
May--------	71.8	45.0	58.4	90	25	281	3.30	2.04	4.44	6	.0
June-------	80.0	54.4	67.2	94	37	516	4.20	2.60	5.64	7	.0
July-------	85.0	59.5	72.2	97	44	689	3.69	2.08	5.12	6	.0
August-----	82.1	57.0	69.6	95	40	606	3.87	2.28	5.30	6	.0
September--	72.7	48.6	60.7	90	29	329	3.75	1.97	5.32	6	.0
October----	61.3	37.8	49.6	83	17	108	2.35	1.16	3.39	4	.0
November---	43.4	25.2	34.3	67	-4	6	1.48	.64	2.29	3	3.5
December---	27.7	10.1	18.9	51	-24	0	1.03	.45	1.53	3	9.7
Yearly:											
Average---	56.5	33.5	45.0	---	---	---	---	---	---	---	---
Extreme---	101	-39	---	98	-32	---	---	---	---	---	---
Total-----	---	---	---	---	---	2,614	29.29	24.40	33.96	54	41.9

* 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 (50 degrees F).

Table 4.--Freeze Dates in Spring and Fall

(Recorded in the period 1961-90 at Menomonie, Wisconsin)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Apr. 28	May 9	May 28
2 years in 10 later than--	Apr. 24	May 5	May 22
5 years in 10 later than--	Apr. 16	Apr. 26	May 12
First freezing temperature in fall:			
1 year in 10 earlier than--	Oct. 7	Sept. 25	Sept. 17
2 years in 10 earlier than--	Oct. 12	Sept. 30	Sept. 21
5 years in 10 earlier than--	Oct. 22	Oct. 9	Sept. 27

Table 5.--Growing Season

(Recorded in the period 1961-90 at Menomonie, Wisconsin)

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	165	147	119
8 years in 10	172	153	125
5 years in 10	187	165	138
2 years in 10	202	177	150
1 year in 10	210	183	157

Table 6.--Cropland Management Considerations

(See text for a description of the considerations listed in this table)

Map symbol and soil name	Cropland management considerations
11A:	
Markey, flood plain, undrained	Flooding Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
20A:	
Palms, undrained	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Houghton, undrained	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
40A:	
Markey, undrained	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Seelyeville, undrained	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
45A:	
Seelyeville, undrained	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Cathro, undrained	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
101B:	
Menahga, valley train	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
101C:	
Menahga, valley train	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
101E:	
Menahga, valley train	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
115B2:	
Seaton	Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
115C2:	
Seaton	Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
115D2:	
Seaton	Slope Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
115E2:	
Seaton	Slope Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
116C2:	
Churchtown	Potential for surface-water contamination Previously eroded Water erosion
116D2:	
Churchtown	Slope Potential for surface-water contamination Previously eroded Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
116E2:	
Churchtown	Slope Potential for surface-water contamination Previously eroded Water erosion
125B2:	
Pepin	Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
125C2:	
Pepin	Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
125D2:	
Pepin	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
125E2:	
Pepin	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
135C2:	
Wickware	Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
135D2:	
Wickware	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
135E2:	
Wickware	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
136B:	
Doritty	Potential for ground-water contamination Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
136C2:	
Doritty	Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
144B2:	
NewGlarus	Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
144C2:	
NewGlarus	Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
144D2:	
NewGlarus	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
144E2:	
NewGlarus	Slope Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
161E:	
Fivepoints	Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion
208A:	
Siouxcreek	Acid soil Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
213B2:	
Hixton	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
213C2:	
Hixton	Depth to rock
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Previously eroded
	Water erosion
224B:	
Elevasil	Depth to rock
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
224C2:	
Elevasil	Depth to rock
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Previously eroded
	Water erosion
	Wind erosion
224D2:	
Elevasil	Slope
	Depth to rock
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Previously eroded
	Water erosion
	Wind erosion
224E2:	
Elevasil	Slope
	Depth to rock
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Previously eroded
	Water erosion
	Wind erosion
233C:	
Boone	Depth to rock
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
243B2:	
Hixton, thin solum	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
243C2:	
Hixton, thin solum	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
244B:	
Elkmound	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
244C2:	
Elkmound	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Surface stones Water erosion
244D2:	
Elkmound	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Surface stones Water erosion
254B2:	
Norden	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
254C2:	
Norden	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
254D2:	
Norden	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
254E2:	
Norden	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
254F:	
Norden	Acid soil Slope Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion
255B2:	
Urne	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
255C2:	
Urne	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
255D2:	
Urne	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
255E2:	
Urne	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
255F:	
Urne	Acid soil Slope Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
265B:	
Garne	Acid soil Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
265C:	
Garne	Acid soil Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
266B:	
Hiles	Acid soil Depth to rock Limited available water capacity Potential for ground-water contamination Restricted permeability Water erosion Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
268A:	
Kert	Acid soil Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
269A:	
Veedum, undrained	Acid soil Depth to rock High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status
273B2:	
Dobie	Acid soil Depth to rock Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
Hixton, frigid	Acid soil Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
273C2:	
Dobie	Acid soil Depth to rock Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
Hixton, frigid	Acid soil Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
273D2:	
Dobie	Acid soil Slope Depth to rock Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
Hixton, frigid	Acid soil Slope Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
273E2:	
Dobie	Acid soil Slope Depth to rock Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
Hixton, frigid	Acid soil Slope Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
275B2:	
Hayriver	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
Elevasil, frigid	Acid soil Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
275C2:	
Hayriver	Acid soil Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
Elevasil, frigid	Acid soil Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
275D2:	
Hayriver	Acid soil Slope Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
Elevasil, frigid	Acid soil Slope Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
276B:	
Humbird, loamy subsoil	Acid soil Depth to rock Limited available water capacity Potential for ground-water contamination Restricted permeability Water erosion Wet soil moisture status Wind erosion
278A:	
Merrillan, loamy subsoil	Acid soil Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
282C:	
Twinmound	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
282F:	
Twinmound	Slope Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
313D2:	
Plumcreek	Slope Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
313F:	
Plumcreek	Slope Potential for surface-water contamination Water erosion
316B2:	
Ella	Potential for ground-water contamination Previously eroded Water erosion
316C2:	
Ella	Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
318A:	
Bearpen	Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
349A:	
Rib, valley train, undrained	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
378A:	
Poskin, valley train	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
403A:	
Dakota	Excessive permeability Potential for ground-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
413A:	
Rasset	Excessive permeability Potential for ground-water contamination Wind erosion
413B:	
Rasset	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
416A:	
Menomin	Excessive permeability Potential for ground-water contamination
423A:	
Meridian	Excessive permeability Potential for ground-water contamination
423B2:	
Meridian	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
423C2:	
Meridian	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
428A:	
Shiffer	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
429A:	
Lows, undrained	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
432A:	
Kevilar	Excessive permeability Potential for ground-water contamination Wind erosion
432B:	
Kevilar	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
432C2:	
Kevilar	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
432D2:	
Kevilar	Slope Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
433A:	
Forkhorn	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
433B:	
Forkhorn	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
433C2:	
Forkhorn	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
433D2:	
Forkhorn	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
434B:	
Bilson	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
436A:	
Rusktown	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
438A:	
Hoopeston	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
453A:	
Burkhardt	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
453B:	
Burkhardt	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
454B:	
Chetek, kame terrace	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion
454C2:	
Chetek, kame terrace	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Previously eroded Surface stones Water erosion Wind erosion
454D2:	
Chetek, kame terrace	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Previously eroded Surface stones Water erosion Wind erosion
454E:	
Chetek, kame terrace	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
468A:	
Oesterle, valley train	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
501A:	
Finchford	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
501B:	
Finchford	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
502B2:	
Chelsea	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Previously eroded Wind erosion
502C2:	
Chelsea	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
506A:	
Komro	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
508A:	
Farrington	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
510B:	
Boplain	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
510C:	
Boplain	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
511A:	
Plainfield	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
511B:	
Plainfield	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
511C:	
Plainfield	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
511F:	
Plainfield	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
512B:	
Drammen	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
512C:	
Drammen	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
512D:	
Drammen	Slope Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
516A:	
Aldo	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
546A:	
Prissel	Excessive permeability Limited content of organic matter Potential for ground-water contamination Wind erosion
546B:	
Prissel	Excessive permeability Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Wind erosion
546C:	
Prissel	Excessive permeability Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
546F:	
Prissel	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
555A:	
Fordum, frequently flooded	Flooding Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
561B:	
Tarr	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
566A:	
Tint	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
573B:	
Plainbo, sand sheet	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
573C:	
Plainbo, sand sheet	Depth to rock Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
588A:	
Meehan, valley train	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
589A:	
Newson, undrained	Excessive permeability Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
601C:	
Beavercreek	Flooding Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface rock fragments
616B:	
Chaseburg	Flooding Potential for surface-water contamination Water erosion
619A:	
Vancecreek, undrained	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
626A:	
Arenzville	Flooding Potential for ground-water contamination Potential for surface-water contamination
628A:	
Orion	Flooding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
629A:	
Ettrick, undrained	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
636A:	
Quarderer	Acid soil Flooding Potential for ground-water contamination Potential for surface-water contamination
646A:	
Dunnbot	Flooding Potential for ground-water contamination Potential for surface-water contamination Wind erosion
656A:	
Scotah	Flooding Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wind erosion
766A:	
Moppet, occasionally flooded	Acid soil Flooding Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wind erosion
804B2:	
Arland, dissected	Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion
804C2:	
Arland, dissected	Depth to rock Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
804D:	
Arland, dissected	Slope Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
814D2:	
Renova, dissected	Acid soil Slope Limited content of organic matter Potential for surface-water contamination Previously eroded Water erosion
816B2:	
Vlasaty, dissected	Acid soil Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wet soil moisture status
816C2:	
Vlasaty, dissected	Acid soil Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion Wet soil moisture status
826B2:	
Hersey	Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
826C2:	
Hersey	Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
828B:	
Vasa	Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status
836B2:	
Spencer, dissected	Acid soil Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion
836C2:	
Spencer, dissected	Acid soil Potential for ground-water contamination Potential for surface-water contamination Previously eroded Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
838B:	
Almena, dissected	Acid soil Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status
870B2:	
Santiago, dissected	Dense layer Potential for surface-water contamination Previously eroded Water erosion
870C2:	
Santiago, dissected	Dense layer Potential for surface-water contamination Previously eroded Water erosion
875B:	
Amery, dissected	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wind erosion
875C2:	
Amery, dissected	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Previously eroded Restricted permeability Water erosion Wind erosion
875D:	
Amery, dissected	Acid soil Slope Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wind erosion
1125F:	
Dorerton	Slope Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Elbaville	Slope Potential for ground-water contamination Potential for surface-water contamination Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
1145F:	
Gaphill	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Rockbluff	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
1224F:	
Boone	Slope Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Elevasil	Slope Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
1233F:	
Boone	Slope Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Tarr	Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
1275F:	
Hayriver	Acid soil Slope Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
1275F:	
Twinmound	Slope Depth to rock Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
1648A:	
Northbend	Flooding Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Ettrick, flood plain, undrained	Flooding Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
1658A:	
Algansee	Flooding Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Kalmarville, undrained	Flooding Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
2002. Udorthents, earthen dams	
2003A. Riverwash	
2013. Pits, gravel	
2014. Pits, quarry, hard bedrock	
2016. Pits, quarry, soft bedrock	
2030:	
Udorthents, cut or fill	Onsite investigation required
Udipsamments, cut or fill	Onsite investigation required
2050. Landfill	

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
M-W. Miscellaneous water	
W. Water	

Table 7.--Land Capability and Yields per Acre of Crops

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. 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		Soybeans		Winter wheat	
	N	I	N	I	N	I
			Bu	Bu	Bu	Bu
11A: Markey, flood plain, undrained	7w	---	---	---	---	---
20A: Palms and Houghton	6w	---	---	---	---	---
40A: Markey and Seelyeville	6w	---	---	---	---	---
45A: Seelyeville and Cathro	6w	---	---	---	---	---
101B: Menahga, valley train	4s	---	17	---	28	---
101C: Menahga, valley train	6s	---	15	---	24	---
101E: Menahga, valley train	7s	---	---	---	---	---
115B2: Seaton	2e	---	48	---	51	---
115C2: Seaton	3e	---	45	---	47	---
115D2: Seaton	4e	---	41	---	43	---
115E2: Seaton	6e	---	38	---	40	---
116C2: Churchtown	3e	---	45	---	47	---
116D2: Churchtown	4e	---	41	---	43	---
116E2: Churchtown	6e	---	37	---	40	---
125B2: Pepin	2e	---	48	---	51	---
125C2: Pepin	3e	---	45	---	47	---
125D2: Pepin	4e	---	41	---	43	---
125E2: Pepin	6e	---	37	---	40	---
135C2: Wickware	3e	---	43	---	47	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
135D2-------------------- Wickware	4e	---	39	---	43	---
135E2-------------------- Wickware	6e	---	30	---	40	---
136B--------------------- Doritty	2e	---	46	---	51	---
136C2-------------------- Doritty	3e	---	43	---	47	---
144B2-------------------- NewGlarus	2e	---	33	---	39	---
144C2-------------------- NewGlarus	3e	---	31	---	35	---
144D2-------------------- NewGlarus	4e	---	29	---	31	---
144E2-------------------- NewGlarus	6e	---	26	---	30	---
161E--------------------- Fivepoints	6e	---	24	---	28	---
208A--------------------- Siouxcreek	2w	---	26	---	31	---
213B2-------------------- Hixton	2e	---	33	---	39	---
213C2-------------------- Hixton	3e	---	31	---	37	---
224B--------------------- Elevasil	3s	---	28	---	39	---
224C2-------------------- Elevasil	3e	---	26	---	35	---
224D2-------------------- Elevasil	4e	---	23	---	31	---
224E2-------------------- Elevasil	6e	---	21	---	26	---
233C--------------------- Boone	6s	---	13	---	18	---
243B2-------------------- Hixton, thin solum	3s	---	31	---	37	---
243C2-------------------- Hixton, thin solum	3e	---	29	---	35	---
244B--------------------- Elkmound	3s	---	20	---	27	---
244C2-------------------- Elkmound	4e	---	16	---	23	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
244D2-------------------- Elkmound	6e	---	13	---	19	---
254B2-------------------- Norden	2e	---	36	---	45	---
254C2-------------------- Norden	3e	---	33	---	41	---
254D2-------------------- Norden	4e	---	29	---	37	---
254E2-------------------- Norden	6e	---	25	---	34	---
254F--------------------- Norden	7e	---	---	---	---	---
255B2-------------------- Urne	3s	---	27	---	38	---
255C2-------------------- Urne	3e	---	25	---	34	---
255D2-------------------- Urne	4e	---	21	---	30	---
255E2-------------------- Urne	6e	---	20	---	27	---
255F--------------------- Urne	7e	---	---	---	---	---
265B--------------------- Garne	3s	---	25	---	42	---
265C--------------------- Garne	3e	---	23	---	39	---
266B--------------------- Hiles	3s	---	28	---	32	---
268A--------------------- Kert	3w	---	25	---	29	---
269A--------------------- Veedum, undrained	6w	---	---	---	---	---
273B2-------------------- Dobie and Hixton	2e	---	32	---	45	---
273C2-------------------- Dobie and Hixton	3e	---	29	---	41	---
273D2-------------------- Dobie and Hixton	4e	---	25	---	37	---
273E2-------------------- Dobie and Hixton	6e	---	23	---	35	---
275B2-------------------- Hayriver and Elevasil	3s	---	26	---	38	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
275C2-------------------- Hayriver and Elevasil	3e	---	24	---	34	---
275D2-------------------- Hayriver and Elevasil	4e	---	20	---	30	---
276B--------------------- Humbird, loamy subsoil	3s	---	18	---	22	---
278A--------------------- Merrillan, loamy subsoil	3w	---	21	---	25	---
282C--------------------- Twinmound	6s	---	13	---	16	---
282F--------------------- Twinmound	7s	---	---	---	---	---
313D2-------------------- Plumcreek	4e	---	40	---	39	---
313F--------------------- Plumcreek	7e	---	---	---	---	---
316B2-------------------- Ella	2e	---	46	---	45	---
316C2-------------------- Ella	3e	---	43	---	41	---
318A--------------------- Bearpen	2w	---	45	---	42	---
349A--------------------- Rib, valley train, undrained	6w	---	---	---	---	---
378A--------------------- Poskin, valley train	2w	---	31	---	37	---
403A--------------------- Dakota	2s	---	36	---	42	---
413A--------------------- Rasset	3s	---	31	---	37	---
413B--------------------- Rasset	3s	---	31	---	37	---
416A--------------------- Menomin	2s	---	35	---	39	---
423A--------------------- Meridian	2s	---	35	---	39	---
423B2-------------------- Meridian	2e	---	35	---	39	---
423C2-------------------- Meridian	3e	---	33	---	35	---
428A--------------------- Shiffer	2w	---	35	---	39	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
429A: Lows, undrained	6w	---	---	---	---	---
432A: Kevilar	3s	---	31	---	37	---
432B: Kevilar	3s	---	31	---	37	---
432C2: Kevilar	3e	---	28	---	33	---
432D2: Kevilar	4e	---	24	---	29	---
433A: Forkhorn	3s	---	31	---	37	---
433B: Forkhorn	3s	---	31	---	37	---
433C2: Forkhorn	3e	---	28	---	33	---
433D2: Forkhorn	4e	---	24	---	29	---
434B: Bilson	3s	---	31	---	37	---
436A: Rusktown	3s	---	31	---	37	---
438A: Hoopeston	3w	---	31	---	37	---
453A: Burkhardt	3s	---	25	---	33	---
453B: Burkhardt	3s	---	25	---	33	---
454B: Chetek, kame terrace	3s	---	23	---	30	---
454C2: Chetek, kame terrace	4e	---	21	---	28	---
454D2: Chetek, kame terrace	6e	---	19	---	25	---
454E: Chetek, kame terrace	7e	---	---	---	---	---
468A: Oesterle, valley train	2w	---	25	---	33	---
501A: Finchford	4s	---	21	---	28	---
501B: Finchford	4s	---	21	---	28	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
502B2-------------------- Chelsea	4s	---	20	---	24	---
502C2-------------------- Chelsea	6s	---	18	---	22	---
506A--------------------- Komro	4s	---	21	---	28	---
508A--------------------- Farrington	4w	---	25	---	30	---
510B--------------------- Boplain	4s	---	15	---	19	---
510C--------------------- Boplain	6s	---	13	---	17	---
511A--------------------- Plainfield	4s	---	18	52	23	---
511B--------------------- Plainfield	4s	---	18	52	23	---
511C--------------------- Plainfield	6s	---	16	---	21	---
511F--------------------- Plainfield	7s	---	---	---	---	---
512B--------------------- Drammen	3s	---	20	---	25	---
512C--------------------- Drammen	4s	---	18	---	23	---
512D--------------------- Drammen	6s	---	18	---	21	---
516A--------------------- Aldo	4s	---	18	---	23	---
546A--------------------- Prissel	3s	---	20	---	25	---
546B--------------------- Prissel	3s	---	20	---	25	---
546C--------------------- Prissel	4s	---	18	---	23	---
546F--------------------- Prissel	7s	---	---	---	---	---
555A--------------------- Fordum	6w	---	---	---	---	---
561B--------------------- Tarr	4s	---	15	---	19	---
566A--------------------- Tint	4s	---	15	---	19	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
573B: Plainbo, sand sheet	4s	---	15	60	19	---
573C: Plainbo, sand sheet	6s	---	13	---	18	---
588A: Meehan, valley train	4w	---	20	---	25	---
589A: Newson, undrained	6w	---	---	---	---	---
601C: Beavercreek	6s	---	---	---	---	---
616B: Chaseburg	2e	---	41	---	45	---
619A: Vancecreek, undrained	6w	---	---	---	---	---
626A: Arenzville	2w	---	45	---	47	---
628A: Orion	2w	---	41	---	45	---
629A: Ettrick, undrained	6w	---	---	---	---	---
636A: Quarderer	2w	---	37	---	40	---
646A: Dunnbot	2w	---	31	---	37	---
656A: Scotah	4w	---	18	---	23	---
766A: Moppet	3w	---	22	---	---	---
804B2: Arland, dissected	3s	---	28	---	33	---
804C2: Arland, dissected	3e	---	26	---	31	---
804D: Arland, dissected	4e	---	24	---	27	---
814D2: Renova, dissected	4e	---	35	---	39	---
816B2: Vlasaty, dissected	2e	---	43	---	48	---
816C2: Vlasaty, dissected	3e	---	40	---	44	---
826B2: Hersey	2e	---	48	---	51	---

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
826C2 Hersey	3e	---	45	---	47	---
828B Vasa	2e	---	43	---	45	---
836B2 Spencer, dissected	2e	---	41	---	45	---
836C2 Spencer, dissected	3e	---	38	---	41	---
838B Almena, dissected	2e	---	36	---	39	---
870B2 Santiago, dissected	2e	---	41	---	45	---
870C2 Santiago, dissected	3e	---	38	---	41	---
875B Amery, dissected	2e	---	31	---	35	---
875C2 Amery, dissected	3e	---	28	---	31	---
875D Amery, dissected	4e	---	24	---	27	---
1125F Dorerton-Elbaville	7e	---	---	---	---	---
1145F			---	---	---	---
Gaphill	7e	---				
Rockbluff	7s	---				
1224F			---	---	---	---
Boone	7s	---				
Elevasil	7e	---				
1233F Boone-Tarr	7s	---	---	---	---	---
1275F			---	---	---	---
Hayriver	7e	---				
Twinmound	7s	---				
1648A Northbend-Ettrick	7w	---	---	---	---	---
1658A Algansee-Kalmarville	7w	---	---	---	---	---
2002. Udorthents, earthen dams						
2003A. Riverwash						
2013. Pits, gravel						

Table 7.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability N	Land capability I	Soybeans N	Soybeans I	Winter wheat N	Winter wheat I
			Bu	Bu	Bu	Bu
2014. Pits, quarry, hard bedrock						
2016. Pits, quarry, soft bedrock						
2030. Udorthents and Udipsamments						
2050. Landfill						
M-W. Miscellaneous water						
W. Water						

Table 8.--Land Capability and Yields per Acre of Crops and Pasture

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. 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		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
11A----------------- Markey, flood plain, undrained	7w	---	---	---	---	---	---	---	---	---	---	---
20A----------------- Palms and Houghton	6w	---	---	---	---	---	---	---	---	---	---	---
40A----------------- Markey and Seelyeville	6w	---	---	---	---	---	---	---	---	---	---	---
45A----------------- Seelyeville and Cathro	6w	---	---	---	---	---	---	---	---	---	---	---
101B---------------- Menahga, valley train	4s	---	2.3	---	50	---	8.0	---	1.5	---	45	---
101C---------------- Menahga, valley train	6s	---	2.1	---	45	---	7.0	---	1.3	---	40	---
101E---------------- Menahga, valley train	7s	---	2.0	---	---	---	---	---	0.7	---	---	---
115B2--------------- Seaton	2e	---	5.5	---	145	---	24.0	---	4.8	---	85	---
115C2--------------- Seaton	3e	---	5.1	---	135	---	22.0	---	4.4	---	75	---
115D2--------------- Seaton	4e	---	4.7	---	125	---	20.0	---	4.0	---	65	---
115E2--------------- Seaton	6e	---	4.5	---	115	---	19.0	---	3.6	---	55	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
116C2--------------- Churchtown	3e	---	5.1	---	135	---	22.0	---	4.4	---	75	---
116D2--------------- Churchtown	4e	---	4.7	---	125	---	20.0	---	4.0	---	65	---
116E2--------------- Churchtown	6e	---	4.5	---	115	---	19.0	---	3.6	---	55	---
125B2--------------- Pepin	2e	---	5.5	---	145	---	24.0	---	4.8	---	85	---
125C2--------------- Pepin	3e	---	5.1	---	135	---	22.0	---	4.4	---	75	---
125D2--------------- Pepin	4e	---	4.7	---	125	---	20.0	---	4.0	---	65	---
125E2--------------- Pepin	6e	---	4.5	---	115	---	19.0	---	3.6	---	55	---
135C2--------------- Wickware	3e	---	5.1	---	130	---	21.0	---	4.4	---	75	---
135D2--------------- Wickware	4e	---	4.7	---	120	---	19.0	---	4.0	---	65	---
135E2--------------- Wickware	6e	---	4.5	---	110	---	17.0	---	3.6	---	55	---
136B---------------- Doritty	2e	---	5.1	---	140	---	23.0	---	4.8	---	85	---
136C2--------------- Doritty	3e	---	4.7	---	130	---	21.0	---	4.4	---	75	---
144B2--------------- NewGlarus	2e	---	4.2	---	110	---	16.0	---	3.4	---	65	---
144C2--------------- NewGlarus	3e	---	3.8	---	100	---	15.0	---	3.0	---	55	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Corn N	Corn I	Corn silage N	Corn silage I	Kentucky bluegrass N	Kentucky bluegrass I	Oats N	Oats I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
144D2: NewGlarus	4e	---	3.4	---	90	---	14.0	---	2.8	---	50	---
144E2: NewGlarus	6e	---	3.1	---	80	---	13.0	---	2.4	---	45	---
161E: Fivepoints	6e	---	2.7	---	75	---	12.0	---	1.8	---	40	---
208A: Siouxcreek	2w	---	3.4	---	95	---	14.0	---	2.8	---	50	---
213B2: Hixton	2e	---	3.9	---	105	---	16.0	---	3.0	---	70	---
213C2: Hixton	3e	---	3.5	---	95	---	15.0	---	2.8	---	65	---
224B: Elevasil	3s	---	3.8	---	90	---	15.0	---	3.1	---	65	---
224C2: Elevasil	3e	---	3.4	---	80	---	13.0	---	2.7	---	55	---
224D2: Elevasil	4e	---	3.0	---	70	---	11.0	---	2.3	---	45	---
224E2: Elevasil	6e	---	2.7	---	60	---	10.0	---	2.0	---	40	---
233C: Boone	6s	---	1.8	---	40	---	6.0	---	0.9	---	30	---
243B2: Hixton, thin solum	2e	---	3.7	---	95	---	14.0	---	2.8	---	60	---
243C2: Hixton, thin solum	3e	---	3.3	---	90	---	13.0	---	2.6	---	55	---
244B: Elkmound	3s	---	2.4	---	60	---	10.0	---	2.2	---	45	---
244C2: Elkmound	4e	---	2.0	---	50	---	8.0	---	1.8	---	35	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
244D2--------------- Elkmound	6e	---	1.6	---	40	---	7.0	---	1.4	---	25	---
254B2--------------- Norden	2e	---	4.2	---	110	---	18.0	---	3.6	---	75	---
254C2--------------- Norden	3e	---	3.8	---	100	---	16.0	---	3.2	---	65	---
254D2--------------- Norden	4e	---	3.4	---	90	---	15.0	---	2.8	---	55	---
254E2--------------- Norden	6e	---	3.1	---	80	---	14.0	---	2.2	---	50	---
254F---------------- Norden	7e	---	---	---	---	---	---	---	2.0	---	---	---
255B2--------------- Urne	3s	---	3.8	---	85	---	14.0	---	2.9	---	60	---
255C2--------------- Urne	3e	---	3.4	---	75	---	12.0	---	2.5	---	50	---
255D2--------------- Urne	4e	---	3.0	---	65	---	11.0	---	2.1	---	40	---
255E2--------------- Urne	6e	---	2.7	---	55	---	10.0	---	2.1	---	38	---
255F---------------- Urne	7e	---	---	---	---	---	---	---	1.9	---	---	---
265B---------------- Garne	3s	---	4.0	---	85	---	13.0	---	3.8	---	70	---
265C---------------- Garne	3e	---	3.5	---	80	---	12.0	---	3.8	---	65	---
266B---------------- Hiles	2e	---	4.0	---	85	---	14.0	---	2.7	---	70	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
268A---------------- Kert	3w	---	3.5	---	75	---	12.0	---	2.7	---	65	---
269A---------------- Veedum, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
273B2--------------- Dobie and Hixton	2e	---	4.2	---	100	---	16.0	---	3.6	---	75	---
273C2--------------- Dobie and Hixton	3e	---	3.8	---	90	---	14.0	---	3.2	---	65	---
273D2--------------- Dobie and Hixton	4e	---	3.4	---	80	---	12.0	---	2.8	---	55	---
273E2--------------- Dobie and Hixton	6e	---	3.1	---	70	---	10.0	---	2.2	---	45	---
275B2--------------- Hayriver and Elevasil	3s	---	3.8	---	80	---	13.0	---	2.9	---	60	---
275C2--------------- Hayriver and Elevasil	3e	---	3.4	---	70	---	11.0	---	2.5	---	50	---
275D2--------------- Hayriver and Elevasil	4e	---	3.0	---	60	---	10.0	---	2.1	---	40	---
276B---------------- Humbird, loamy subsoil	3s	---	2.5	---	55	---	9.0	---	2.0	---	45	---
278A---------------- Merrillan, loamy subsoil	3w	---	3.0	---	65	---	10.0	---	1.9	---	60	---
282C---------------- Twinmound	6s	---	1.8	---	40	---	6.0	---	0.9	---	30	---
282F---------------- Twinmound	7s	---	---	---	---	---	---	---	0.7	---	---	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Corn N	Corn I	Corn silage N	Corn silage I	Kentucky bluegrass N	Kentucky bluegrass I	Oats N	Oats I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
313D2--------------- Plumcreek	4e	---	4.7	---	115	---	19.0	---	4.2	---	60	---
313F---------------- Plumcreek	7e	---	---	---	---	---	---	---	3.4	---	---	---
316B2--------------- Ella	2e	---	5.3	---	140	---	23.0	---	5.0	---	75	---
316C2--------------- Ella	3e	---	4.9	---	130	---	21.0	---	4.6	---	65	---
318A---------------- Bearpen	2w	---	5.2	---	135	---	22.0	---	4.5	---	70	---
349A---------------- Rib, valley train, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
378A---------------- Poskin, valley train	2w	---	3.7	---	100	---	16.0	---	3.0	---	60	---
403A---------------- Dakota	2s	---	4.4	---	110	---	18.0	---	3.9	---	70	---
413A---------------- Rasset	3s	---	4.2	---	100	---	15.0	---	3.0	---	55	---
413B---------------- Rasset	3s	---	4.2	---	100	---	15.0	---	3.0	---	55	---
416A---------------- Menomin	2s	---	4.2	---	105	---	16.0	---	3.4	---	65	---
423A---------------- Meridian	2s	---	4.2	---	105	---	16.0	---	3.4	---	65	---
423B2--------------- Meridian	2e	---	4.2	---	105	---	16.0	---	3.4	---	65	---
423C2--------------- Meridian	3e	---	3.8	---	95	---	14.0	---	3.0	---	55	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
428A---------------- Shiffer	2w	---	3.7	---	105	---	17.0	---	3.1	---	60	---
429A---------------- Lows, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
432A---------------- Kevilar	3s	---	4.2	---	100	---	16.0	---	2.9	---	60	---
432B---------------- Kevilar	3s	---	4.2	---	100	---	16.0	---	2.9	---	60	---
432C2--------------- Kevilar	3e	---	3.8	---	90	---	15.0	---	2.6	---	50	---
432D2--------------- Kevilar	4e	---	3.5	---	80	---	13.0	---	2.3	---	40	---
433A---------------- Forkhorn	3s	---	3.8	---	95	---	15.0	---	2.9	---	60	---
433B---------------- Forkhorn	3s	---	3.8	---	95	---	15.0	---	2.9	---	60	---
433C2--------------- Forkhorn	3e	---	3.4	---	85	---	14.0	---	2.6	---	50	---
433D2--------------- Forkhorn	4e	---	3.1	---	75	---	12.0	---	2.2	---	40	---
434B---------------- Bilson	3s	---	3.8	---	95	---	15.0	---	2.9	---	60	---
436A---------------- Rusktown	3s	---	3.8	---	95	---	15.0	---	2.9	---	60	---
438A---------------- Hoopeston	3w	---	3.8	---	95	---	15.0	---	2.9	---	60	---
453A---------------- Burkhardt	3s	---	3.1	---	75	---	12.0	---	2.9	---	60	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
453B---------------- Burkhardt	3s	---	3.1	---	75	---	12.0	---	2.9	---	60	---
454B---------------- Chetek, kame terrace	3s	---	3.1	---	70	---	11.0	---	2.7	---	60	---
454C2--------------- Chetek, kame terrace	4e	---	2.9	---	65	---	10.0	---	2.5	---	55	---
454D2--------------- Chetek, kame terrace	6e	---	2.4	---	55	---	8.0	---	2.1	---	45	---
454E---------------- Chetek, kame terrace	7e	---	2.2	---	---	---	---	---	1.9	---	---	---
468A---------------- Oesterle, valley train	2w	---	3.4	---	85	---	14.0	---	2.8	---	55	---
501A---------------- Finchford	4s	---	2.8	---	65	---	10.0	---	2.0	---	55	---
501B---------------- Finchford	4s	---	2.8	---	65	---	10.0	---	2.0	---	55	---
502B2--------------- Chelsea	4s	---	2.6	---	60	---	10.0	---	1.5	---	50	---
502C2--------------- Chelsea	6s	---	2.3	---	55	---	9.0	---	1.0	---	40	---
506A---------------- Komro	4s	---	2.8	---	65	---	10.0	---	2.0	---	55	---
508A---------------- Farrington	4w	---	3.0	---	75	---	12.0	---	2.2	---	60	---
510B---------------- Boplain	4s	---	2.1	---	45	---	7.0	---	1.1	---	35	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
510C---------------- Boplain	6s	---	1.9	---	40	---	6.0	---	0.9	---	30	---
511A---------------- Plainfield	4s	---	2.5	4.7	55	150	9.0	---	1.5	---	45	---
511B---------------- Plainfield	4s	---	2.5	4.7	55	150	9.0	---	1.5	---	45	---
511C---------------- Plainfield	6s	---	2.3	---	50	---	8.0	---	1.3	---	40	---
511F---------------- Plainfield	7s	---	1.7	---	---	---	---	---	0.7	---	---	---
512B---------------- Drammen	3s	---	2.8	---	65	---	10.0	---	1.7	---	50	---
512C---------------- Drammen	4s	---	2.6	---	60	---	10.0	---	1.5	---	45	---
512D---------------- Drammen	6s	---	2.3	---	55	---	9.0	---	1.3	---	40	---
516A---------------- Aldo	4s	---	2.5	---	55	---	9.0	---	1.5	---	45	---
546A---------------- Prissel	3s	---	2.8	---	65	---	10.0	---	1.7	---	50	---
546B---------------- Prissel	3s	---	2.8	---	65	---	10.0	---	1.7	---	50	---
546C---------------- Prissel	4s	---	2.6	---	55	---	9.0	---	1.5	---	40	---
546F---------------- Prissel	7s	---	1.7	---	---	---	---	---	0.7	---	---	---
555A---------------- Fordum	6w	---	---	---	---	---	---	---	---	---	---	---
561B---------------- Tarr	4s	---	2.1	---	45	---	7.0	---	1.1	---	35	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
566A---------------- Tint	4s	---	2.1	---	45	100	7.0	---	1.1	---	35	---
573B---------------- Plainbo, sand sheet	4s	---	2.1	5.0	45	170	7.0	---	1.1	---	40	---
573C---------------- Plainbo, sand sheet	6s	---	1.9	---	40	---	6.0	---	0.9	---	35	---
588A---------------- Meehan, valley train	4w	---	2.5	---	60	---	10.0	---	1.8	---	50	---
589A---------------- Newson, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
601C---------------- Beavercreek	6s	---	---	---	---	---	---	---	2.5	---	---	---
616B---------------- Chaseburg	2e	---	4.7	---	125	---	20.0	---	4.6	---	75	---
619A---------------- Vancecreek, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
626A---------------- Arenzville	2w	---	5.0	---	135	---	22.0	---	4.8	---	80	---
628A---------------- Orion	2w	---	4.5	---	125	---	20.0	---	4.0	---	75	---
629A---------------- Ettrick, undrained	6w	---	---	---	---	---	---	---	---	---	---	---
636A---------------- Quarderer	2w	---	5.0	---	110	---	18.0	---	4.3	---	85	---
646A---------------- Dunnbot	2w	---	3.8	---	95	---	15.0	---	2.9	---	60	---
656A---------------- Scotah	4w	---	2.5	---	55	---	9.0	---	1.5	---	45	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Corn N	Corn I	Corn silage N	Corn silage I	Kentucky bluegrass N	Kentucky bluegrass I	Oats N	Oats I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
766A---------------- Moppet	3w	---	2.6	---	65	---	10.0	---	3.0	---	60	---
804B2--------------- Arland, dissected	3s	---	4.0	---	85	---	14.0	---	3.0	---	60	---
804C2--------------- Arland, dissected	3e	---	3.8	---	80	---	13.0	---	2.6	---	50	---
804D---------------- Arland, dissected	4e	---	3.4	---	70	---	11.0	---	2.2	---	40	---
814D2--------------- Renova, dissected	4e	---	3.9	---	105	---	17.0	---	3.9	---	55	---
816B2--------------- Vlasaty, dissected	2e	---	4.7	---	130	---	21.0	---	4.5	---	80	---
816C2--------------- Vlasaty, dissected	3e	---	4.5	---	120	---	20.0	---	4.1	---	70	---
826B2--------------- Hersey	2e	---	5.5	---	145	---	24.0	---	4.8	---	85	---
826C2--------------- Hersey	3e	---	5.1	---	135	---	22.0	---	4.4	---	75	---
828B---------------- Vasa	2e	---	5.0	---	130	---	21.0	---	4.3	---	70	---
836B2--------------- Spencer, dissected	2e	---	4.7	---	125	---	20.0	---	4.5	---	75	---
836C2--------------- Spencer, dissected	3e	---	4.5	---	115	---	18.0	---	4.1	---	70	---
838B---------------- Almena, dissected	2e	---	4.4	---	110	---	17.0	---	4.0	---	65	---
870B2--------------- Santiago, dissected	2e	---	4.5	---	125	---	20.0	---	4.5	---	75	---

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability N	Land capability I	Alfalfa hay N	Alfalfa hay I	Corn N	Corn I	Corn silage N	Corn silage I	Kentucky bluegrass N	Kentucky bluegrass I	Oats N	Oats I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
870C2--------------- Santiago, dissected	3e	---	4.3	---	115	---	18.0	---	4.1	---	70	---
875B---------------- Amery, dissected	2e	---	4.3	---	95	---	16.0	---	3.0	---	60	---
875C2--------------- Amery, dissected	3e	---	4.1	---	85	---	14.0	---	2.6	---	50	---
875D---------------- Amery, dissected	4e	---	3.7	---	75	---	12.0	---	2.2	---	40	---
1125F--------------- Dorerton-Elbaville	7e	---	---	---	---	---	---	---	2.3	---	---	---
1145F---------------			---	---	---	---	---	---	1.2	---	---	---
Gaphill------------	7e	---										
Rockbluff----------	7s	---										
1224F---------------			---	---	---	---	---	---	1.0	---	---	---
Boone--------------	7s	---										
Elevasil	7e	---										
1233F--------------- Boone-Tarr	7s	---	---	---	---	---	---	---	0.6	---	---	---
1275F---------------			---	---	---	---	---	---	1.1	---	---	---
Hayriver-----------	7e	---										
Twinmound----------	7s	---										
1648A--------------- Northbend-Ettrick	7w	---	---	---	---	---	---	---	3.1	---	---	---
1658A--------------- Algansee-Kalmarville	7w	---	---	---	---	---	---	---	1.1	---	---	---
2002. Udorthents, earthen dams												
2003A. Riverwash												

See footnote at end of table.

Table 8.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability		Alfalfa hay		Corn		Corn silage		Kentucky bluegrass		Oats	
	N	I	N	I	N	I	N	I	N	I	N	I
			Tons	Tons	Bu	Bu	Tons	Tons	AUM*	AUM*	Bu	Bu
2013. Pits, gravel												
2014. Pits, quarry, hard bedrock												
2016. Pits, quarry, soft bedrock												
2030. Udorthents and Udipsamments												
2050. Landfill												
M-W. Miscellaneous water												
W. Water												

* Animal unit month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Table 9.--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
115B2	Seaton silt loam, 2 to 6 percent slopes, eroded
125B2	Pepin silt loam, 2 to 6 percent slopes, eroded
136B	Doritty silt loam, 1 to 6 percent slopes
144B2	NewGlarus silt loam, 2 to 6 percent slopes, eroded
208A	Siouxcreek silt loam, 0 to 3 percent slopes (where drained)
213B2	Hixton silt loam, 2 to 6 percent slopes, eroded
224B	Elevasil sandy loam, 2 to 6 percent slopes
243B2	Hixton silt loam, thin solum, 1 to 6 percent slopes, eroded
254B2	Norden silt loam, 2 to 6 percent slopes, eroded
255B2	Urne fine sandy loam, 2 to 6 percent slopes, eroded
266B	Hiles silt loam, 1 to 6 percent slopes
268A	Kert silt loam, 0 to 3 percent slopes (where drained)
273B2	Dobie and Hixton silt loams, 2 to 6 percent slopes, eroded
316B2	Ella silt loam, 1 to 6 percent slopes, eroded
318A	Bearpen silt loam, 0 to 3 percent slopes (where drained)
349A	Rib silt loam, valley train, 0 to 2 percent slopes (where drained)
378A	Poskin silt loam, valley train, 0 to 3 percent slopes (where drained)
403A	Dakota silt loam, 0 to 3 percent slopes
413A	Rasset sandy loam, 0 to 3 percent slopes
413B	Rasset sandy loam, 2 to 6 percent slopes
416A	Menomin silt loam, 0 to 3 percent slopes
423A	Meridian silt loam, 0 to 3 percent slopes
423B2	Meridian silt loam, 2 to 6 percent slopes, eroded
428A	Shiffer loam, 0 to 3 percent slopes (where drained)
429A	Lows loam, 0 to 2 percent slopes (where drained)
432A	Kevilar sandy loam, 0 to 3 percent slopes
432B	Kevilar sandy loam, 2 to 6 percent slopes
433A	Forkhorn sandy loam, 0 to 3 percent slopes
433B	Forkhorn sandy loam, 2 to 6 percent slopes
434B	Bilson sandy loam, 1 to 6 percent slopes
436A	Rusktown sandy loam, 0 to 3 percent slopes
438A	Hoopeston sandy loam, 0 to 3 percent slopes (where drained)
468A	Oesterle sandy loam, valley train, 0 to 3 percent slopes (where drained)
616B	Chaseburg silt loam, 1 to 4 percent slopes
619A	Vancecreek silt loam, 0 to 2 percent slopes (where drained and either protected from flooding or not frequently flooded during the growing season)
626A	Arenzville silt loam, 0 to 3 percent slopes
628A	Orion silt loam, 0 to 3 percent slopes (where drained)
629A	Ettrick silt loam, 0 to 2 percent slopes (where drained and either protected from flooding or not frequently flooded during the growing season)
636A	Quarderer silt loam, 0 to 3 percent slopes
646A	Dunnbot fine sandy loam, 0 to 3 percent slopes
766A	Moppet fine sandy loam, 0 to 3 percent slopes
804B2	Arland fine sandy loam, 2 to 6 percent slopes, eroded, dissected
816B2	Vlasaty silt loam, 2 to 6 percent slopes, eroded, dissected
826B2	Hersey silt loam, 2 to 6 percent slopes, eroded
828B	Vasa silt loam, 1 to 6 percent slopes, dissected (where drained)
836B2	Spencer silt loam, 2 to 6 percent slopes, eroded, dissected
838B	Almena silt loam, 1 to 6 percent slopes, dissected (where drained)
870B2	Santiago silt loam, 2 to 6 percent slopes, eroded, dissected
875B	Amery sandy loam, 2 to 6 percent slopes, dissected

Table 10.--Windbreaks and Environmental Plantings

(Only the soils that are suitable for windbreaks and environmental plantings are listed. Absence of an entry indicates that trees generally do not grow to the given height)

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
20A:					
Palms, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
Houghton, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
40A:					
Markey, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
Seelyeville, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
45A:					
Seelyeville, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
Cathro, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
101B:					
Menahga, valley train	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
101C:					
Menahga, valley train	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
101E:					
Menahga, valley train	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
115B2:					
Seaton	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
115C2:					
Seaton	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
115D2:					
Seaton	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
115E2:					
Seaton	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
116C2:					
Churchtown	---	Siberian peashrub, common lilac, gray dogwood	Eastern arborvitae, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	Eastern redcedar
116D2:					
Churchtown	---	Siberian peashrub, common lilac, gray dogwood	Eastern arborvitae, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	Eastern redcedar
116E2:					
Churchtown	---	Siberian peashrub, common lilac, gray dogwood	Eastern arborvitae, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	Eastern redcedar
125B2:					
Pepin	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
125C2:					
Pepin	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
125D2:					
Pepin	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
125E2:					
Pepin	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
135C2:					
Wickware	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
135D2:					
Wickware	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
135E2:					
Wickware	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
136B:					
Doritty	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
136C2:					
Doritty	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
144B2:					
NewGlarus	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
144C2:					
NewGlarus	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
144D2:					
NewGlarus	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
144E2:					
NewGlarus	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
161E:					
Fivepoints	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
208A:					
Siouxcreek	Nannyberry, redosier dogwood, silky dogwood	American cranberrybush, common lilac	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
213B2:					
Hixton	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
213C2:					
Hixton	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
224B:					
Elevasil	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
224C2:					
Elevasil	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
224D2:					
Elevasil	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
224E2:					
Elevasil	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
233C:					
Boone	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
243B2:					
Hixton, thin solum	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
243C2:					
Hixton, thin solum	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
244B:					
Elkmound	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
244C2:					
Elkmound	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
244D2:					
Elkmound	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
254B2:					
Norden	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
254C2:					
Norden	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
254D2:					
Norden	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
254E2:					
Norden	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
254F:					
Norden	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
255B2:					
Urne	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
255C2:					
Urne	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
255D2:					
Urne	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
255E2:					
Urne	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
255F:					
Urne	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
265B:					
Garne	Nannyberry, silky dogwood	Amur maple, Siberian peashrub, common lilac	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, green ash, red pine, silver maple	---
265C:					
Garne	Nannyberry, silky dogwood	Amur maple, Siberian peashrub, common lilac	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, green ash, red pine, silver maple	---
266B:					
Hiles	Gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce, Siberian peashrub	Eastern white pine, jack pine, red pine	---
268A:					
Kert	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
269A:					
Veedum, undrained	Common ninebark	---	---	Golden willow, white willow	Imperial Carolina poplar
273B2:					
Dobie	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, common lilac	Eastern redcedar, Amur maple, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
273B2:					
Hixton, frigid	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
273C2:					
Dobie	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, common lilac	Eastern redcedar, Amur maple, Norway spruce	Eastern white pine, jack pine, red pine	---
Hixton, frigid	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
273D2:					
Dobie	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, common lilac	Eastern redcedar, Amur maple, Norway spruce	Eastern white pine, jack pine, red pine	---
Hixton, frigid	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
273E2:					
Dobie	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, common lilac	Eastern redcedar, Amur maple, Norway spruce	Eastern white pine, jack pine, red pine	---
Hixton, frigid	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
275B2:					
Hayriver	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Elevasil, frigid	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
275C2:					
Hayriver	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Elevasil, frigid	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
275D2:					
Hayriver	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Elevasil, frigid	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
276B:					
Humbird, loamy subsoil	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
278A:					
Merrillan, loamy subsoil	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
282C:					
Twinmound	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	Manyflower cotoneaster
282F:					
Twinmound	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	Manyflower cotoneaster
313D2:					
Plumcreek	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
313F:					
Plumcreek	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
316B2:					
Ella	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, green ash, eastern white pine	---
316C2:					
Ella	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, green ash, eastern white pine	---
318A:					
Bearpen	Common ninebark, nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, silver maple, white ash	---
349A:					
Rib, valley train, undrained	Common ninebark, nannyberry, redosier dogwood, silky dogwood	American cranberrybush	Eastern arborvitae, balsam fir, white spruce	Green ash, red maple, white ash	Silver maple

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
378A:					
Poskin, valley train	---	American cranberrybush, common lilac, silky dogwood, common ninebark, nannyberry, northern whitecedar, redosier dogwood	White spruce	Eastern white pine, red maple, silver maple, white ash	---
403A:					
Dakota	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
413A:					
Rasset	Hedge cotoneaster	Siberian peashrub, Persian lilac, eastern redcedar	Amur maple, Russian-olive, Norway spruce	Common hackberry, red pine, thornless honeylocust, green ash	Eastern white pine
413B:					
Rasset	Hedge cotoneaster	Siberian peashrub, Persian lilac, eastern redcedar	Amur maple, Russian-olive, Norway spruce	Common hackberry, red pine, thornless honeylocust, green ash	Eastern white pine
416A:					
Menomin	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
423A:					
Meridian	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
423B2:					
Meridian	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
423C2:					
Meridian	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
428A:					
Shiffer	Gray dogwood, nannyberry	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
429A:					
Lows, undrained	Common ninebark, nannyberry, redosier dogwood, silky dogwood	American cranberrybush	Eastern arborvitae, balsam fir, white spruce	Green ash, red maple, white ash	Silver maple
432A:					
Kevilar	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
432B:					
Kevilar	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
432C2:					
Kevilar	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
432D2:					
Kevilar	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
433A:					
Forkhorn	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
433B:					
Forkhorn	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
433C2:					
Forkhorn	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
433D2:					
Forkhorn	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
434B:					
Bilson	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
436A:					
Rusktown	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
438A:					
Hoopeston	Nannyberry	Common lilac, redosier dogwood	Eastern arborvitae, white spruce, Amur maple	Eastern white pine, red maple, white ash, common hackberry, green ash	Silver maple
453A:					
Burkhardt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
453B:					
Burkhardt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
454B:					
Chetek, kame terrace	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
454C2:					
Chetek, kame terrace	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
454D2:					
Chetek, kame terrace	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
454E:					
Chetek, kame terrace	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
468A:					
Oesterle, valley train	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
501A:					
Finchford	Siberian peashrub, common lilac	Sargent crabapple	Russian-olive, eastern redcedar, jack pine, red pine, Austrian pine, Siberian elm, green ash	Eastern white pine	---
501B:					
Finchford	Siberian peashrub, common lilac	Sargent crabapple	Russian-olive, eastern redcedar, jack pine, red pine, Austrian pine, Siberian elm, green ash	Eastern white pine	---
502B2:					
Chelsea	Siberian peashrub, common lilac	---	Eastern redcedar, jack pine, red pine, Austrian pine	Eastern white pine	---
502C2:					
Chelsea	Siberian peashrub, common lilac	---	Eastern redcedar, jack pine, red pine, Austrian pine	Eastern white pine	---
506A:					
Komro	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
508A:					
Farrington	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
510B:					
Boplain	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
510C:					
Boplain	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
511A:					
Plainfield	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
511B:					
Plainfield	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
511C:					
Plainfield	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
511F:					
Plainfield	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
512B:					
Drammen	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
512C:					
Drammen	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
512D:					
Drammen	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
516A:					
Aldo	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
546A:					
Prissel	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
546B:					
Prissel	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
546C:					
Prissel	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
546F:					
Prissel	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
561B:					
Tarr	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
566A: Tint	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
573B: Plainbo, sand sheet	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
573C: Plainbo, sand sheet	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
588A: Meehan, valley train	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
589A: Newson, undrained	Common ninebark, nannyberry, redosier dogwood, silky dogwood	American cranberrybush	Eastern arborvitae, balsam fir, white spruce	Green ash, red maple, white ash	Silver maple
601C: Beavercreek	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
616B: Chaseburg	Gray dogwood, nannyberry	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
619A: Vancecreek, undrained	Common ninebark, nannyberry, redosier dogwood, silky dogwood	American cranberrybush	Eastern arborvitae, balsam fir, white spruce	Green ash, red maple, white ash	Silver maple
626A: Arenzville	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, white ash	Silver maple
628A: Orion	Common ninebark, nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, silver maple, white ash	---
629A: Ettrick, undrained	Common ninebark, nannyberry, redosier dogwood, silky dogwood	American cranberrybush	Eastern arborvitae, balsam fir, white spruce	Green ash, red maple, white ash	Silver maple
636A: Quarderer	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
646A: Dunnbot	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood, silver maple	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, white ash	---
656A: Scotah	Common ninebark	American cranberrybush, silky dogwood	Amur privet, nannyberry, eastern arborvitae, white spruce	Manchurian crabapple, Norway spruce, eastern white pine, green ash	Imperial Carolina poplar

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
766A: Moppet, occasionally flooded	---	American cranberrybush, common lilac, silky dogwood, nannyberry, northern whitecedar, redosier dogwood	White spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---
804B2: Arland, dissected	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
804C2: Arland, dissected	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
804D: Arland, dissected	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
814D2: Renova, dissected	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple, blue spruce	Russian-olive, common hackberry, eastern white pine, green ash	---
816B2: Vlasaty, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Norway spruce, white spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
816C2:					
Vlasaty, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Norway spruce, white spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
826B2:					
Hersey	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
826C2:					
Hersey	---	Siberian peashrub, common lilac, gray dogwood, redosier dogwood	Eastern arborvitae, eastern redcedar, Amur maple	Russian-olive, common hackberry, eastern white pine, green ash, red pine	---
828B:					
Vasa	---	Common lilac, gray dogwood	Amur maple, eastern redcedar, eastern arborvitae, eastern redcedar, blue spruce	Eastern white pine, common hackberry	Green ash, eastern cottonwood
836B2:					
Spencer, dissected	---	American cranberrybush, Amur maple, common lilac, gray dogwood, northern whitecedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
836C2:					
Spencer, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
838B:					
Almena, dissected	Nannyberry, redosier dogwood	American cranberrybush, silky dogwood, common lilac	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, silver maple, white ash	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
870B2:					
Santiago, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
870C2:					
Santiago, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
875B:					
Amery, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Norway spruce, white spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
875C2:					
Amery, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Norway spruce, white spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
875D:					
Amery, dissected	Gray dogwood	American cranberrybush, Amur maple, common lilac	Eastern arborvitae, Norway spruce, white spruce, white spruce	Eastern white pine, red maple, red pine, white ash	---
1125F:					
Dorerton	Siberian peashrub, gray dogwood, manyflower cotoneaster	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Elbaville	Siberian peashrub, common lilac, silky dogwood	Eastern redcedar	Manchurian crabapple, Russian-olive, bur oak, common hackberry, green ash, eastern white pine, jack pine, honeylocust	---	---

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
1145F:					
Gaphill	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Rockbluff	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
1224F:					
Boone	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Elevasil	Siberian peashrub, gray dogwood, silky dogwood	Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
1233F:					
Boone	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Tarr	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
1275F:					
Hayriver	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	---
Twinmound	Siberian peashrub, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine	Manyflower cotoneaster

Table 10.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
1648A:					
Northbend	Nannyberry, redosier dogwood	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce	Eastern white pine, red maple, red pine, white ash	Silver maple
Ettrick, flood plain, undrained.					
1658A:					
Algansee	Silky dogwood	American cranberrybush, common lilac	Amur maple, eastern arborvitae, white spruce	Manchurian crabapple, Norway spruce, eastern white pine, green ash, red maple	Imperial Carolina poplar
Kalmarville, undrained.					

Table 11.--Conservation Tree/Shrub Suitability Groups

(Suitable shrubs and trees with their mature heights are listed in table 10. Absence of an entry indicates that a conservation tree/shrub suitability group is not assigned)

Map symbol and soil name	Conservation tree/shrub group
11A:	
Markey, flood plain, undrained	10
20A:	
Palms, undrained	10
Houghton, undrained	10
40A:	
Markey, undrained	10
Seelyeville, undrained	10
45A:	
Seelyeville, undrained	10
Cathro, undrained	10
101B:	
Menahga, valley train	7
101C:	
Menahga, valley train	7
101E:	
Menahga, valley train	7
115B2:	
Seaton	3
115C2:	
Seaton	3
115D2:	
Seaton	3
115E2:	
Seaton	3
116C2:	
Churchtown	3
116D2:	
Churchtown	3
116E2:	
Churchtown	3
125B2:	
Pepin	3
125C2:	
Pepin	3
125D2:	
Pepin	3

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
125E2:	
Pepin	3
135C2:	
Wickware	3
135D2:	
Wickware	3
135E2:	
Wickware	3
136B:	
Doritty	1
136C2:	
Doritty	1
144B2:	
NewGlarus	4
144C2:	
NewGlarus	4
144D2:	
NewGlarus	4
144E2:	
NewGlarus	4
161E:	
Fivepoints	6D
208A:	
Siouxcreek	10
213B2:	
Hixton	6D
213C2:	
Hixton	6D
224B:	
Elevasil	6GA
224C2:	
Elevasil	6GA
224D2:	
Elevasil	6GA
224E2:	
Elevasil	6GA
233C:	
Boone	6A
243B2:	
Hixton, thin solum	6GA
243C2:	
Hixton, thin solum	6GA

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
244B:	
Elkmound	10
244C2:	
Elkmound	10
244D2:	
Elkmound	10
254B2:	
Norden	6D
254C2:	
Norden	6D
254D2:	
Norden	6D
254E2:	
Norden	6D
254F:	
Norden	6D
255B2:	
Urne	6D
255C2:	
Urne	6D
255D2:	
Urne	6D
255E2:	
Urne	6D
255F:	
Urne	6D
265B:	
Garne	6
265C:	
Garne	6
266B:	
Hiles	6GA
268A:	
Kert	10
269A:	
Veedum, undrained	10
273B2:	
Dobie	6D
Hixton, frigid	6D
273C2:	
Dobie	6D
Hixton, frigid	6D

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
273D2:	
Dobie	6D
Hixton, frigid	6D
273E2:	
Dobie	6D
Hixton, frigid	6D
275B2:	
Hayriver	6D
Elevasil, frigid	6GA
275C2:	
Hayriver	6D
Elevasil, frigid	6GA
275D2:	
Hayriver	6D
Elevasil, frigid	6GA
276B:	
Humbird, loamy subsoil	6GA
278A:	
Merrillan, loamy subsoil	10
282C:	
Twinmound	6A
282F:	
Twinmound	6A
313D2:	
Plumcreek	3
313F:	
Plumcreek	3
316B2:	
Ella	1
316C2:	
Ella	1
318A:	
Bearpen	2
349A:	
Rib, valley train, undrained	10
378A:	
Poskin, valley train	2
403A:	
Dakota	4

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
413A:	
Rasset	4
413B:	
Rasset	4
416A:	
Menomin	4
423A:	
Meridian	4
423B2:	
Meridian	4
423C2:	
Meridian	4
428A:	
Shiffer	2
429A:	
Lows, undrained	10
432A:	
Kevilar	1
432B:	
Kevilar	1
432C2:	
Kevilar	1
432D2:	
Kevilar	1
433A:	
Forkhorn	4
433B:	
Forkhorn	4
433C2:	
Forkhorn	4
433D2:	
Forkhorn	4
434B:	
Bilson	4
436A:	
Rusktown	4
438A:	
Hoopeston	2
453A:	
Burkhardt	6
453B:	
Burkhardt	6

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
454B:	
Chetek, kame terrace--	6
454C2:	
Chetek, kame terrace--	6
454D2:	
Chetek, kame terrace--	6
454E:	
Chetek, kame terrace--	6
468A:	
Oesterle, valley train	2
501A:	
Finchford-------------	7
501B:	
Finchford-------------	7
502B2:	
Chelsea---------------	7
502C2:	
Chelsea---------------	7
506A:	
Komro-----------------	7
508A:	
Farrington------------	7
510B:	
Boplain---------------	6A
510C:	
Boplain---------------	6A
511A:	
Plainfield------------	7
511B:	
Plainfield------------	7
511C:	
Plainfield------------	7
511F:	
Plainfield------------	7
512B:	
Drammen---------------	7
512C:	
Drammen---------------	7
512D:	
Drammen---------------	7
516A:	
Aldo------------------	7

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
546A:	
Prissel	5
546B:	
Prissel	5
546C:	
Prissel	5
546F:	
Prissel	5
555A:	
Fordum, frequently flooded	10
561B:	
Tarr	7
566A:	
Tint	7
573B:	
Plainbo, sand sheet	6A
573C:	
Plainbo, sand sheet	6A
588A:	
Meehan, valley train	7
589A:	
Newson, undrained	10
601C:	
Beavercreek	4
616B:	
Chaseburg	3
619A:	
Vancecreek, undrained	10
626A:	
Arenzville	3
628A:	
Orion	2A
629A:	
Ettrick, undrained	10
636A:	
Quarderer	3
646A:	
Dunnbot	4
656A:	
Scotah	7
766A:	
Moppet, occasionally flooded	2A

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
804B2:	
Arland, dissected	6D
804C2:	
Arland, dissected	6D
804D:	
Arland, dissected	6D
814D2:	
Renova, dissected	1
816B2:	
Vlasaty, dissected	1
816C2:	
Vlasaty, dissected	1
826B2:	
Hersey	1
826C2:	
Hersey	1
828B:	
Vasa	2A
836B2:	
Spencer, dissected	1
836C2:	
Spencer, dissected	1
838B:	
Almena, dissected	2A
870B2:	
Santiago, dissected	3
870C2:	
Santiago, dissected	3
875B:	
Amery, dissected	3
875C2:	
Amery, dissected	3
875D:	
Amery, dissected	3
1125F:	
Dorerton	3
Elbaville	3
1145F:	
Gaphill	4
Rockbluff	6A

Table 11.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and soil name	Conservation tree/shrub group
1224F:	
Boone	6A
Elevasil	6GA
1233F:	
Boone	6A
Tarr	7
1275F:	
Hayriver	6D
Twinmound	6A
1648A:	
Northbend	2A
Ettrick, flood plain, undrained	10
1658A:	
Algansee	7
Kalmarville, undrained	10

Table 12.--Forest Land Harvest Equipment Considerations

(Only the soils that are suitable for forest land management are listed. See text for a description of the considerations listed in this table)

Map symbol and soil name	Forest land harvest equipment considerations
45A:	
Seelyeville, undrained	Wetness Susceptible to rutting and wheel slippage
Cathro, undrained	Wetness Susceptible to rutting and wheel slippage
101B:	
Menahga, valley train	Poor traction (loose sandy material)
101C:	
Menahga, valley train	Poor traction (loose sandy material)
101E:	
Menahga, valley train	Slope Poor traction (loose sandy material)
115B2:	
Seaton	Susceptible to rutting and wheel slippage
115C2:	
Seaton	Susceptible to rutting and wheel slippage
115D2:	
Seaton	Slope Susceptible to rutting and wheel slippage
115E2:	
Seaton	Slope Susceptible to rutting and wheel slippage
116C2:	
Churchtown	Susceptible to rutting and wheel slippage
116D2:	
Churchtown	Slope Susceptible to rutting and wheel slippage
116E2:	
Churchtown	Slope Susceptible to rutting and wheel slippage
125B2:	
Pepin	Susceptible to rutting and wheel slippage
125C2:	
Pepin	Susceptible to rutting and wheel slippage
125D2:	
Pepin	Slope Susceptible to rutting and wheel slippage
125E2:	
Pepin	Slope Susceptible to rutting and wheel slippage
135C2:	
Wickware	Susceptible to rutting and wheel slippage
135D2:	
Wickware	Slope Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
135E2:	
Wickware	Slope Susceptible to rutting and wheel slippage
136B:	
Doritty	Wetness Susceptible to rutting and wheel slippage
136C2:	
Doritty	Wetness Susceptible to rutting and wheel slippage
144B2:	
NewGlarus	Susceptible to rutting and wheel slippage
144C2:	
NewGlarus	Susceptible to rutting and wheel slippage
144D2:	
NewGlarus	Slope Susceptible to rutting and wheel slippage
144E2:	
NewGlarus	Slope Susceptible to rutting and wheel slippage
161E:	
Fivepoints	Slope Susceptible to rutting and wheel slippage
208A:	
Siouxcreek	Wetness
213B2:	
Hixton	Susceptible to rutting and wheel slippage
213C2:	
Hixton	Susceptible to rutting and wheel slippage
224B:	
Elevasil	No major considerations
224C2:	
Elevasil	No major considerations
224D2:	
Elevasil	Slope
224E2:	
Elevasil	Slope
233C:	
Boone	Poor traction (loose sandy material)
243B2:	
Hixton, thin solum	Susceptible to rutting and wheel slippage
243C2:	
Hixton, thin solum	Susceptible to rutting and wheel slippage
244B:	
Elkmound	Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
244C2:	
Elkmound	Susceptible to rutting and wheel slippage
244D2:	
Elkmound	Slope Susceptible to rutting and wheel slippage
254B2:	
Norden	Susceptible to rutting and wheel slippage
254C2:	
Norden	Susceptible to rutting and wheel slippage
254D2:	
Norden	Slope Susceptible to rutting and wheel slippage
254E2:	
Norden	Slope Susceptible to rutting and wheel slippage
254F:	
Norden	Slope Susceptible to rutting and wheel slippage
255B2:	
Urne	Susceptible to rutting and wheel slippage
255C2:	
Urne	Susceptible to rutting and wheel slippage
255D2:	
Urne	Slope Susceptible to rutting and wheel slippage
255E2:	
Urne	Slope Susceptible to rutting and wheel slippage
255F:	
Urne	Slope Susceptible to rutting and wheel slippage
265B:	
Garne	Poor traction (loose sandy material)
265C:	
Garne	Poor traction (loose sandy material)
266B:	
Hiles	Wetness Susceptible to rutting and wheel slippage
268A:	
Kert	Wetness Susceptible to rutting and wheel slippage
269A:	
Veedum, undrained	Wetness Susceptible to rutting and wheel slippage
273B2:	
Dobie	Susceptible to rutting and wheel slippage
Hixton, frigid	Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
273C2:	
Dobie	Susceptible to rutting and wheel slippage
Hixton, frigid	Susceptible to rutting and wheel slippage
273D2:	
Dobie	Slope Susceptible to rutting and wheel slippage
Hixton, frigid	Slope Susceptible to rutting and wheel slippage
273E2:	
Dobie	Slope Susceptible to rutting and wheel slippage
Hixton, frigid	Slope Susceptible to rutting and wheel slippage
275B2:	
Hayriver	No major considerations
Elevasil, frigid	No major considerations
275C2:	
Hayriver	No major considerations
Elevasil, frigid	No major considerations
275D2:	
Hayriver	Slope
Elevasil, frigid	Slope
276B:	
Humbird, loamy subsoil	Wetness Susceptible to rutting and wheel slippage
278A:	
Merrillan, loamy subsoil	Wetness
282C:	
Twinmound	Poor traction (loose sandy material)
282F:	
Twinmound	Slope Poor traction (loose sandy material)
313D2:	
Plumcreek	Slope Susceptible to rutting and wheel slippage
313F:	
Plumcreek	Slope Susceptible to rutting and wheel slippage
316B2:	
Ella	Wetness Susceptible to rutting and wheel slippage
316C2:	
Ella	Wetness Susceptible to rutting and wheel slippage

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
318A:	
Bearpen	Wetness Susceptible to rutting and wheel slippage
349A:	
Rib, valley train, undrained	Wetness Susceptible to rutting and wheel slippage
378A:	
Poskin, valley train	Wetness Susceptible to rutting and wheel slippage
416A:	
Menomin	Susceptible to rutting and wheel slippage
423A:	
Meridian	Susceptible to rutting and wheel slippage
423B2:	
Meridian	Susceptible to rutting and wheel slippage
423C2:	
Meridian	Susceptible to rutting and wheel slippage
428A:	
Shiffer	Wetness Susceptible to rutting and wheel slippage
429A:	
Lows, undrained	Wetness Susceptible to rutting and wheel slippage
432A:	
Kevilar	Wetness
432B:	
Kevilar	Wetness
432C2:	
Kevilar	Wetness
432D2:	
Kevilar	Slope Wetness
433A:	
Forkhorn	No major considerations
433B:	
Forkhorn	No major considerations
433C2:	
Forkhorn	No major considerations
433D2:	
Forkhorn	Slope
434B:	
Bilson	No major considerations
436A:	
Rusktown	No major considerations

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
438A:	
Hoopeston	Wetness
454B:	
Chetek, kame terrace	Surface boulders Susceptible to rutting and wheel slippage
454C2:	
Chetek, kame terrace	Surface boulders Susceptible to rutting and wheel slippage
454D2:	
Chetek, kame terrace	Slope Surface boulders Susceptible to rutting and wheel slippage
454E:	
Chetek, kame terrace	Slope Surface boulders Susceptible to rutting and wheel slippage
468A:	
Oesterle, valley train	Wetness
502B2:	
Chelsea	Poor traction (loose sandy material)
502C2:	
Chelsea	Poor traction (loose sandy material)
508A:	
Farrington	Wetness Poor traction (loose sandy material)
510B:	
Boplain	Poor traction (loose sandy material)
510C:	
Boplain	Poor traction (loose sandy material)
511A:	
Plainfield	Poor traction (loose sandy material)
511B:	
Plainfield	Poor traction (loose sandy material)
511C:	
Plainfield	Poor traction (loose sandy material)
511F:	
Plainfield	Slope Poor traction (loose sandy material)
512B:	
Drammen	Poor traction (loose sandy material)
512C:	
Drammen	Poor traction (loose sandy material)
512D:	
Drammen	Slope Poor traction (loose sandy material)

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
516A:	
Aldo	Poor traction (loose sandy material)
546A:	
Prissel	Wetness Poor traction (loose sandy material)
546B:	
Prissel	Wetness Poor traction (loose sandy material)
546C:	
Prissel	Wetness Poor traction (loose sandy material)
546F:	
Prissel	Slope Wetness Poor traction (loose sandy material)
555A:	
Fordum, frequently flooded	Flooding Wetness Susceptible to rutting and wheel slippage
561B:	
Tarr	Poor traction (loose sandy material)
566A:	
Tint	Poor traction (loose sandy material)
573B:	
Plainbo, sand sheet	Poor traction (loose sandy material)
573C:	
Plainbo, sand sheet	Poor traction (loose sandy material)
588A:	
Meehan, valley train	Wetness Poor traction (loose sandy material)
589A:	
Newson, undrained	Wetness Poor traction (loose sandy material)
601C:	
Beavercreek	No major considerations
616B:	
Chaseburg	No major considerations
619A:	
Vancecreek, undrained	Flooding Wetness Susceptible to rutting and wheel slippage
626A:	
Arenzville	No major considerations
628A:	
Orion	Wetness

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
629A:	
Ettrick, undrained	Flooding Wetness Susceptible to rutting and wheel slippage
636A:	
Quarderer	No major considerations
646A:	
Dunnbot	No major considerations
656A:	
Scotah	Poor traction (loose sandy material)
766A:	
Moppet, occasionally flooded	No major considerations
804B2:	
Arland, dissected	No major considerations
804C2:	
Arland, dissected	No major considerations
804D:	
Arland, dissected	Slope
814D2:	
Renova, dissected	Slope Susceptible to rutting and wheel slippage
816B2:	
Vlasaty, dissected	Wetness Susceptible to rutting and wheel slippage
816C2:	
Vlasaty, dissected	Wetness Susceptible to rutting and wheel slippage
826B2:	
Hersey	Wetness Susceptible to rutting and wheel slippage
826C2:	
Hersey	Wetness Susceptible to rutting and wheel slippage
828B:	
Vasa	Wetness Susceptible to rutting and wheel slippage
836B2:	
Spencer, dissected	Wetness Susceptible to rutting and wheel slippage
836C2:	
Spencer, dissected	Wetness Susceptible to rutting and wheel slippage
838B:	
Almena, dissected	Wetness Susceptible to rutting and wheel slippage
870B2:	
Santiago, dissected	No major considerations

Table 12.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
870C2:	
Santiago, dissected	No major considerations
875B:	
Amery, dissected	No major considerations
875C2:	
Amery, dissected	No major considerations
875D:	
Amery, dissected	Slope
1125F:	
Dorerton	Slope Susceptible to rutting and wheel slippage
Elbaville	Slope Susceptible to rutting and wheel slippage
1145F:	
Gaphill	Slope
Rockbluff	Slope Poor traction (loose sandy material)
1224F:	
Boone	Slope Poor traction (loose sandy material)
Elevasil	Slope
1233F:	
Boone	Slope Poor traction (loose sandy material)
Tarr	Slope Poor traction (loose sandy material)
1275F:	
Hayriver	Slope
Twinmound	Slope Poor traction (loose sandy material)
1648A:	
Northbend	Flooding Wetness
Ettrick, flood plain, undrained	Flooding Wetness Susceptible to rutting and wheel slippage
1658A:	
Algansee	Flooding Wetness Poor traction (loose sandy material)
Kalmarville, undrained	Flooding Wetness

Table 13.--Forest Haul Road Considerations

(Only the soils that are suitable for forest land management are listed. See text for a description of the considerations listed in this table)

Map symbol and soil name	Forest haul road considerations
45A:	
Seelyeville, undrained	Wetness Low bearing strength
Cathro, undrained	Wetness Low bearing strength
101B:	
Menahga, valley train	No major considerations
101C:	
Menahga, valley train	Slope
101E:	
Menahga, valley train	Slope
115B2:	
Seaton	Low bearing strength
115C2:	
Seaton	Slope Low bearing strength
115D2:	
Seaton	Slope Low bearing strength
115E2:	
Seaton	Slope Low bearing strength
116C2:	
Churchtown	Slope Low bearing strength
116D2:	
Churchtown	Slope Low bearing strength
116E2:	
Churchtown	Slope Low bearing strength
125B2:	
Pepin	Low bearing strength
125C2:	
Pepin	Slope Low bearing strength
125D2:	
Pepin	Slope Low bearing strength
125E2:	
Pepin	Slope Low bearing strength

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
135C2:	
Wickware	Slope Low bearing strength
135D2:	
Wickware	Slope Low bearing strength
135E2:	
Wickware	Slope Low bearing strength
136B:	
Doritty	Wetness Low bearing strength
136C2:	
Doritty	Slope Wetness Low bearing strength
144B2:	
NewGlarus	Low bearing strength
144C2:	
NewGlarus	Slope Low bearing strength
144D2:	
NewGlarus	Slope Low bearing strength
144E2:	
NewGlarus	Slope Low bearing strength
161E:	
Fivepoints	Slope Low bearing strength
208A:	
Siouxcreek	Wetness
213B2:	
Hixton	Low bearing strength
213C2:	
Hixton	Slope Low bearing strength
224B:	
Elevasil	No major considerations
224C2:	
Elevasil	Slope
224D2:	
Elevasil	Slope
224E2:	
Elevasil	Slope
233C:	
Boone	Slope

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
243B2:	
Hixton, thin solum	Depth to soft bedrock Low bearing strength
243C2:	
Hixton, thin solum	Slope Depth to soft bedrock Low bearing strength
244B:	
Elkmound	Depth to soft bedrock Low bearing strength
244C2:	
Elkmound	Slope Depth to soft bedrock Low bearing strength
244D2:	
Elkmound	Slope Depth to hard bedrock Low bearing strength
254B2:	
Norden	Low bearing strength
254C2:	
Norden	Slope Low bearing strength
254D2:	
Norden	Slope Low bearing strength
254E2:	
Norden	Slope Low bearing strength
254F:	
Norden	Slope Low bearing strength
255B2:	
Urne	Low bearing strength
255C2:	
Urne	Slope Low bearing strength
255D2:	
Urne	Slope Low bearing strength
255E2:	
Urne	Slope Low bearing strength
255F:	
Urne	Slope Low bearing strength
265B:	
Garne	No major considerations

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
265C:	
Garne	Slope
266B:	
Hiles	Wetness Low bearing strength
268A:	
Kert	Wetness Low bearing strength
269A:	
Veedum, undrained	Wetness Low bearing strength
273B2:	
Dobie	Low bearing strength
Hixton, frigid	Low bearing strength
273C2:	
Dobie	Slope Low bearing strength
Hixton, frigid	Slope Low bearing strength
273D2:	
Dobie	Slope Low bearing strength
Hixton, frigid	Slope Low bearing strength
273E2:	
Dobie	Slope Low bearing strength
Hixton, frigid	Slope Low bearing strength
275B2:	
Hayriver	No major considerations
Elevasil, frigid	No major considerations
275C2:	
Hayriver	Slope
Elevasil, frigid	Slope
275D2:	
Hayriver	Slope
Elevasil, frigid	Slope
276B:	
Humbird, loamy subsoil	Wetness Low bearing strength
278A:	
Merrillan, loamy subsoil	Wetness
282C:	
Twinmound	Slope

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
282F:	
Twinmound	Slope
313D2:	
Plumcreek	Slope Low bearing strength
313F:	
Plumcreek	Slope Low bearing strength
316B2:	
Ella	Wetness Low bearing strength
316C2:	
Ella	Slope Wetness Low bearing strength
318A:	
Bearpen	Wetness Low bearing strength
349A:	
Rib, valley train, undrained	Wetness Low bearing strength
378A:	
Poskin, valley train	Wetness Low bearing strength
416A:	
Menomin	Low bearing strength
423A:	
Meridian	Low bearing strength
423B2:	
Meridian	Low bearing strength
423C2:	
Meridian	Slope Low bearing strength
428A:	
Shiffer	Wetness Low bearing strength
429A:	
Lows, undrained	Wetness Low bearing strength
432A:	
Kevilar	Wetness
432B:	
Kevilar	Wetness
432C2:	
Kevilar	Slope Wetness

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
432D2:	
Kevilar	Slope Wetness
433A:	
Forkhorn	No major considerations
433B:	
Forkhorn	No major considerations
433C2:	
Forkhorn	Slope
433D2:	
Forkhorn	Slope
434B:	
Bilson	No major considerations
436A:	
Rusktown	No major considerations
438A:	
Hoopeston	Wetness
454B:	
Chetek, kame terrace	Surface boulders Low bearing strength
454C2:	
Chetek, kame terrace	Slope Surface boulders Low bearing strength
454D2:	
Chetek, kame terrace	Slope Surface boulders Low bearing strength
454E:	
Chetek, kame terrace	Slope Surface boulders Low bearing strength
468A:	
Oesterle, valley train	Wetness
502B2:	
Chelsea	No major considerations
502C2:	
Chelsea	Slope
508A:	
Farrington	Wetness
510B:	
Boplain	No major considerations
510C:	
Boplain	Slope
511A:	
Plainfield	No major considerations

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
511B:	
Plainfield	No major considerations
511C:	
Plainfield	Slope
511F:	
Plainfield	Slope
512B:	
Drammen	No major considerations
512C:	
Drammen	Slope
512D:	
Drammen	Slope
516A:	
Aldo	No major considerations
546A:	
Prissel	Wetness
546B:	
Prissel	Wetness
546C:	
Prissel	Slope Wetness
546F:	
Prissel	Slope Wetness
555A:	
Fordum, frequently flooded	Flooding Wetness Low bearing strength
561B:	
Tarr	No major considerations
566A:	
Tint	No major considerations
573B:	
Plainbo, sand sheet	No major considerations
573C:	
Plainbo, sand sheet	Slope
588A:	
Meehan, valley train	Wetness
589A:	
Newson, undrained	Wetness
601C:	
Beavercreek	Slope
616B:	
Chaseburg	No major considerations

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
619A:	
Vancecreek, undrained	Flooding Wetness Low bearing strength
626A:	
Arenzville	No major considerations
628A:	
Orion	Wetness
629A:	
Ettrick, undrained	Flooding Wetness Low bearing strength
636A:	
Quarderer	No major considerations
646A:	
Dunnbot	No major considerations
656A:	
Scotah	No major considerations
766A:	
Moppet, occasionally flooded	No major considerations
804B2:	
Arland, dissected	No major considerations
804C2:	
Arland, dissected	Slope
804D:	
Arland, dissected	Slope
814D2:	
Renova, dissected	Slope Low bearing strength
816B2:	
Vlasaty, dissected	Wetness Low bearing strength
816C2:	
Vlasaty, dissected	Slope Wetness Low bearing strength
826B2:	
Hersey	Wetness Low bearing strength
826C2:	
Hersey	Slope Wetness Low bearing strength
828B:	
Vasa	Wetness Low bearing strength

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
836B2:	
Spencer, dissected	Wetness Low bearing strength
836C2:	
Spencer, dissected	Slope Wetness Low bearing strength
838B:	
Almena, dissected	Wetness Low bearing strength
870B2:	
Santiago, dissected	No major considerations
870C2:	
Santiago, dissected	Slope
875B:	
Amery, dissected	No major considerations
875C2:	
Amery, dissected	Slope
875D:	
Amery, dissected	Slope
1125F:	
Dorerton	Slope Low bearing strength
Elbaville	Slope Low bearing strength
1145F:	
Gaphill	Slope
Rockbluff	Slope
1224F:	
Boone	Slope
Elevasil	Slope
1233F:	
Boone	Slope
Tarr	Slope
1275F:	
Hayriver	Slope
Twinmound	Slope
1648A:	
Northbend	Flooding Wetness
Ettrick, flood plain, undrained	Flooding Wetness Low bearing strength

Table 13.--Forest Haul Road Considerations--Continued

Map symbol and soil name	Forest haul road considerations
1658A:	
Algansee	Flooding Wetness
Kalmarville, undrained	Flooding Wetness

Table 14.--Forest Log Landing Considerations

(Only the soils that are suitable for forest land management are listed. See text for a description of the considerations listed in this table)

Map symbol and soil name	Forest log landing considerations
45A:	
Seelyeville, undrained	Wetness Susceptible to rutting and wheel slippage
Cathro, undrained	Wetness Susceptible to rutting and wheel slippage
101B:	
Menahga, valley train	No major considerations
101C:	
Menahga, valley train	Slope
101E:	
Menahga, valley train	Slope
115B2:	
Seaton	Susceptible to rutting and wheel slippage
115C2:	
Seaton	Slope Susceptible to rutting and wheel slippage
115D2:	
Seaton	Slope Susceptible to rutting and wheel slippage
115E2:	
Seaton	Slope Susceptible to rutting and wheel slippage
116C2:	
Churchtown	Slope Susceptible to rutting and wheel slippage
116D2:	
Churchtown	Slope Susceptible to rutting and wheel slippage
116E2:	
Churchtown	Slope Susceptible to rutting and wheel slippage
125B2:	
Pepin	Susceptible to rutting and wheel slippage
125C2:	
Pepin	Slope Susceptible to rutting and wheel slippage
125D2:	
Pepin	Slope Susceptible to rutting and wheel slippage
125E2:	
Pepin	Slope Susceptible to rutting and wheel slippage
135C2:	
Wickware	Slope Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
135D2:	
Wickware	Slope Susceptible to rutting and wheel slippage
135E2:	
Wickware	Slope Susceptible to rutting and wheel slippage
136B:	
Doritty	Wetness Susceptible to rutting and wheel slippage
136C2:	
Doritty	Slope Wetness Susceptible to rutting and wheel slippage
144B2:	
NewGlarus	Susceptible to rutting and wheel slippage
144C2:	
NewGlarus	Slope Susceptible to rutting and wheel slippage
144D2:	
NewGlarus	Slope Susceptible to rutting and wheel slippage
144E2:	
NewGlarus	Slope Susceptible to rutting and wheel slippage
161E:	
Fivepoints	Slope Susceptible to rutting and wheel slippage
208A:	
Siouxcreek	Wetness
213B2:	
Hixton	Susceptible to rutting and wheel slippage
213C2:	
Hixton	Slope Susceptible to rutting and wheel slippage
224B:	
Elevasil	No major considerations
224C2:	
Elevasil	Slope
224D2:	
Elevasil	Slope
224E2:	
Elevasil	Slope
233C:	
Boone	Slope
243B2:	
Hixton, thin solum	Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
243C2:	
Hixton, thin solum	Slope Susceptible to rutting and wheel slippage
244B:	
Elkmound	Susceptible to rutting and wheel slippage
244C2:	
Elkmound	Slope Susceptible to rutting and wheel slippage
244D2:	
Elkmound	Slope Susceptible to rutting and wheel slippage
254B2:	
Norden	Susceptible to rutting and wheel slippage
254C2:	
Norden	Slope Susceptible to rutting and wheel slippage
254D2:	
Norden	Slope Susceptible to rutting and wheel slippage
254E2:	
Norden	Slope Susceptible to rutting and wheel slippage
254F:	
Norden	Slope Susceptible to rutting and wheel slippage
255B2:	
Urne	Susceptible to rutting and wheel slippage
255C2:	
Urne	Slope Susceptible to rutting and wheel slippage
255D2:	
Urne	Slope Susceptible to rutting and wheel slippage
255E2:	
Urne	Slope Susceptible to rutting and wheel slippage
255F:	
Urne	Slope Susceptible to rutting and wheel slippage
265B:	
Garne	No major considerations
265C:	
Garne	Slope
266B:	
Hiles	Wetness Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
268A:	
Kert	Wetness Susceptible to rutting and wheel slippage
269A:	
Veedum, undrained	Wetness Susceptible to rutting and wheel slippage
273B2:	
Dobie	Susceptible to rutting and wheel slippage
Hixton, frigid	Susceptible to rutting and wheel slippage
273C2:	
Dobie	Slope Susceptible to rutting and wheel slippage
Hixton, frigid	Slope Susceptible to rutting and wheel slippage
273D2:	
Dobie	Slope Susceptible to rutting and wheel slippage
Hixton, frigid	Slope Susceptible to rutting and wheel slippage
273E2:	
Dobie	Slope Susceptible to rutting and wheel slippage
Hixton, frigid	Slope Susceptible to rutting and wheel slippage
275B2:	
Hayriver	No major considerations
Elevasil, frigid	No major considerations
275C2:	
Hayriver	Slope
Elevasil, frigid	Slope
275D2:	
Hayriver	Slope
Elevasil, frigid	Slope
276B:	
Humbird, loamy subsoil	Wetness Susceptible to rutting and wheel slippage
278A:	
Merrillan, loamy subsoil	Wetness
282C:	
Twinmound	Slope
282F:	
Twinmound	Slope
313D2:	
Plumcreek	Slope Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
313F:	
Plumcreek	Slope Susceptible to rutting and wheel slippage
316B2:	
Ella	Wetness Susceptible to rutting and wheel slippage
316C2:	
Ella	Slope Wetness Susceptible to rutting and wheel slippage
318A:	
Bearpen	Wetness Susceptible to rutting and wheel slippage
349A:	
Rib, valley train, undrained	Wetness Susceptible to rutting and wheel slippage
378A:	
Poskin, valley train	Wetness Susceptible to rutting and wheel slippage
416A:	
Menomin	Susceptible to rutting and wheel slippage
423A:	
Meridian	Susceptible to rutting and wheel slippage
423B2:	
Meridian	Susceptible to rutting and wheel slippage
423C2:	
Meridian	Slope Susceptible to rutting and wheel slippage
428A:	
Shiffer	Wetness Susceptible to rutting and wheel slippage
429A:	
Lows, undrained	Wetness Susceptible to rutting and wheel slippage
432A:	
Kevilar	Wetness
432B:	
Kevilar	Wetness
432C2:	
Kevilar	Slope Wetness
432D2:	
Kevilar	Slope Wetness
433A:	
Forkhorn	No major considerations

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
433B:	
Forkhorn	No major considerations
433C2:	
Forkhorn	Slope
433D2:	
Forkhorn	Slope
434B:	
Bilson	No major considerations
436A:	
Rusktown	No major considerations
438A:	
Hoopeston	Wetness
454B:	
Chetek, kame terrace	Surface boulders Susceptible to rutting and wheel slippage
454C2:	
Chetek, kame terrace	Slope Surface boulders Susceptible to rutting and wheel slippage
454D2:	
Chetek, kame terrace	Slope Surface boulders Susceptible to rutting and wheel slippage
454E:	
Chetek, kame terrace	Slope Surface boulders Susceptible to rutting and wheel slippage
468A:	
Oesterle, valley train	Wetness
502B2:	
Chelsea	No major considerations
502C2:	
Chelsea	Slope
508A:	
Farrington	Wetness
510B:	
Boplain	No major considerations
510C:	
Boplain	Slope
511A:	
Plainfield	No major considerations
511B:	
Plainfield	No major considerations
511C:	
Plainfield	Slope

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
511F:	
Plainfield	Slope
512B:	
Drammen	No major considerations
512C:	
Drammen	Slope
512D:	
Drammen	Slope
516A:	
Aldo	No major considerations
546A:	
Prissel	Wetness
546B:	
Prissel	Wetness
546C:	
Prissel	Slope Wetness
546F:	
Prissel	Slope Wetness
555A:	
Fordum, frequently flooded	Flooding Wetness Susceptible to rutting and wheel slippage
561B:	
Tarr	No major considerations
566A:	
Tint	No major considerations
573B:	
Plainbo, sand sheet	No major considerations
573C:	
Plainbo, sand sheet	Slope
588A:	
Meehan, valley train	Wetness
589A:	
Newson, undrained	Wetness
601C:	
Beavercreek	Flooding Slope
616B:	
Chaseburg	Flooding
619A:	
Vancecreek, undrained	Flooding Wetness Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
626A:	
Arenzville	Flooding
628A:	
Orion	Flooding Wetness
629A:	
Ettrick, undrained	Flooding Wetness Susceptible to rutting and wheel slippage
636A:	
Quarderer	Flooding
646A:	
Dunnbot	Flooding
656A:	
Scotah	Flooding
766A:	
Moppet, occasionally flooded	Flooding
804B2:	
Arland, dissected	No major considerations
804C2:	
Arland, dissected	Slope
804D:	
Arland, dissected	Slope
814D2:	
Renova, dissected	Slope Susceptible to rutting and wheel slippage
816B2:	
Vlasaty, dissected	Wetness Susceptible to rutting and wheel slippage
816C2:	
Vlasaty, dissected	Slope Wetness Susceptible to rutting and wheel slippage
826B2:	
Hersey	Wetness Susceptible to rutting and wheel slippage
826C2:	
Hersey	Slope Wetness Susceptible to rutting and wheel slippage
828B:	
Vasa	Wetness Susceptible to rutting and wheel slippage
836B2:	
Spencer, dissected	Wetness Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
836C2:	
Spencer, dissected	Slope Wetness Susceptible to rutting and wheel slippage
838B:	
Almena, dissected	Wetness Susceptible to rutting and wheel slippage
870B2:	
Santiago, dissected	No major considerations
870C2:	
Santiago, dissected	Slope
875B:	
Amery, dissected	No major considerations
875C2:	
Amery, dissected	Slope
875D:	
Amery, dissected	Slope
1125F:	
Dorerton	Slope Susceptible to rutting and wheel slippage
Elbaville	Slope Susceptible to rutting and wheel slippage
1145F:	
Gaphill	Slope
Rockbluff	Slope
1224F:	
Boone	Slope
Elevasil	Slope
1233F:	
Boone	Slope
Tarr	Slope
1275F:	
Hayriver	Slope
Twinmound	Slope
1648A:	
Northbend	Flooding Wetness
Ettrick, flood plain, undrained	Flooding Wetness Susceptible to rutting and wheel slippage

Table 14.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
1658A:	
Algansee	Flooding Wetness
Kalmarville, undrained	Flooding Wetness

Table 15.--Forest Land Site Preparation and Planting Considerations

(Only the soils that are suitable for forest land management are listed. See text for a description of the considerations listed in this table)

Map symbol and soil name	Forest land site preparation and planting considerations
45A:	
Seelyeville, undrained	Wetness
Cathro, undrained	Wetness
101B:	
Menahga, valley train	No major considerations
101C:	
Menahga, valley train	Water erosion
101E:	
Menahga, valley train	Slope Water erosion
115B2:	
Seaton	Potential poor tilth and compaction
115C2:	
Seaton	Water erosion Potential poor tilth and compaction
115D2:	
Seaton	Slope Water erosion Potential poor tilth and compaction
115E2:	
Seaton	Slope Water erosion Potential poor tilth and compaction
116C2:	
Churchtown	Cobbly surface Water erosion Potential poor tilth and compaction
116D2:	
Churchtown	Slope Cobbly surface Water erosion Potential poor tilth and compaction
116E2:	
Churchtown	Slope Cobbly surface Water erosion Potential poor tilth and compaction
125B2:	
Pepin	No major considerations
125C2:	
Pepin	Water erosion
125D2:	
Pepin	Slope Water erosion
125E2:	
Pepin	Slope Water erosion

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
135C2:	
Wickware	Water erosion Potential poor tilth and compaction
135D2:	
Wickware	Slope Water erosion Potential poor tilth and compaction
135E2:	
Wickware	Slope Water erosion Potential poor tilth and compaction
136B:	
Doritty	Wetness Potential poor tilth and compaction
136C2:	
Doritty	Wetness Water erosion Potential poor tilth and compaction
144B2:	
NewGlarus	Potential poor tilth and compaction
144C2:	
NewGlarus	Water erosion Potential poor tilth and compaction
144D2:	
NewGlarus	Slope Water erosion Potential poor tilth and compaction
144E2:	
NewGlarus	Slope Water erosion Potential poor tilth and compaction
161E:	
Fivepoints	Slope Cobbly surface Water erosion Potential poor tilth and compaction
208A:	
Siouxcreek	Wetness
213B2:	
Hixton	No major considerations
213C2:	
Hixton	Water erosion
224B:	
Elevasil	Cobbly surface
224C2:	
Elevasil	Cobbly surface Water erosion

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
224D2:	
Elevasil	Slope Cobbly surface Water erosion
224E2:	
Elevasil	Slope Cobbly surface Water erosion
233C:	
Boone	Cobbly surface Water erosion
243B2:	
Hixton, thin solum	No major considerations
243C2:	
Hixton, thin solum	Water erosion
244B:	
Elkmound	Surface stones Cobbly surface
244C2:	
Elkmound	Surface stones Cobbly surface Water erosion
244D2:	
Elkmound	Slope Depth to hard rock Surface stones Cobbly surface Water erosion
254B2:	
Norden	No major considerations
254C2:	
Norden	Water erosion
254D2:	
Norden	Slope Water erosion
254E2:	
Norden	Slope Water erosion
254F:	
Norden	Slope Water erosion
255B2:	
Urne	Cobbly surface
255C2:	
Urne	Cobbly surface Water erosion

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
255D2:	
Urne	Slope Cobbly surface Water erosion
255E2:	
Urne	Slope Cobbly surface Water erosion
255F:	
Urne	Slope Cobbly surface Water erosion
265B:	
Garne	No major considerations
265C:	
Garne	Water erosion
266B:	
Hiles	Wetness
268A:	
Kert	Wetness
269A:	
Veedum, undrained	Wetness Potential poor tilth and compaction
273B2:	
Dobie	No major considerations
Hixton, frigid	No major considerations
273C2:	
Dobie	Water erosion
Hixton, frigid	Water erosion
273D2:	
Dobie	Slope Water erosion
Hixton, frigid	Slope Water erosion
273E2:	
Dobie	Slope Water erosion
Hixton, frigid	Slope Water erosion
275B2:	
Hayriver	Cobbly surface
Elevasil, frigid	Cobbly surface

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
275C2:	
Hayriver	Cobbly surface Water erosion
Elevasil, frigid	Cobbly surface Water erosion
275D2:	
Hayriver	Slope Cobbly surface Water erosion
Elevasil, frigid	Slope Cobbly surface Water erosion
276B:	
Humbird, loamy subsoil	Wetness
278A:	
Merrillan, loamy subsoil	Wetness
282C:	
Twinmound	Water erosion
282F:	
Twinmound	Slope Water erosion
313D2:	
Plumcreek	Slope Water erosion Potential poor tilth and compaction
313F:	
Plumcreek	Slope Water erosion Potential poor tilth and compaction
316B2:	
Ella	Wetness Potential poor tilth and compaction
316C2:	
Ella	Wetness Water erosion Potential poor tilth and compaction
318A:	
Bearpen	Wetness
349A:	
Rib, valley train, undrained	Wetness Cobbly surface Potential poor tilth and compaction
378A:	
Poskin, valley train	Wetness Cobbly surface
416A:	
Menomin	No major considerations

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
423A:	
Meridian	No major considerations
423B2:	
Meridian	No major considerations
423C2:	
Meridian	Water erosion
428A:	
Shiffer	Wetness Potential poor tilth and compaction
429A:	
Lows, undrained	Wetness
432A:	
Kevilar	Wetness
432B:	
Kevilar	Wetness
432C2:	
Kevilar	Wetness Water erosion
432D2:	
Kevilar	Slope Wetness Water erosion
433A:	
Forkhorn	Cobbly surface
433B:	
Forkhorn	Cobbly surface
433C2:	
Forkhorn	Cobbly surface Water erosion
433D2:	
Forkhorn	Slope Cobbly surface Water erosion
434B:	
Bilson	No major considerations
436A:	
Rusktown	Cobbly surface
438A:	
Hoopeston	Wetness
454B:	
Chetek, kame terrace	Surface boulders Cobbly surface
454C2:	
Chetek, kame terrace	Surface boulders Cobbly surface Water erosion

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
454D2:	
Chetek, kame terrace	Slope Surface boulders Cobbly surface Water erosion
454E:	
Chetek, kame terrace	Slope Surface boulders Cobbly surface Water erosion
468A:	
Oesterle, valley train	Wetness Cobbly surface
502B2:	
Chelsea	No major considerations
502C2:	
Chelsea	Water erosion
508A:	
Farrington	Wetness
510B:	
Boplain	No major considerations
510C:	
Boplain	Water erosion
511A:	
Plainfield	No major considerations
511B:	
Plainfield	No major considerations
511C:	
Plainfield	Water erosion
511F:	
Plainfield	Slope Water erosion
512B:	
Drammen	No major considerations
512C:	
Drammen	Water erosion
512D:	
Drammen	Slope Water erosion
516A:	
Aldo	No major considerations
546A:	
Prissel	Wetness
546B:	
Prissel	Wetness

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
546C:	
Prissel	Wetness Water erosion
546F:	
Prissel	Slope Wetness Water erosion
555A:	
Fordum, frequently flooded	Flooding Wetness Cobbly surface Potential poor tilth and compaction
561B:	
Tarr	Cobbly surface
566A:	
Tint	Cobbly surface
573B:	
Plainbo, sand sheet	No major considerations
573C:	
Plainbo, sand sheet	Water erosion
588A:	
Meehan, valley train	Wetness
589A:	
Newson, undrained	Wetness
601C:	
Beavercreek	Cobbly surface Water erosion
616B:	
Chaseburg	No major considerations
619A:	
Vancecreek, undrained	Flooding Wetness
626A:	
Arenzville	No major considerations
628A:	
Orion	Wetness
629A:	
Ettrick, undrained	Flooding Wetness
636A:	
Quarderer	No major considerations
646A:	
Dunnbot	No major considerations
656A:	
Scotah	No major considerations

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
766A:	
Moppet, occasionally flooded	No major considerations
804B2:	
Arland, dissected	Cobbly surface
804C2:	
Arland, dissected	Cobbly surface Water erosion
804D:	
Arland, dissected	Slope Cobbly surface Water erosion
814D2:	
Renova, dissected	Slope Water erosion
816B2:	
Vlasaty, dissected	Wetness Potential poor tilth and compaction
816C2:	
Vlasaty, dissected	Wetness Water erosion Potential poor tilth and compaction
826B2:	
Hersey	Wetness
826C2:	
Hersey	Wetness Water erosion
828B:	
Vasa	Wetness
836B2:	
Spencer, dissected	Wetness Cobbly surface Potential poor tilth and compaction
836C2:	
Spencer, dissected	Wetness Cobbly surface Water erosion Potential poor tilth and compaction
838B:	
Almena, dissected	Wetness Cobbly surface Potential poor tilth and compaction
870B2:	
Santiago, dissected	Cobbly surface
870C2:	
Santiago, dissected	Cobbly surface Water erosion
875B:	
Amery, dissected	Cobbly surface

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
875C2:	
Amery, dissected	Cobbly surface Water erosion
875D:	
Amery, dissected	Slope Cobbly surface Water erosion
1125F:	
Dorerton	Slope Surface stones Cobbly surface Water erosion
Elbaville	Slope Water erosion Potential poor tilth and compaction
1145F:	
Gaphill	Slope Cobbly surface Water erosion
Rockbluff	Slope Cobbly surface Water erosion
1224F:	
Boone	Slope Water erosion
Elevasil	Slope Water erosion
1233F:	
Boone	Slope Water erosion
Tarr	Slope Water erosion
1275F:	
Hayriver	Slope Cobbly surface Water erosion
Twinmound	Slope Water erosion
1648A:	
Northbend	Flooding Wetness
Ettrick, flood plain, undrained	Flooding Wetness

Table 15.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
1658A:	
Algansee	Flooding Wetness
Kalmarville, undrained	Flooding Wetness

Table 16.--Forest Habitat Types

(One asterisk indicates the primary habitat type; two asterisks indicate a secondary habitat type. See text for descriptions of the forest habitat types listed in this table)

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
11A:		
Markey, flood plain, undrained	Nvpd	N/A
20A:		
Palms and Houghton	Nvpd	N/A
40A:		
Markey and Seelyeville------	Nvpd	N/A
45A:		
Seelyeville and Cathro-----------	Nvpd	N/A
101B, 101C, 101E:		
Menahga, valley train------------	PArVAm*	Pinus strobus-Acer rubrum/Vaccinium angustifolium-Amphicarpa bracteata
115B2, 115C2, 115D2, 115E2:		
Seaton-----------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
116C2, 116D2:		
Churchtown--------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
116E2:		
Churchtown--------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
	ATiSa-De**	Acer-Tilia/Sanguinaria (Desmodium)
125B2, 125C2, 125D2:		
Pepin------------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
125E2:		
Pepin-------------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
	ATiSa-De**	Acer-Tilia/Sanguinaria (Desmodium)
135C2, 135D2, 135E2:		
Wickware---------	ACaCi*	Acer saccharum/Caulophyllum thalictroides-Circaea spp.
136B, 136C2:		
Doritty-----------	ACaCi*	Acer saccharum/Caulophyllum thalictroides-Circaea spp.
144B2, 144C2, 144D2, 144E2:		
NewGlarus--------	ArCi-Ph*	Acer rubrum/Circaea (Phryma)
	ATiSa-De**	Acer-Tilia/Sanguinaria (Desmodium)
161E:		
Fivepoints--------	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
208A:		
Siouxcreek--------	ASaI*	Acer/Sanguinaria-Impatiens

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
213B2, 213C2:		
Hixton-----------	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
	ArCi**	Acer rubrum/Circaea
224B, 224C2, 224D2, 224E2:		
Elevasil---------	PVCr*	Pinus/Vaccinium-Cornus
	ArDe-V**	Acer rubrum/Desmodium (Vaccinium)
233C:		
Boone-------------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
243B2, 243C2:		
Hixton, thin solum	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
244B, 244C2, 244D2:		
Elkmound----------	PVCr*	Pinus/Vaccinium-Cornus
254B2, 254C2, 254D2, 254E2, 254F:		
Norden-----------	ArCi-Ph*	Acer rubrum/Circaea (Phryma)
	ArCi**	Acer rubrum/Circaea
255B2, 255C2, 255D2, 255E2, 255F:		
Urne-------------	ArCi*	Acer rubrum/Circaea
	ArDe-V**	Acer rubrum/Desmodium (Vaccinium)
265B, 265C:		
Garne-------------	PVHa*	Pinus/Vaccinium-Hamamelis
266B:		
Hiles-------------	ArCi*	Acer rubrum/Circaea
268A:		
Kert--------------	ArCi*	Acer rubrum/Circaea
	PVHa**	Pinus/Vaccinium-Hamamelis
269A:		
Veedum, undrained	Npd	N/A
273B2, 273C2, 273D2, 273E2:		
Dobie and Hixton	AAt*	Acer saccharum/Athyrium filix-femina
	ACaCi**	Acer saccharum/Caulophyllum thalictroides-Circaea spp.
275B2, 275C2, 275D2:		
Hayriver and Elevasil--------	AVDe*	Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum
	AAt**	Acer saccharum/Athyrium filix-femina

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
276B:		
Humbird, loamy subsoil----------	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
	PVHa**	Pinus/Vaccinium-Hamamelis
278A:		
Merrillan, loamy subsoil----------	PVHa*	Pinus/Vaccinium-Hamamelis
	PVRh**	Pinus strobus/Vaccinium-Rubus hispidus
282C, 282F:		
Twinmound---------	PVGy*	Pinus/Vaccinium-Gaylussacia
313D2, 313F:		
Plumcreek---------	ArCi-Ph*	Acer rubrum/Circaea (Phryma)
	ATiSa-De**	Acer-Tilia/Sanguinaria (Desmodium)
316B2, 316C2:		
Ella--------------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
318A:		
Bearpen-----------	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
349A:		
Rib, valley train, undrained--------	Npd	N/A
378A:		
Poskin, valley train------------	ASaI*	Acer/Sanguinaria-Impatiens
403A:		
Dakota------------	AArVb*	Acer saccharum-Acer rubrum/Viburnum
413A, 413B:		
Rasset------------	PVCr*	Pinus/Vaccinium-Cornus
	AArVb**	Acer saccharum-Acer rubrum/Viburnum
416A:		
Menomin-----------	AArVb*	Acer saccharum-Acer rubrum/Viburnum
423A, 423B2, 423C2:		
Meridian----------	AArVb*	Acer saccharum-Acer rubrum/Viburnum
428A:		
Shiffer-----------	AArVb*	Acer saccharum-Acer rubrum/Viburnum
429A:		
Lows, undrained---	Npd	N/A
432A, 432B, 432C2, 432D2:		
Kevilar----------	AArVb*	Acer saccharum-Acer rubrum/Viburnum
	PVCr**	Pinus/Vaccinium-Cornus

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
433A, 433B, 433C2, 433D2:		
Forkhorn---------	PVCr*	Pinus/Vaccinium-Cornus
	AArVb**	Acer saccharum-Acer rubrum/Viburnum
434B:		
Bilson------------	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
436A:		
Rusktown----------	PVCr*	Pinus/Vaccinium-Cornus
	AArVb**	Acer saccharum-Acer rubrum/Viburnum
438A:		
Hoopeston---------	PVRh*	Pinus strobus/Vaccinium-Rubus hispidus
	PVCr**	Pinus/Vaccinium-Cornus
453A, 453B:		
Burkhardt---------	PVCr*	Pinus/Vaccinium-Cornus
454B, 454C2, 454D2, 454E:		
Chetek, kame terrace---------	AVDe*	Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum
468A:		
Oesterle, valley train-----------	ASaI*	Acer/Sanguinaria-Impatiens
501A, 501B:		
Finchford---------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
502B2, 502C2:		
Chelsea-----------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
506A:		
Komro-------------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
508A:		
Farrington--------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
510B, 510C:		
Boplain-----------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
511A, 511B, 511C, 511F:		
Plainfield-------	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
512B, 512C, 512D:		
Drammen	PVHa*	Pinus/Vaccinium-Hamamelis
	PVGy**	Pinus/Vaccinium-Gaylussacia
516A:		
Aldo	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
546A, 546B, 546C, 546F:		
Prissel	PVHa*	Pinus/Vaccinium-Hamamelis
555A:		
Fordum	Nfld	N/A
561B:		
Tarr	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
566A:		
Tint	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
573B, 573C:		
Plainbo, sand sheet	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
588A:		
Meehan, valley train	PArVAm*	Pinus strobus-Acer rubrum/Vaccinium angustifolium-Amphicarpa bracteata
589A:		
Newson, undrained	Npd	N/A
601C:		
Beavercreek	ArDe-V*	Acer rubrum/Desmodium (Vaccinium)
616B:		
Chaseburg	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
619A:		
Vancecreek, undrained	Npd	N/A
626A:		
Arenzville	Nfld	N/A
628A:		
Orion	Nfld	N/A
629A:		
Ettrick, undrained	Npd	N/A
636A:		
Quarderer	Nfld	N/A
646A:		
Dunnbot	Nfld	N/A

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
656A:		
Scotah	Nfld	N/A
766A:		
Moppet	Nfld	N/A
804B2, 804C2, 804D:		
Arland, dissected	AAt*	Acer saccharum/Athyrium filix-femina
814D2:		
Renova, dissected	ArCi*	Acer rubrum/Circaea
816B2, 816C2:		
Vlasaty, dissected	ArCi*	Acer rubrum/Circaea
826B2, 826C2:		
Hersey	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
828B:		
Vasa	ATiCa-La*	Acer-Tilia/Caulophyllum (Laportea)
836B2, 836C2:		
Spencer, dissected	ACaCi*	Acer saccharum/Caulophyllum thalictroides-Circaea spp.
838B:		
Almena, dissected	ASaI*	Acer/Sanguinaria-Impatiens
870B2, 870C2:		
Santiago, dissected	ACaCi*	Acer saccharum/Caulophyllum thalictroides-Circaea spp.
875B, 875C2, 875D:		
Amery, dissected	AVDe*	Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum
1125F:		
Dorerton-Elbaville	ArCi*	Acer rubrum/Circaea
	ArCi-Ph**	Acer rubrum/Circaea (Phryma)
1145F:		
Gaphill-Rockbluff	PVCr*	Pinus/Vaccinium-Cornus
	PVGy**	Pinus/Vaccinium-Gaylussacia
1224F:		
Boone-Elevasil	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
1233F:		
Boone-Tarr	PVGy*	Pinus/Vaccinium-Gaylussacia
	PVCr**	Pinus/Vaccinium-Cornus
1275F:		
Hayriver-Twinmound	AVDe*	Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum
	PVGy**	Pinus/Vaccinium-Gaylussacia
1648A:		
Northbend-Ettrick	Nfld	N/A

Table 16.--Forest Habitat Types--Continued

Map symbol and soil name	Forest habitat symbol	Forest habitat type (short scientific name)
1658A:		
Algansee-Kalmarville------	Nfld	N/A
2002:		
Udorthents, earthen dams-----	Nma	N/A
2003A:		
Riverwash---------	Nfld	N/A
2013:		
Pits, gravel------	Nma	N/A
2014:		
Pits, quarry, hard bedrock----------	Nma	N/A
2016:		
Pits, quarry, soft bedrock----------	Nma	N/A
2030:		
Udorthents and Udipsamments-----	Nma	N/A
2050:		
Landfill----------	Nma	N/A
M-W:		
Miscellaneous water------------	Nma	N/A
W:		
Water-------------	Nma	N/A

Table 17a.--Recreation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Ponding	1.00	Content of organic matter	1.00	Flooding	1.00
	Content of organic matter	1.00	Flooding	0.40	Ponding	1.00
20A:						
Palms, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
Houghton, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
101B:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
101C:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	1.00
101E:						
Menahga, valley train	Not rated		Not rated		Not rated	
115B2:						
Seaton	Not limited		Not limited		Somewhat limited	
					Slope	0.50
115C2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
116C2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Content of large stones	0.03
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Content of large stones	0.03
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Content of large stones	0.03
125B2:						
Pepin	Not limited		Not limited		Somewhat limited	
					Slope	0.50

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
125C2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
125D2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
125E2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
135C2:						
Wickware	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
135D2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
135E2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
136B:						
Doritty	Not limited		Not limited		Not limited	
136C2:						
Doritty	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
144B2:						
NewGlarus	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.98	Restricted permeability	0.98	Restricted permeability	0.98
					Slope	0.50
144C2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.98	Restricted permeability	0.98	Slope	1.00
	Slope	0.04	Slope	0.04	Restricted permeability	0.98
144D2:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.98	Restricted permeability	0.98	Restricted permeability	0.98
144E2:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.98	Restricted permeability	0.98	Restricted permeability	0.98
161E:						
Fivepoints	Not rated		Not rated		Not rated	
208A:						
Siouxcreek	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
213B2:						
Hixton	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
213C2:						
Hixton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
224B:						
Elevasil	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
224C2:						
Elevasil	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
233C:						
Boone	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
					Depth to bedrock	0.42
					Content of large stones	0.01
243B2:						
Hixton, thin solum	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Restricted permeability	0.44
243C2:						
Hixton, thin solum	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Slope	1.00
	Slope	0.04	Slope	0.04	Depth to bedrock	0.99
					Restricted permeability	0.44
244B:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Restricted permeability	0.44	Restricted permeability	0.44	Restricted permeability	0.44
	Too stony	0.19	Too stony	0.19	Too stony	0.19
					Gravel content	0.16
					Content of large stones	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
244C2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Restricted permeability	0.44	Restricted permeability	0.44	Depth to bedrock	1.00
	Too stony	0.19	Too stony	0.19	Restricted permeability	0.44
	Slope	0.04	Slope	0.04	Too stony	0.19
					Gravel content	0.16
244D2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Restricted permeability	0.44	Restricted permeability	0.44	Restricted permeability	0.44
	Too stony	0.19	Too stony	0.19	Too stony	0.19
					Gravel content	0.16
254B2:						
Norden--------------	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
254C2:						
Norden--------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
254D2:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
254E2:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
254F:						
Norden--------------	Not rated		Not rated		Not rated	
255B2:						
Urne----------------	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
					Gravel content	0.06
255C2:						
Urne----------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
					Gravel content	0.06
255D2:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
					Gravel content	0.06

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
255E2:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
					Gravel content	0.06
255F:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
					Gravel content	0.06
265B:						
Garne	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Slope	0.50
					Too sandy	0.46
					Depth to bedrock	0.42
265C:						
Garne	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.46	Too sandy	0.46	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	0.46
					Depth to bedrock	0.42
266B:						
Hiles	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.55	Restricted permeability	0.55	Restricted permeability	0.55
	Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
268A:						
Kert	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98
269A:						
Veedum, undrained	Not rated		Not rated		Not rated	
273B2:						
Dobie	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
Hixton, frigid	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
273C2:						
Dobie	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
Hixton, frigid	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
273D2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
273D2:						
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
275B2:						
Hayriver	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
Elevasil, frigid	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
275C2:						
Hayriver	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
Elevasil, frigid	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
275D2:						
Hayriver	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
Elevasil, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
276B:						
Humbird, loamy subsoil	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.55	Restricted permeability	0.55	Restricted permeability	0.55
	Depth to saturated zone	0.39	Depth to saturated zone	0.19	Depth to saturated zone	0.39
278A:						
Merrillan, loamy subsoil	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98
282C:						
Twinmound	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
					Depth to bedrock	0.42

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
282F:						
Twinmound	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Depth to bedrock	0.42
313D2:						
Plumcreek	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
313F:						
Plumcreek	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
316B2:						
Ella	Not limited		Not limited		Not limited	
316C2:						
Ella	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
318A:						
Bearpen	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98				
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
					Content of large stones	0.01
378A:						
Poskin, valley train	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98
					Content of large stones	0.01
403A:						
Dakota	Not limited		Not limited		Not limited	
413A:						
Rasset	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
413B:						
Rasset	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Content of large stones	0.01
416A:						
Menomin	Not limited		Not limited		Not limited	
423A:						
Meridian	Not limited		Not limited		Not limited	

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
423B2:						
Meridian	Not limited		Not limited		Somewhat limited	
					Slope	0.50
423C2:						
Meridian	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
428A:						
Shiffer	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98				
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00				
432A:						
Kevilar	Not limited		Not limited		Not limited	
432B:						
Kevilar	Not limited		Not limited		Somewhat limited	
					Slope	0.50
432C2:						
Kevilar	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
432D2:						
Kevilar	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
433A:						
Forkhorn	Not limited		Not limited		Somewhat limited	
					Gravel content	0.03
					Content of large stones	0.01
433B:						
Forkhorn	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Gravel content	0.03
					Content of large stones	0.01
433C2:						
Forkhorn	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Gravel content	0.03
					Content of large stones	0.01

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
433D2:						
Forkhorn------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Gravel content	0.03
					Content of large stones	0.01
434B:						
Bilson--------------	Not limited		Not limited		Somewhat limited	
					Slope	0.12
436A:						
Rusktown------------	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
438A:						
Hoopeston-----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98
453A:						
Burkhardt-----------	Not limited		Not limited		Somewhat limited	
					Gravel content	0.16
					Content of large stones	0.01
453B:						
Burkhardt-----------	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Gravel content	0.16
					Content of large stones	0.01
454B:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Somewhat limited	
	Too stony	0.19	Too stony	0.19	Slope	0.50
					Too stony	0.19
					Gravel content	0.04
454C2:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Very limited	
	Too stony	0.19	Too stony	0.19	Slope	1.00
	Slope	0.04	Slope	0.04	Too stony	0.19
					Gravel content	0.04
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.19	Too stony	0.19	Too stony	0.19
					Gravel content	0.04
454E:						
Chetek, kame terrace	Not rated		Not rated		Not rated	
468A:						
Oesterle, valley train--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98
					Gravel content	0.20

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
501A:						
Finchford	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.79	Too sandy	0.79	Too sandy	0.79
501B:						
Finchford	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.79	Too sandy	0.79	Too sandy	0.79
					Slope	0.50
502B2:						
Chelsea	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.50
502C2:						
Chelsea	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
506A:						
Komro	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Too sandy	0.84
508A:						
Farrington	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Too sandy	0.84	Depth to saturated zone	0.98
	Too sandy	0.84	Depth to saturated zone	0.75	Too sandy	0.84
510B:						
Boplain	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
510C:						
Boplain	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
					Depth to bedrock	0.42
511A:						
Plainfield	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Gravel content	0.06
511B:						
Plainfield	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.50
					Gravel content	0.06
511C:						
Plainfield	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
					Gravel content	0.06
511F:						
Plainfield	Not rated		Not rated		Not rated	
512B:						
Drammen	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Too sandy	0.46

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
512C:						
Drammen	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.46	Too sandy	0.46	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	0.46
512D:						
Drammen	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too sandy	0.46	Too sandy	0.46	Too sandy	0.46
516A:						
Aldo	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
546A:						
Prissel	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.54	Too sandy	0.54	Too sandy	0.54
546B:						
Prissel	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.54	Too sandy	0.54	Too sandy	0.54
					Slope	0.50
546C:						
Prissel	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.54	Too sandy	0.54	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	0.54
546F:						
Prissel	Not rated		Not rated		Not rated	
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
					Gravel content	0.04
561B:						
Tarr	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.50
566A:						
Tint	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
573B:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
573C:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
					Depth to bedrock	0.42

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
588A:						
Meehan, valley train	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Too sandy	0.81	Depth to saturated zone	0.98
	Too sandy	0.81	Depth to saturated zone	0.75	Too sandy	0.81
					Gravel content	0.22
589A:						
Newson, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Too sandy	0.87	Too sandy	0.87	Too sandy	0.87
601C:						
Beavercreek	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Gravel content	0.18	Gravel content	1.00
	Gravel content	0.18			Slope	1.00
					Flooding	0.60
					Content of large stones	0.20
616B:						
Chaseburg	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
					Slope	0.12
619A:						
Vancecreek, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
626A:						
Arenzville	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
628A:						
Orion	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98			Flooding	0.60
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
636A:						
Quarderer	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
646A:						
Dunnbot	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
656A:						
Scotah	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Too sandy	0.87	Too sandy	0.87
	Too sandy	0.87			Flooding	0.60
766A:						
Moppet, occasionally flooded	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
804B2:						
Arland, dissected	Not limited		Not limited		Somewhat limited	
					Slope	0.50
					Depth to bedrock	0.42
					Gravel content	0.18
804C2:						
Arland, dissected	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
					Depth to bedrock	0.42
					Gravel content	0.18
804D:						
Arland, dissected	Not rated		Not rated		Not rated	
814D2:						
Renova, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
816B2:						
Vlasaty, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.39	Restricted permeability	0.21	Slope	0.50
	Restricted permeability	0.21	Depth to saturated zone	0.19	Depth to saturated zone	0.39
					Restricted permeability	0.21
816C2:						
Vlasaty, dissected	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.39	Restricted permeability	0.21	Slope	1.00
	Restricted permeability	0.21	Depth to saturated zone	0.19	Depth to saturated zone	0.39
	Slope	0.04	Slope	0.04	Restricted permeability	0.21
826B2:						
Hersey	Not limited		Not limited		Somewhat limited	
					Slope	0.50
826C2:						
Hersey	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
828B:						
Vasa	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98			Slope	0.12

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
836B2:						
Spencer, dissected--	Not limited		Not limited		Somewhat limited	
					Slope	0.50
836C2:						
Spencer, dissected--	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
838B:						
Almena, dissected---	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98			Slope	0.12
870B2:						
Santiago, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Slope	0.50
					Restricted permeability	0.44
870C2:						
Santiago, dissected	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Slope	1.00
	Slope	0.04	Slope	0.04	Restricted permeability	0.44
875B:						
Amery, dissected----	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Slope	0.50
					Restricted permeability	0.44
					Gravel content	0.16
					Content of large stones	0.01
875C2:						
Amery, dissected----	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.44	Restricted permeability	0.44	Slope	1.00
	Slope	0.04	Slope	0.04	Restricted permeability	0.44
					Gravel content	0.16
					Content of large stones	0.01
875D:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.44	Restricted permeability	0.44	Restricted permeability	0.44
					Gravel content	0.16
					Content of large stones	0.01
1125F:						
Dorerton------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.76	Too stony	0.76	Too stony	0.76
					Content of large stones	0.01
Elbaville-----------	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
1145F:						
Gaphill	Not rated		Not rated		Not rated	
Rockbluff	Not rated		Not rated		Not rated	
1224F:						
Boone	Not rated		Not rated		Not rated	
Elevasil	Not rated		Not rated		Not rated	
1233F:						
Boone	Not rated		Not rated		Not rated	
Tarr	Not rated		Not rated		Not rated	
1275F:						
Hayriver	Not rated		Not rated		Not rated	
Twinmound	Not rated		Not rated		Not rated	
1648A:						
Northbend	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
	Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
1658A:						
Algansee	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
	Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	

Table 17a.--Recreation--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 17b.--Recreation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Content of organic matter	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
20A:						
Palms, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Houghton, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
101B:						
Menahga, valley train	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.51
					Too sandy	0.50
101C:						
Menahga, valley train	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.51
					Too sandy	0.50
					Slope	0.04
101E:						
Menahga, valley train	Not rated		Not rated		Very limited	
					Slope	1.00
					Droughty	0.08
115B2:						
Seaton	Not limited		Not limited		Not limited	
115C2:						
Seaton	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00				
116C2:						
Churchtown	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
					Content of large stones	0.03
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02			Content of large stones	0.03
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00			Content of large stones	0.03

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
125B2:						
Pepin---------------	Not limited		Not limited		Not limited	
125C2:						
Pepin---------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
125D2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
125E2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00				
135C2:						
Wickware------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
135D2:						
Wickware------------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
135E2:						
Wickware------------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00				
136B:						
Doritty-------------	Not limited		Not limited		Not limited	
136C2:						
Doritty-------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
144B2:						
NewGlarus-----------	Not limited		Not limited		Not limited	
144C2:						
NewGlarus-----------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
144D2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
144E2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00				
161E:						
Fivepoints----------	Not rated		Not rated		Very limited	
					Slope	1.00
					Depth to bedrock	0.46

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf fairways: Rating class and limiting features	Golf fairways: Value
208A:						
Siouxcreek----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
					Depth to bedrock	0.42
213B2:						
Hixton--------------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
213C2:						
Hixton--------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.42
					Slope	0.04
224B:						
Elevasil------------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
224C2:						
Elevasil------------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Slope	0.04
224D2:						
Elevasil------------	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Depth to bedrock	0.42
224E2:						
Elevasil------------	Very limited		Not limited		Very limited	
	Slope	1.00			Slope	1.00
					Depth to bedrock	0.42
233C:						
Boone---------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.96
					Too sandy	0.50
					Depth to bedrock	0.42
					Slope	0.37
					Content of large stones	0.01
243B2:						
Hixton, thin solum--	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.99
243C2:						
Hixton, thin solum--	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.99
					Slope	0.04
244B:						
Elkmound------------	Somewhat limited		Somewhat limited		Very limited	
	Too stony	0.19	Too stony	0.19	Depth to bedrock	1.00
					Droughty	0.98
					Content of large stones	0.01

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf fairways: Rating class and limiting features	Golf fairways: Value
244C2:						
Elkmound	Somewhat limited		Somewhat limited		Very limited	
	Too stony	0.19	Too stony	0.19	Depth to bedrock	1.00
					Droughty	0.98
					Slope	0.04
					Content of large stones	0.01
244D2:						
Elkmound	Somewhat limited		Somewhat limited		Very limited	
	Too stony	0.19	Too stony	0.19	Depth to bedrock	1.00
	Slope	0.02			Slope	1.00
					Droughty	0.98
					Content of large stones	0.01
254B2:						
Norden	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
254C2:						
Norden	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.42
					Slope	0.04
254D2:						
Norden	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02			Depth to bedrock	0.42
254E2:						
Norden	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00			Depth to bedrock	0.42
254F:						
Norden	Not rated		Not rated		Very limited	
					Slope	1.00
					Depth to bedrock	0.42
255B2:						
Urne	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
255C2:						
Urne	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Slope	0.04
255D2:						
Urne	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Depth to bedrock	0.42
255E2:						
Urne	Very limited		Not limited		Very limited	
	Slope	1.00			Slope	1.00
					Depth to bedrock	0.42

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
255F:						
Urne----------------	Very limited		Somewhat limited		Very limited	
	Slope	1.00	Slope	0.96	Slope	1.00
					Depth to bedrock	0.42
265B:						
Garne---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Depth to bedrock	0.42
					Droughty	0.26
265C:						
Garne---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Depth to bedrock	0.42
					Droughty	0.26
					Slope	0.04
266B:						
Hiles---------------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Depth to saturated zone	0.19
268A:						
Kert----------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
					Depth to bedrock	0.42
269A:						
Veedum, undrained---	Not rated		Not rated		Very limited	
					Ponding	1.00
					Depth to saturated zone	1.00
					Depth to bedrock	0.42
273B2:						
Dobie---------------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
Hixton, frigid------	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
273C2:						
Dobie---------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.42
					Slope	0.04
Hixton, frigid------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.42
					Slope	0.04
273D2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02			Depth to bedrock	0.42
Hixton, frigid------	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02			Depth to bedrock	0.42

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00			Depth to bedrock	0.42
Hixton, frigid	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00			Depth to bedrock	0.42
275B2:						
Hayriver	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
Elevasil, frigid	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
275C2:						
Hayriver	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Slope	0.04
Elevasil, frigid	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Slope	0.04
275D2:						
Hayriver	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Depth to bedrock	0.42
Elevasil, frigid	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Depth to bedrock	0.42
276B:						
Humbird, loamy subsoil	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.46
					Depth to saturated zone	0.19
					Droughty	0.01
278A:						
Merrillan, loamy subsoil	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
					Depth to bedrock	0.42
282C:						
Twinmound	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	1.00
					Depth to bedrock	0.42
					Slope	0.37
282F:						
Twinmound	Very limited		Somewhat limited		Very limited	
	Slope	1.00	Slope	0.78	Slope	1.00
					Droughty	0.98
					Depth to bedrock	0.42

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
313D2:						
Plumcreek	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
313F:						
Plumcreek	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.56		
316B2:						
Ella	Not limited		Not limited		Not limited	
316C2:						
Ella	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
318A:						
Bearpen	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
					Content of large stones	0.01
378A:						
Poskin, valley train	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
					Content of large stones	0.01
403A:						
Dakota	Not limited		Not limited		Not limited	
413A:						
Rasset	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
413B:						
Rasset	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
416A:						
Menomin	Not limited		Not limited		Not limited	
423A:						
Meridian	Not limited		Not limited		Not limited	
423B2:						
Meridian	Not limited		Not limited		Not limited	

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
423C2:						
Meridian------------	Not limited		Not limited		Somewhat limited	
					Slope	0.04
428A:						
Shiffer-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
429A:						
Lows, undrained-----	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
432A:						
Kevilar-------------	Not limited		Not limited		Not limited	
432B:						
Kevilar-------------	Not limited		Not limited		Not limited	
432C2:						
Kevilar-------------	Not limited		Not limited		Somewhat limited	
					Slope	0.04
432D2:						
Kevilar-------------	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
433A:						
Forkhorn------------	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
433B:						
Forkhorn------------	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
433C2:						
Forkhorn------------	Not limited		Not limited		Somewhat limited	
					Slope	0.04
					Content of large stones	0.01
433D2:						
Forkhorn------------	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Content of large stones	0.01
434B:						
Bilson--------------	Not limited		Not limited		Not limited	
436A:						
Rusktown------------	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
438A:						
Hoopeston-----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
453A:						
Burkhardt-----------	Not limited		Not limited		Somewhat limited	
					Droughty	0.05
					Content of large stones	0.01
453B:						
Burkhardt-----------	Not limited		Not limited		Somewhat limited	
					Droughty	0.05
					Content of large stones	0.01
454B:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Somewhat limited	
	Too stony	0.19	Too stony	0.19	Droughty	0.11
454C2:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Somewhat limited	
	Too stony	0.19	Too stony	0.19	Droughty	0.11
					Slope	0.04
454D2:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Very limited	
	Too stony	0.19	Too stony	0.19	Slope	1.00
	Slope	0.02			Droughty	0.11
454E:						
Chetek, kame terrace	Not rated		Not rated		Very limited	
					Slope	1.00
468A:						
Oesterle, valley train--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
501A:						
Finchford-----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.79	Too sandy	0.79	Droughty	0.26
501B:						
Finchford-----------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.79	Too sandy	0.79	Droughty	0.26
502B2:						
Chelsea-------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.13
502C2:						
Chelsea-------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Slope	0.37
					Droughty	0.13
506A:						
Komro---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Droughty	0.20

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
508A:						
Farrington	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.84	Too sandy	0.84	Depth to saturated zone	0.75
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Droughty	0.19
510B:						
Boplain	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.97
					Too sandy	0.50
					Depth to bedrock	0.42
510C:						
Boplain	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.97
					Too sandy	0.50
					Depth to bedrock	0.42
					Slope	0.37
511A:						
Plainfield	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.74
					Too sandy	0.50
511B:						
Plainfield	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.74
					Too sandy	0.50
511C:						
Plainfield	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.74
					Too sandy	0.50
					Slope	0.37
511F:						
Plainfield	Not rated		Not rated		Very limited	
					Slope	1.00
					Droughty	0.25
512B:						
Drammen	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Droughty	0.15
512C:						
Drammen	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.46	Too sandy	0.46	Droughty	0.15
					Slope	0.04
512D:						
Drammen	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.46	Too sandy	0.46	Slope	1.00
	Slope	0.02			Droughty	0.15
516A:						
Aldo	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.63
					Too sandy	0.50
546A:						
Prissel	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.54	Too sandy	0.54	Droughty	0.03

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
546B:						
Prissel-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.54	Too sandy	0.54	Droughty	0.03
546C:						
Prissel-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.54	Too sandy	0.54	Slope	0.37
					Droughty	0.03
546F:						
Prissel-------------	Not rated		Not rated		Very limited	
					Slope	1.00
555A:						
Fordum, frequently flooded------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
					Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00		
	Flooding	0.40	Flooding	0.40	Ponding	1.00
561B:						
Tarr----------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.78
					Too sandy	0.50
566A:						
Tint----------------	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.66
					Too sandy	0.50
573B:						
Plainbo, sand sheet	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.90
					Too sandy	0.50
					Depth to bedrock	0.42
573C:						
Plainbo, sand sheet	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.90
					Too sandy	0.50
					Depth to bedrock	0.42
					Slope	0.37
588A:						
Meehan, valley train	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.81	Too sandy	0.81	Depth to saturated zone	0.75
	Depth to saturated zone	0.44	Depth to saturated zone	0.44		
					Droughty	0.62
589A:						
Newson, undrained---	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
					Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00		
	Too sandy	0.87	Too sandy	0.87	Droughty	0.18

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
601C:						
Beavercreek	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
					Content of large stones	0.20
					Gravel content	0.18
616B:						
Chaseburg	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
619A:						
Vancecreek, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
626A:						
Arenzville	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
628A:						
Orion	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
					Flooding	0.60
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
636A:						
Quarderer	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
646A:						
Dunnbot	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
656A:						
Scotah	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.87	Too sandy	0.87	Flooding	0.60
					Droughty	0.38
766A:						
Moppet, occasionally flooded	Not limited		Not limited		Somewhat limited	
					Flooding	0.60
804B2:						
Arland, dissected	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
804C2:						
Arland, dissected	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
					Slope	0.04

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
804D:						
Arland, dissected---	Not rated		Not rated		Not rated	
814D2:						
Renova, dissected---	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
816B2:						
Vlasaty, dissected--	Not limited		Not limited		Somewhat limited	
					Depth to saturated zone	0.19
816C2:						
Vlasaty, dissected--	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Depth to saturated zone	0.19
					Slope	0.04
826B2:						
Hersey--------------	Not limited		Not limited		Not limited	
826C2:						
Hersey--------------	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
828B:						
Vasa----------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
836B2:						
Spencer, dissected--	Not limited		Not limited		Not limited	
836C2:						
Spencer, dissected--	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
838B:						
Almena, dissected---	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
870B2:						
Santiago, dissected	Not limited		Not limited		Not limited	
870C2:						
Santiago, dissected	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.04
875B:						
Amery, dissected----	Not limited		Not limited		Somewhat limited	
					Content of large stones	0.01
875C2:						
Amery, dissected----	Not limited		Not limited		Somewhat limited	
					Slope	0.04
					Content of large stones	0.01

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
875D:						
Amery, dissected	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Content of large stones	0.01
1125F:						
Dorerton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.76	Too stony	0.76	Content of large stones	0.01
Elbaville	Not rated		Not rated		Very limited	
					Slope	1.00
1145F:						
Gaphill	Not rated		Not rated		Very limited	
					Slope	1.00
Rockbluff	Not rated		Not rated		Very limited	
					Slope	1.00
					Droughty	0.01
1224F:						
Boone	Not rated		Not rated		Not rated	
Elevasil	Not rated		Not rated		Not rated	
1233F:						
Boone	Not rated		Not rated		Not rated	
Tarr	Not rated		Not rated		Not rated	
1275F:						
Hayriver	Not rated		Not rated		Not rated	
Twinmound	Not rated		Not rated		Not rated	
1648A:						
Northbend	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
1658A:						
Algansee	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
					Droughty	0.07

Table 17b.--Recreation--Continued

Map symbol and soil name	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf fairways: Rating class and limiting features	Golf fairways: Value
1658A:						
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 18.--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
11A:										
Markey, flood plain, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
20A:										
Palms, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Houghton, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
40A:										
Markey, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Seelyeville, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
45A:										
Seelyeville, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
Cathro, undrained	Very poor	Very poor	Poor	Poor	Poor	Good	Good	Very poor	Poor	Good
101B:										
Menahga, valley train	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
101C:										
Menahga, valley train	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
101E:										
Menahga, valley train	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
115B2:										
Seaton	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
115C2:										
Seaton	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
115D2:										
Seaton	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
115E2:										
Seaton	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
116C2:										
Churchtown	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Open- land wild- life	Wood- land wild- life	Wetland wild- life
116D2: Churchtown	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
116E2: Churchtown	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
125B2: Pepin	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Poor
125C2: Pepin	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
125D2: Pepin	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
125E2: Pepin	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
135C2: Wickware	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
135D2: Wickware	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
135E2: Wickware	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
136B: Doritty	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
136C2: Doritty	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
144B2: NewGlarus	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
144C2: NewGlarus	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
144D2: NewGlarus	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
144E2: NewGlarus	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
161E: Fivepoints	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
208A:										
Siouxcreek	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
213B2:										
Hixton	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
213C2:										
Hixton	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
224B:										
Elevasil	Fair	Good	Good	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
224C2:										
Elevasil	Fair	Good	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
224D2:										
Elevasil	Poor	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
224E2:										
Elevasil	Very poor	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
233C:										
Boone	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
243B2:										
Hixton, thin solum	Poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
243C2:										
Hixton, thin solum	Poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
244B:										
Elkmound	Poor	Poor	Fair	Poor	Poor	Poor	Very poor	Poor	Poor	Very poor
244C2:										
Elkmound	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
244D2:										
Elkmound	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
254B2:										
Norden	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
254C2:										
Norden	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
254D2:										
Norden	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 18.--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
254E2:										
Norden	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
254F:										
Norden	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
255B2:										
Urne	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
255C2:										
Urne	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
255D2:										
Urne	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
255E2:										
Urne	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
255F:										
Urne	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
265B:										
Garne	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
265C:										
Garne	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
266B:										
Hiles	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
268A:										
Kert	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
269A:										
Veedum, undrained	Poor	Fair	Fair	Poor	Poor	Good	Fair	Fair	Poor	Fair
273B2:										
Dobie	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Hixton, frigid	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
273C2:										
Dobie	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Hixton, frigid	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor

Table 18.--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
273D2:										
Dobie	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Hixton, frigid	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
273E2:										
Dobie	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Hixton, frigid	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
275B2:										
Hayriver	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Elevasil, frigid	Fair	Good	Good	Good	Good	Poor	Very poor	Fair	Fair	Very poor
275C2:										
Hayriver	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Elevasil, frigid	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
275D2:										
Hayriver	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Elevasil, frigid	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
276B:										
Humbird, loamy subsoil	Fair	Good	Good	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
278A:										
Merrillan, loamy subsoil	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
282C:										
Twinmound	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
282F:										
Twinmound	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
313D2:										
Plumcreek	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
313F:										
Plumcreek	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
316B2:										
Ella	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Table 18.--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
316C2: Ella	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
318A: Bearpen	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
349A: Rib, valley train, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
378A: Poskin, valley train	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
403A: Dakota	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
413A: Rasset	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
413B: Rasset	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
416A: Menomin	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
423A: Meridian	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
423B2: Meridian	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
423C2: Meridian	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
428A: Shiffer	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
429A: Lows, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Good	Good	Good
432A: Kevilar	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
432B: Kevilar	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
432C2: Kevilar	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
432D2: Kevilar	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 18.--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
433A:										
Forkhorn	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
433B:										
Forkhorn	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
433C2:										
Forkhorn	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
433D2:										
Forkhorn	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
434B:										
Bilson	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
436A:										
Rusktown	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
438A:										
Hoopeston	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
453A:										
Burkhardt	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
453B:										
Burkhardt	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
454B:										
Chetek, kame terrace	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
454C2:										
Chetek, kame terrace	Fair	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
454D2:										
Chetek, kame terrace	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
454E:										
Chetek, kame terrace	Very poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
468A:										
Oesterle, valley train	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
501A:										
Finchford	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
501B:										
Finchford	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor

Table 18.--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
502B2: Chelsea	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
502C2: Chelsea	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
506A: Komro	Poor	Fair	Good	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
508A: Farrington	Poor	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
510B: Boplain	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
510C: Boplain	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
511A: Plainfield	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
511B: Plainfield	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
511C: Plainfield	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
511F: Plainfield	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
512B: Drammen	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
512C: Drammen	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
512D: Drammen	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
516A: Aldo	Poor	Poor	Fair	Poor	Fair	Poor	Poor	Poor	Fair	Poor
546A: Prissel	Poor	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
546B: Prissel	Poor	Fair	Good	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor

Table 18.--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
546C:										
Prissel	Poor	Fair	Good	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor
546F:										
Prissel	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Poor	Very poor
555A:										
Fordum, frequently flooded	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
561B:										
Tarr	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
566A:										
Tint	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
573B:										
Plainbo, sand sheet	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
573C:										
Plainbo, sand sheet	Poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
588A:										
Meehan, valley train	Poor	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair
589A:										
Newson, undrained	Poor	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair
601C:										
Beavercreek	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
616B:										
Chaseburg	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
619A:										
Vancecreek, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
626A:										
Arenzville	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
628A:										
Orion	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair
629A:										
Ettrick, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
636A:										
Quarderer	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
646A:										
Dunnbot	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
656A:										
Scotah	Poor	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor

Table 18.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Open- land wild- life	Wood- land wild- life	Wetland wild- life
766A:										
Moppet, occasionally flooded	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
804B2:										
Arland, dissected	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
804C2:										
Arland, dissected	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
804D:										
Arland, dissected	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
814D2:										
Renova, dissected	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
816B2:										
Vlasaty, dissected	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
816C2:										
Vlasaty, dissected	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
826B2:										
Hersey	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
826C2:										
Hersey	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
828B:										
Vasa	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
836B2:										
Spencer, dissected	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
836C2:										
Spencer, dissected	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
838B:										
Almena, dissected	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
870B2:										
Santiago, dissected	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
870C2:										
Santiago, dissected	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
875B:										
Amery, dissected	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Table 18.--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
875C2:										
Amery, dissected	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
875D:										
Amery, dissected	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
1125F:										
Dorerton	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Elbaville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
1145F:										
Gaphill	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rockbluff	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Very poor	Fair	Very poor
1224F:										
Boone	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
Elevasil	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
1233F:										
Boone	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
Tarr	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
1275F:										
Hayriver	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Twinmound	Very poor	Poor	Fair	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor
1648A:										
Northbend	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair
Ettrick, flood plain, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
1658A:										
Algansee	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair
Kalmarville, undrained	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
2002.										
Udorthents, earthen dams										
2003A.										
Riverwash										
2013.										
Pits, gravel										

Table 18.--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
2014. Pits, quarry, hard bedrock										
2016. Pits, quarry, soft bedrock										
2030:										
Udorthents, cut or fill.										
Udipsamments, cut or fill.										
2050. Landfill										
M-W. Miscellaneous water										
W. Water										

Table 19a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00			Content of organic matter	1.00
20A:						
Palms, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00			Content of organic matter	1.00
Houghton, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00			Content of organic matter	1.00
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
101B:						
Menahga, valley train	Not limited		Not limited		Not limited	
101C:						
Menahga, valley train	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
101E:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
115B2:						
Seaton	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
115C2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Slope	0.04	Shrink-swell	0.50
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
116C2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Slope	0.04	Slope	1.00
	Slope	0.04			Shrink-swell	0.50
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
125B2:						
Pepin	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
125C2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Slope	0.04	Shrink-swell	0.50
125D2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
125E2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
135C2:						
Wickware	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Slope	0.04	Slope	1.00
	Slope	0.04			Shrink-swell	0.50
135D2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
135E2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
136B:						
Doritty	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.61	Shrink-swell	0.50
			Shrink-swell	0.50		
136C2:						
Doritty	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Depth to saturated zone	0.61	Slope	1.00
	Slope	0.04	Shrink-swell	0.50	Shrink-swell	0.50
			Slope	0.04		
144B2:						
NewGlarus	Very limited		Very limited		Very limited	
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
			Depth to hard bedrock	0.42		
144C2:						
NewGlarus	Very limited		Very limited		Very limited	
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
	Slope	0.04	Depth to hard bedrock	0.42	Slope	1.00
			Slope	0.04		
144D2:						
NewGlarus	Very limited		Very limited		Very limited	
	Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Shrink-swell	1.00
			Depth to hard bedrock	0.42		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
144E2:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
			Depth to hard bedrock	0.42		
161E:						
Fivepoints	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
208A:						
Siouxcreek	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Depth to soft bedrock	0.42		
213B2:						
Hixton	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
213C2:						
Hixton	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Depth to soft bedrock	0.42	Shrink-swell	0.50
			Slope	0.04		
224B:						
Elevasil	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
224C2:						
Elevasil	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
233C:						
Boone	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.37		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
243B2:						
Hixton, thin solum	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.99		
243C2:						
Hixton, thin solum	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.99	Slope	1.00
			Slope	0.04		
244B:						
Elkmound	Somewhat limited		Very limited		Somewhat limited	
	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
244C2:						
Elkmound	Somewhat limited		Very limited		Very limited	
	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	0.04	Slope	1.00
244D2:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
254B2:						
Norden	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
254C2:						
Norden	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Depth to soft bedrock	0.42	Shrink-swell	0.50
			Slope	0.04		
254D2:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
254E2:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
254F:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
255B2:						
Urne----------------	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
255C2:						
Urne----------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
255D2:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
255E2:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
255F:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
265B:						
Garne---------------	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
265C:						
Garne---------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
266B:						
Hiles---------------	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
	Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
			Depth to soft bedrock	0.42		
268A:						
Kert----------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
269A:						
Veedum, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
273B2:						
Dobie---------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
Hixton, frigid------	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
273C2:						
Dobie---------------	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Depth to soft bedrock	0.42	Shrink-swell	0.50
			Slope	0.04		
Hixton, frigid------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
273D2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
Hixton, frigid------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
273E2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to soft bedrock	0.42		
Hixton, frigid------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
275B2:						
Hayriver------------	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
275B2:						
Elevasil, frigid----	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
275C2:						
Hayriver------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
Elevasil, frigid----	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
275D2:						
Hayriver------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
Elevasil, frigid----	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
276B:						
Humbird, loamy subsoil------------	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.44	Depth to saturated zone	1.00	Shrink-swell	0.44
	Depth to saturated zone	0.39	Depth to soft bedrock	0.46	Depth to saturated zone	0.39
			Shrink-swell	0.44		
278A:						
Merrillan, loamy subsoil------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Depth to soft bedrock	0.42		
282C:						
Twinmound-----------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.37		
282F:						
Twinmound-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
313D2:						
Plumcreek-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
313F:						
Plumcreek	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
316B2:						
Ella	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.61	Shrink-swell	0.50
			Shrink-swell	0.50		
316C2:						
Ella	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Depth to saturated zone	0.61	Slope	1.00
	Slope	0.04			Shrink-swell	0.50
			Shrink-swell	0.50		
			Slope	0.04		
318A:						
Bearpen	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
378A:						
Poskin, valley train	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50			Shrink-swell	0.50
403A:						
Dakota	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
413A:						
Rasset	Not limited		Not limited		Not limited	
413B:						
Rasset	Not limited		Not limited		Not limited	
416A:						
Menomin	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.61	Shrink-swell	0.50
423A:						
Meridian	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Shrink-swell	0.50
423B2:						
Meridian	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Shrink-swell	0.50

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
423C2:						
Meridian------------	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Slope	0.04	Slope	1.00
	Slope	0.04			Shrink-swell	0.50
428A:						
Shiffer-------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50			Shrink-swell	0.50
429A:						
Lows, undrained-----	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
432A:						
Kevilar-------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
432B:						
Kevilar-------------	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
432C2:						
Kevilar-------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to saturated zone	0.61	Slope	1.00
			Slope	0.04		
432D2:						
Kevilar-------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to saturated zone	0.61		
433A:						
Forkhorn------------	Not limited		Not limited		Not limited	
433B:						
Forkhorn------------	Not limited		Not limited		Not limited	
433C2:						
Forkhorn------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
433D2:						
Forkhorn------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
434B:						
Bilson--------------	Not limited		Not limited		Not limited	

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
436A:						
Rusktown	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
438A:						
Hoopeston	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
453A:						
Burkhardt	Not limited		Not limited		Not limited	
453B:						
Burkhardt	Not limited		Not limited		Not limited	
454B:						
Chetek, kame terrace	Not limited		Not limited		Not limited	
454C2:						
Chetek, kame terrace	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
454E:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
468A:						
Oesterle, valley train	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
501A:						
Finchford	Not limited		Not limited		Not limited	
501B:						
Finchford	Not limited		Not limited		Not limited	
502B2:						
Chelsea	Not limited		Not limited		Not limited	
502C2:						
Chelsea	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
506A:						
Komro	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
508A:						
Farrington	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
510B:						
Boplain	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
510C:						
Boplain	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.37		
511A:						
Plainfield	Not limited		Not limited		Not limited	
511B:						
Plainfield	Not limited		Not limited		Not limited	
511C:						
Plainfield	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
511F:						
Plainfield	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
512B:						
Drammen	Not limited		Not limited		Not limited	
512C:						
Drammen	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
512D:						
Drammen	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
516A:						
Aldo	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
546A:						
Prissel	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.95		
546B:						
Prissel	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.95		
546C:						
Prissel	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Depth to saturated zone	0.95	Slope	1.00
			Slope	0.37		
546F:						
Prissel	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to saturated zone	0.95		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
561B:						
Tarr	Not limited		Not limited		Not limited	
566A:						
Tint	Not limited		Somewhat limited		Not limited	
			Depth to saturated zone	0.61		
573B:						
Plainbo, sand sheet	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
573C:						
Plainbo, sand sheet	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.37		
588A:						
Meehan, valley train	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
589A:						
Newson, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
601C:						
Beavercreek	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Content of large stones	0.35	Content of large stones	0.35	Slope	1.00
					Content of large stones	0.35
616B:						
Chaseburg	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
619A:						
Vancecreek, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
626A:						
Arenzville	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.61		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
628A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
636A:						
Quarderer	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.61		
646A:						
Dunnbot	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.61		
656A:						
Scotah	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	0.61		
766A:						
Moppet, occasionally flooded	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
			Depth to saturated zone	1.00		
804B2:						
Arland, dissected	Not limited		Somewhat limited		Not limited	
			Depth to soft bedrock	0.42		
804C2:						
Arland, dissected	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Depth to soft bedrock	0.42	Slope	1.00
			Slope	0.04		
804D:						
Arland, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
814D2:						
Renova, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
816B2:						
Vlasaty, dissected--	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
	Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
816C2:						
Vlasaty, dissected--	Somewhat limited		Very limited		Very limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Slope	1.00
	Depth to saturated zone	0.39	Shrink-swell	0.50	Shrink-swell	0.50
	Slope	0.04	Slope	0.04	Depth to saturated zone	0.39
826B2:						
Hersey--------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
			Shrink-swell	0.50		
826C2:						
Hersey--------------	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Depth to saturated zone	0.95	Slope	1.00
	Slope	0.04	Shrink-swell	0.50	Shrink-swell	0.50
			Slope	0.04		
828B:						
Vasa----------------	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
836B2:						
Spencer, dissected--	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
836C2:						
Spencer, dissected--	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Depth to saturated zone	0.95	Slope	1.00
	Slope	0.04	Slope	0.04	Shrink-swell	0.50
838B:						
Almena, dissected---	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
870B2:						
Santiago, dissected	Not limited		Not limited		Not limited	
870C2:						
Santiago, dissected	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
875B:						
Amery, dissected----	Not limited		Not limited		Not limited	

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
875C2:						
Amery, dissected	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
875D:						
Amery, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
1125F:						
Dorerton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Content of large stones	0.03	Shrink-swell	0.50
	Content of large stones	0.03	Depth to hard bedrock	0.01	Content of large stones	0.03
Elbaville	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
1145F:						
Gaphill	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Rockbluff	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
1224F:						
Boone	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
1233F:						
Boone	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
Tarr	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
1275F:						
Hayriver	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		
Twinmound	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to soft bedrock	0.42		

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
1648A:						
Northbend	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	

Table 19a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
W:						
Water	Not rated		Not rated		Not rated	

Table 19b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Subsidence	1.00	Cutbanks cave	1.00	Content of organic matter	1.00
	Frost action	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80		
20A:						
Palms, undrained----	Not rated		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Content of organic matter	1.00
			Content of organic matter	1.00	Depth to saturated zone	1.00
			Cutbanks cave	0.10		
Houghton, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	0.10		
40A:						
Markey, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Content of organic matter	1.00		
Seelyeville, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	0.10		
45A:						
Seelyeville, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	0.10		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
45A:						
Cathro, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	0.10		
101B:						
Menahga, valley train--------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.51
					Too sandy	0.50
101C:						
Menahga, valley train--------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.51
			Slope	0.04	Too sandy	0.50
					Slope	0.04
101E:						
Menahga, valley train--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.08
115B2:						
Seaton--------------	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
	Shrink-swell	0.50				
115C2:						
Seaton--------------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	0.50	Slope	0.04
	Low strength	1.00	Slope	0.04		
	Shrink-swell	0.50				
	Slope	0.04				
115D2:						
Seaton--------------	Very limited		Very limited		Very limited	
	Frost action	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
	Shrink-swell	0.50				
115E2:						
Seaton--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
	Shrink-swell	0.50				
116C2:						
Churchtown----------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	0.10	Slope	0.04
	Shrink-swell	0.50	Slope	0.04	Content of large stones	0.03
	Slope	0.04				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
116D2:						
Churchtown----------	Very limited		Very limited		Very limited	
	Frost action	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Cutbanks cave	0.10	Content of large stones	0.03
	Shrink-swell	0.50				
116E2:						
Churchtown----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.10	Content of large stones	0.03
	Shrink-swell	0.50				
125B2:						
Pepin---------------	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Too clayey	0.88		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
125C2:						
Pepin---------------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Too clayey	0.88	Slope	0.04
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50	Slope	0.04		
	Slope	0.04				
125D2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Frost action	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Too clayey	0.88		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
125E2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Too clayey	0.88		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
135C2:						
Wickware------------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	0.10	Slope	0.04
	Low strength	1.00	Slope	0.04		
	Shrink-swell	0.50				
	Slope	0.04				
135D2:						
Wickware------------	Very limited		Very limited		Very limited	
	Frost action	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
135E2:						
Wickware------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
136B:						
Doritty-------------	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00	Depth to saturated zone	0.61		
	Shrink-swell	0.50				
136C2:						
Doritty-------------	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	0.04
	Low strength	1.00	Depth to saturated zone	0.61		
	Shrink-swell	0.50				
	Slope	0.04	Slope	0.04		
144B2:						
NewGlarus-----------	Very limited		Somewhat limited		Not limited	
	Shrink-swell	1.00	Too clayey	0.88		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Frost action	0.50				
			Cutbanks cave	0.10		
144C2:						
NewGlarus-----------	Very limited		Somewhat limited		Somewhat limited	
	Shrink-swell	1.00	Too clayey	0.88	Slope	0.04
	Low strength	1.00	Depth to hard bedrock	0.42		
	Frost action	0.50				
	Slope	0.04	Cutbanks cave	0.10		
			Slope	0.04		
144D2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Shrink-swell	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Too clayey	0.88		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Frost action	0.50				
			Cutbanks cave	0.10		
144E2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	1.00	Too clayey	0.88		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Frost action	0.50				
			Cutbanks cave	0.10		
161E:						
Fivepoints----------	Very limited		Very limited		Very limited	
	Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Frost action	0.50			Depth to bedrock	0.46
	Depth to hard bedrock	0.46	Slope	1.00		
			Cutbanks cave	0.10		
208A:						
Siouxcreek----------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
213B2:						
Hixton	Somewhat limited		Very limited		Somewhat limited	
	Low strength	0.78	Cutbanks cave	1.00	Depth to bedrock	0.42
	Shrink-swell	0.50	Depth to soft bedrock	0.42		
	Frost action	0.50				
213C2:						
Hixton	Somewhat limited		Very limited		Somewhat limited	
	Low strength	0.78	Cutbanks cave	1.00	Depth to bedrock	0.42
	Shrink-swell	0.50	Depth to soft bedrock	0.42	Slope	0.04
	Frost action	0.50				
	Slope	0.04	Slope	0.04		
224B:						
Elevasil	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
224C2:						
Elevasil	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
	Slope	0.04	Depth to soft bedrock	0.42	Slope	0.04
			Slope	0.04		
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
233C:						
Boone	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	0.96
			Depth to soft bedrock	0.42	Too sandy	0.50
					Depth to bedrock	0.42
			Slope	0.37	Slope	0.37
					Content of large stones	0.01
243B2:						
Hixton, thin solum	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.99	Depth to bedrock	0.99
			Cutbanks cave	0.10		
243C2:						
Hixton, thin solum	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.99	Depth to bedrock	0.99
	Slope	0.04			Slope	0.04
			Cutbanks cave	0.10		
			Slope	0.04		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
244B:						
Elkmound------------	Somewhat limited		Very limited		Very limited	
	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
					Droughty	0.98
	Frost action	0.50	Cutbanks cave	0.10	Content of large stones	0.01
244C2:						
Elkmound------------	Somewhat limited		Very limited		Very limited	
	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
					Droughty	0.98
	Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
	Slope	0.04	Slope	0.04	Content of large stones	0.01
244D2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
					Slope	1.00
	Slope	1.00	Slope	1.00	Droughty	0.98
	Frost action	0.50	Cutbanks cave	0.10	Content of large stones	0.01
254B2:						
Norden--------------	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50				
	Shrink-swell	0.50	Cutbanks cave	0.10		
254C2:						
Norden--------------	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50			Slope	0.04
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Slope	0.04	Slope	0.04		
254D2:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50				
	Shrink-swell	0.50	Cutbanks cave	0.10		
254E2:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50				
	Shrink-swell	0.50	Cutbanks cave	0.10		
254F:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50				
	Shrink-swell	0.50	Cutbanks cave	0.10		
255B2:						
Urne----------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
255C2:						
Urne	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Cutbanks cave	0.10	Slope	0.04
			Slope	0.04		
255D2:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
255E2:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
255F:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
265B:						
Garne	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42	Droughty	0.26
265C:						
Garne	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
	Slope	0.04	Depth to soft bedrock	0.42	Droughty	0.26
			Slope	0.04	Slope	0.04
266B:						
Hiles	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Depth to bedrock	0.42
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to saturated zone	0.19
	Depth to saturated zone	0.19	Cutbanks cave	0.10		
268A:						
Kert	Very limited		Very limited		Somewhat limited	
	Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Depth to saturated zone	0.75	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50	Cutbanks cave	0.10		
	Shrink-swell	0.50				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
269A:						
Veedum, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
273B2:						
Dobie	Somewhat limited		Somewhat limited		Somewhat limited	
	Low strength	0.78	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50	Cutbanks cave	0.10		
	Shrink-swell	0.50				
Hixton, frigid	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
273C2:						
Dobie	Somewhat limited		Somewhat limited		Somewhat limited	
	Low strength	0.78	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
	Shrink-swell	0.50	Slope	0.04		
	Slope	0.04				
Hixton, frigid	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
	Slope	0.04	Depth to soft bedrock	0.42	Slope	0.04
			Slope	0.04		
273D2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	0.78	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50	Cutbanks cave	0.10		
	Shrink-swell	0.50				
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	0.78	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Frost action	0.50	Cutbanks cave	0.10		
	Shrink-swell	0.50				
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
275B2:						
Hayriver	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
Elevasil, frigid	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
275C2:						
Hayriver	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04			Slope	0.04
			Cutbanks cave	0.10		
			Slope	0.04		
Elevasil, frigid	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Depth to bedrock	0.42
	Slope	0.04	Depth to soft bedrock	0.42	Slope	0.04
			Slope	0.04		
275D2:						
Hayriver	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
Elevasil, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00	Depth to bedrock	0.42
			Depth to soft bedrock	0.42		
276B:						
Humbird, loamy subsoil	Very limited		Very limited		Somewhat limited	
	Low strength	1.00	Depth to saturated zone	1.00	Depth to bedrock	0.46
	Frost action	0.50			Depth to saturated zone	0.19
	Shrink-swell	0.44	Depth to soft bedrock	0.46		
	Depth to saturated zone	0.19			Droughty	0.01
			Cutbanks cave	0.10		
278A:						
Merrillan, loamy subsoil	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
282C:						
Twinmound	Somewhat limited		Very limited		Very limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	1.00
			Depth to soft bedrock	0.42	Depth to bedrock	0.42
					Slope	0.37
			Slope	0.37		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
282F:						
Twinmound-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00	Droughty	0.98
			Depth to soft bedrock	0.42	Depth to bedrock	0.42
313D2:						
Plumcreek-----------	Very limited		Very limited		Very limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	1.00
	Slope	1.00	Slope	1.00		
	Shrink-swell	0.50				
313F:						
Plumcreek-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	1.00		
	Shrink-swell	0.50				
316B2:						
Ella----------------	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.61		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
316C2:						
Ella----------------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	0.61	Slope	0.04
	Low strenght	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Slope	0.04	Slope	0.04		
318A:						
Bearpen-------------	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00				
	Depth to saturated zone	0.75	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Flooding	0.40				
349A:						
Rib, valley train, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00	Content of large stones	0.01
	Low strength	1.00				
	Shrink-swell	0.50				
378A:						
Poskin, valley train	Somewhat limited		Very limited		Somewhat limited	
	Low strength	0.78	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Depth to saturated zone	0.75	Cutbanks cave	1.00	Content of large stones	0.01
	Frost action	0.50				
	Shrink-swell	0.50				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
403A:						
Dakota	Somewhat limited		Very limited		Not limited	
	Shrink-swell	0.50	Cutbanks cave	1.00		
	Frost action	0.50				
413A:						
Rasset	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
413B:						
Rasset	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
416A:						
Menomin	Somewhat limited		Very limited		Not limited	
	Shrink-swell	0.50	Cutbanks cave	1.00		
	Frost action	0.50	Depth to saturated zone	0.61		
423A:						
Meridian	Very limited		Very limited		Not limited	
	Low strength	1.00	Cutbanks cave	1.00		
	Shrink-swell	0.50				
	Frost action	0.50				
423B2:						
Meridian	Very limited		Very limited		Not limited	
	Low strength	1.00	Cutbanks cave	1.00		
	Shrink-swell	0.50				
	Frost action	0.50				
423C2:						
Meridian	Very limited		Very limited		Somewhat limited	
	Low strength	1.00	Cutbanks cave	1.00	Slope	0.04
	Shrink-swell	0.50	Slope	0.04		
	Frost action	0.50				
	Slope	0.04				
428A:						
Shiffer	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Shrink-swell	0.50	Cutbanks cave	1.00		
	Frost action	0.50				
	Flooding	0.40				
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00		
	Shrink-swell	0.50				
	Flooding	0.40				
432A:						
Kevilar	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
			Depth to saturated zone	0.61		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
432B:						
Kevilar-------------	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
			Depth to saturated zone	0.61		
432C2:						
Kevilar-------------	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
	Slope	0.04	Depth to saturated zone	0.61		
			Slope	0.04		
432D2:						
Kevilar-------------	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00		
			Depth to saturated zone	0.61		
433A:						
Forkhorn------------	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
433B:						
Forkhorn------------	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
433C2:						
Forkhorn------------	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
	Slope	0.04	Slope	0.04	Content of large stones	0.01
433D2:						
Forkhorn------------	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00	Content of large stones	0.01
434B:						
Bilson--------------	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
436A:						
Rusktown------------	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
			Depth to saturated zone	0.61		
438A:						
Hoopeston-----------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Frost action	0.50	Cutbanks cave	1.00		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
453A:						
Burkhardt-----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.05
					Content of large stones	0.01
453B:						
Burkhardt-----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.05
					Content of large stones	0.01
454B:						
Chetek, kame terrace	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.11
454C2:						
Chetek, kame terrace	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.11
			Slope	0.04	Slope	0.04
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.11
454E:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00		
468A:						
Oesterle, valley train--------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Frost action	0.50	Cutbanks cave	1.00		
501A:						
Finchford-----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.26
501B:						
Finchford-----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.26
502B2:						
Chelsea-------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.13
502C2:						
Chelsea-------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Slope	0.37
			Slope	0.37	Droughty	0.13
506A:						
Komro---------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.20
			Depth to saturated zone	0.61		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
508A:						
Farrington----------	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
			Cutbanks cave	1.00	Droughty	0.19
510B:						
Boplain-------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.97
			Depth to soft bedrock	0.42	Too sandy	0.50
					Depth to bedrock	0.42
510C:						
Boplain-------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	0.97
			Depth to soft bedrock	0.42	Too sandy	0.50
					Depth to bedrock	0.42
			Slope	0.37	Slope	0.37
511A:						
Plainfield----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.74
					Too sandy	0.50
511B:						
Plainfield----------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.74
					Too sandy	0.50
511C:						
Plainfield----------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	0.74
			Slope	0.37	Too sandy	0.50
					Slope	0.37
511F:						
Plainfield----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00	Droughty	0.25
512B:						
Drammen-------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.15
512C:						
Drammen-------------	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.15
			Slope	0.04	Slope	0.04
512D:						
Drammen-------------	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.15
516A:						
Aldo----------------	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.63
			Depth to saturated zone	0.61	Too sandy	0.50

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
546A:						
Prissel	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.03
			Depth to saturated zone	0.95		
546B:						
Prissel	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.03
			Depth to saturated zone	0.95		
546C:						
Prissel	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Slope	0.37
			Depth to saturated zone	0.95	Droughty	0.03
			Slope	0.37		
546F:						
Prissel	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00		
			Depth to saturated zone	0.95		
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.80		
561B:						
Tarr	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.78
					Too sandy	0.50
566A:						
Tint	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.66
			Depth to saturated zone	0.61	Too sandy	0.50
573B:						
Plainbo, sand sheet	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.90
			Depth to soft bedrock	0.42	Too sandy	0.50
					Depth to bedrock	0.42
573C:						
Plainbo, sand sheet	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	0.90
			Depth to soft bedrock	0.42	Too sandy	0.50
					Depth to bedrock	0.42
			Slope	0.37	Slope	0.37

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
588A:						
Meehan, valley train	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
			Cutbanks cave	1.00	Droughty	0.62
589A:						
Newson, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	0.50	Cutbanks cave	1.00	Droughty	0.18
601C:						
Beavercreek---------	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Frost action	0.50	Flooding	0.60	Content of large stones	0.20
	Content of large stones	0.35	Content of large stones	0.35	Gravel content	0.18
616B:						
Chaseburg-----------	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Flooding	0.60	Flooding	0.60
	Flooding	1.00	Cutbanks cave	0.10		
619A:						
Vancecreek, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80		
	Low strength	1.00				
626A:						
Arenzville----------	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Flooding	0.60
	Flooding	1.00	Depth to saturated zone	0.61		
			Flooding	0.60		
628A:						
Orion---------------	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Depth to saturated zone	0.75	Flooding	0.60		
629A:						
Ettrick, undrained--	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80		
	Low strength	1.00				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
636A:						
Quarderer	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	0.61	Flooding	0.60
	Flooding	1.00	Flooding	0.60		
			Cutbanks cave	0.10		
646A:						
Dunnbot	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Frost action	0.50	Depth to saturated zone	0.61		
			Flooding	0.60		
656A:						
Scotah	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
			Depth to saturated zone	0.61	Droughty	0.38
			Flooding	0.60		
766A:						
Moppet, occasionally flooded	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
	Frost action	0.50	Depth to saturated zone	1.00		
			Flooding	0.60		
804B2:						
Arland, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
			Cutbanks cave	0.10		
804C2:						
Arland, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Frost action	0.50	Depth to soft bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Cutbanks cave	0.10	Slope	0.04
			Slope	0.04		
804D:						
Arland, dissected	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
	Frost action	0.50	Depth to soft bedrock	0.42		
			Cutbanks cave	0.10		
814D2:						
Renova, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
816B2:						
Vlasaty, dissected	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
	Frost action	0.50	Cutbanks cave	0.10		
	Depth to saturated zone	0.19				

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
816C2:						
Vlasaty, dissected	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
	Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
	Depth to saturated zone	0.19	Slope	0.04		
	Slope	0.04				
826B2:						
Hersey	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.95		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
826C2:						
Hersey	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	0.95	Slope	0.04
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50	Slope	0.04		
	Slope	0.04				
828B:						
Vasa	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
	Shrink-swell	0.50				
	Flooding	0.40				
836B2:						
Spencer, dissected	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.95		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
836C2:						
Spencer, dissected	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	0.95	Slope	0.04
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50	Slope	0.04		
	Slope	0.04				
838B:						
Almena, dissected	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
	Shrink-swell	0.50				
	Flooding	0.40				
870B2:						
Santiago, dissected	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
870C2:						
Santiago, dissected	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
	Slope	0.04	Slope	0.04		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
875B:						
Amery, dissected----	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Content of large stones	0.01
875C2:						
Amery, dissected----	Somewhat limited		Very limited		Somewhat limited	
	Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
	Slope	0.04	Slope	0.04	Content of large stones	0.01
875D:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Frost action	0.50	Slope	1.00	Content of large stones	0.01
1125F:						
Dorerton------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Cutbanks cave	1.00	Content of large stones	0.01
	Frost action	0.50	Content of large stones	0.03		
	Content of large stones	0.03	Depth to hard bedrock	0.01		
Elbaville-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Cutbanks cave	0.50		
	Frost action	0.50	Too clayey	0.03		
1145F:						
Gaphill-------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Cutbanks cave	1.00		
Rockbluff-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00	Droughty	0.01
1224F:						
Boone---------------	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
			Cutbanks cave	1.00		
			Depth to soft bedrock	0.42		
Elevasil------------	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
	Frost action	0.50	Cutbanks cave	1.00		
			Depth to soft bedrock	0.42		
1233F:						
Boone---------------	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
			Cutbanks cave	1.00		
			Depth to soft bedrock	0.42		

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
1233F:						
Tarr	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
			Cutbanks cave	1.00		
1275F:						
Hayriver	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
	Frost action	0.50	Depth to soft bedrock	0.42		
			Cutbanks cave	0.10		
Twinmound	Very limited		Very limited		Not rated	
	Slope	1.00	Slope	1.00		
			Cutbanks cave	1.00		
			Depth to soft bedrock	0.42		
1648A:						
Northbend	Very limited		Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Depth to saturated zone	0.75	Cutbanks cave	1.00	Depth to saturated zone	0.75
	Frost action	0.50	Flooding	0.80		
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80		
	Low strength	1.00				
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Depth to saturated zone	0.75	Cutbanks cave	1.00	Depth to saturated zone	0.75
			Flooding	0.80	Droughty	0.07
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80		
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	

Table 19b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 20a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:				
Markey, flood plain, undrained	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Content of organic matter	1.00
20A:				
Palms, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Content of organic matter	1.00
	Restricted permeability	0.72	Seepage	0.28
Houghton, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Depth to saturated zone	1.00
			Seepage	1.00
40A:				
Markey, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Content of organic matter	1.00
Seelyeville, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Depth to saturated zone	1.00
			Seepage	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
45A:				
Seelyeville, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Depth to saturated zone	1.00
			Seepage	1.00
Cathro, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.72	Seepage	1.00
101B:				
Menahga, valley train	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
101C:				
Menahga, valley train	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.04	Slope	1.00
101E:				
Menahga, valley train	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
115B2:				
Seaton	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.32
115C2:				
Seaton	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
	Slope	0.04	Seepage	0.53
115D2:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
115E2:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
116C2:				
Churchtown----------	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
	Slope	0.04	Seepage	0.53
116D2:				
Churchtown----------	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
116E2:				
Churchtown----------	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
125B2:				
Pepin---------------	Very limited		Somewhat limited	
	Restricted permeability	1.00	Seepage	0.53
	Depth to bedrock	0.16	Slope	0.32
125C2:				
Pepin---------------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Depth to bedrock	0.16	Seepage	0.53
	Slope	0.04		
125D2:				
Pepin---------------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	0.53
	Depth to bedrock	0.16		
125E2:				
Pepin---------------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	0.53
	Depth to bedrock	0.16		
135C2:				
Wickware------------	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
	Slope	0.04	Seepage	0.53
135D2:				
Wickware------------	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
135E2:				
Wickware------------	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
136B:				
Doritty------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Restricted permeability	0.46	Depth to saturated zone	0.71
136C2:				
Doritty------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	1.00
	Slope	0.04	Depth to saturated zone	0.71
144B2:				
NewGlarus-----------	Very limited		Somewhat limited	
	Restricted permeability	1.00	Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
			Slope	0.32
144C2:				
NewGlarus-----------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Depth to bedrock	0.78	Seepage	0.53
	Slope	0.04	Depth to hard bedrock	0.42
144D2:				
NewGlarus-----------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
144E2:				
NewGlarus-----------	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
161E:				
Fivepoints----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
208A:				
Siouxcreek----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	0.01

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
213B2:				
Hixton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32
213C2:				
Hixton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04		
			Seepage	1.00
			Slope	1.00
224B:				
Elevasil	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Seepage	1.00
			Slope	0.32
224C2:				
Elevasil	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Seepage	1.00
	Slope	0.04	Slope	1.00
224D2:				
Elevasil	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00		
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
224E2:				
Elevasil	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00		
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
233C:				
Boone	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Seepage	1.00
	Slope	0.37	Slope	1.00
243B2:				
Hixton, thin solum	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
243C2:				
Hixton, thin solum	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04		
			Slope	1.00
			Seepage	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
244B:				
Elkmound------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
244C2:				
Elkmound------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	1.00
244D2:				
Elkmound------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
254B2:				
Norden--------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32
254C2:				
Norden--------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	1.00
254D2:				
Norden--------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
254E2:				
Norden--------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
254F:				
Norden--------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
255B2:				
Urne----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
255C2:				
Urne----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	1.00
255D2:				
Urne----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
255E2:				
Urne----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
255F:				
Urne----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
265B:				
Garne---------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
265C:				
Garne---------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.04	Slope	1.00
266B:				
Hiles---------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Seepage	0.53
	Restricted permeability	0.72	Depth to saturated zone	0.25
268A:				
Kert----------------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Seepage	0.53
			Depth to saturated zone	0.01

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
269A:				
Veedum, undrained	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.72	Seepage	0.53
273B2:				
Dobie	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Restricted permeability	0.46	Seepage	1.00
			Slope	0.32
Hixton, frigid	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32
273C2:				
Dobie	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Restricted permeability	0.46	Slope	1.00
	Slope	0.04	Seepage	1.00
Hixton, frigid	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Seepage	1.00
			Slope	1.00
273D2:				
Dobie	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	1.00
Hixton, frigid	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
273E2:				
Dobie	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	1.00
Hixton, frigid	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
275B2:				
Hayriver-----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32
Elevasil, frigid----	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
275C2:				
Hayriver-----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	1.00
Elevasil, frigid----	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.04	Slope	1.00
275D2:				
Hayriver-----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
Elevasil, frigid----	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
	Poor filtering capacity	1.00	Seepage	1.00
276B:				
Humbird, loamy subsoil-----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Restricted permeability	0.72	Depth to saturated zone	0.25
278A:				
Merrillan, loamy subsoil-----------	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	0.01

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
282C:				
Twinmound	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.37	Slope	1.00
282F:				
Twinmound	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
			Content of organic matter	1.00
313D2:				
Plumcreek	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
313F:				
Plumcreek	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
316B2:				
Ella	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
	Restricted permeability	0.46	Seepage	0.53
316C2:				
Ella	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
	Restricted permeability	0.46	Depth to saturated zone	0.71
	Slope	0.04	Seepage	0.53
318A:				
Bearpen	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.53
	Restricted permeability	0.46	Flooding	0.40
	Flooding	0.40	Depth to saturated zone	0.01
349A:				
Rib, valley train, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46		

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
378A:				
Poskin, valley train	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46		
403A:				
Dakota	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Restricted permeability	0.72		
413A:				
Rasset	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
413B:				
Rasset	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
416A:				
Menomin	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
	Restricted permeability	0.46		
423A:				
Meridian	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Restricted permeability	0.46		
423B2:				
Meridian	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	0.32
423C2:				
Meridian	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	1.00
	Slope	0.04		

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
428A:				
Shiffer	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Flooding	0.40
	Flooding	0.40		
429A:				
Lows, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Flooding	0.40
	Flooding	0.40		
432A:				
Kevilar	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
432B:				
Kevilar	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
			Slope	0.32
432C2:				
Kevilar	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Slope	1.00
	Slope	0.04	Depth to saturated zone	0.71
432D2:				
Kevilar	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
433A:				
Forkhorn	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
433B:				
Forkhorn	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
433C2:				
Forkhorn	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.04	Slope	1.00
433D2:				
Forkhorn	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
434B:				
Bilson	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.08
436A:				
Rusktown	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
438A:				
Hoopeston	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
453A:				
Burkhardt	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
453B:				
Burkhardt	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
454B:				
Chetek, kame terrace	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
454C2:				
Chetek, kame terrace	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.04	Slope	1.00
454D2:				
Chetek, kame terrace	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
454E:				
Chetek, kame terrace	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
	Slope	1.00		
468A:				
Oesterle, valley train	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	1.00
	Poor filtering capacity	1.00		
501A:				
Finchford	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
501B:				
Finchford	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
502B2:				
Chelsea	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
502C2:				
Chelsea	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	1.00
	Slope	0.37		
506A:				
Komro	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Depth to saturated zone	0.71
	Depth to saturated zone	1.00		
508A:				
Farrington	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	1.00
	Poor filtering capacity	1.00		
510B:				
Boplain	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Seepage	1.00
510C:				
Boplain	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Seepage	1.00
	Slope	0.37	Slope	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
511A:				
Plainfield----------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
511B:				
Plainfield----------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
511C:				
Plainfield----------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	1.00
	Slope	0.37		
511F:				
Plainfield----------	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
	Slope	1.00		
512B:				
Drammen------------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
512C:				
Drammen------------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	1.00
	Slope	0.04		
512D:				
Drammen------------	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
	Slope	1.00		
516A:				
Aldo----------------	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Depth to saturated zone	0.71
	Depth to saturated zone	1.00		
546A:				
Prissel------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	1.00
	Poor filtering capacity	1.00		
546B:				
Prissel------------	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	1.00
	Poor filtering capacity	1.00		
			Slope	0.32

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
546C:				
Prissel	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Slope	0.37	Slope	1.00
546F:				
Prissel	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	1.00	Depth to saturated zone	1.00
555A:				
Fordum, frequently flooded	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
561B:				
Tarr	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
			Slope	0.32
566A:				
Tint	Very limited		Very limited	
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
573B:				
Plainbo, sand sheet	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
573C:				
Plainbo, sand sheet	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Slope	0.37	Slope	1.00
588A:				
Meehan, valley train	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
589A:				
Newson, undrained	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
601C:				
Beavercreek	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Content of large stones	0.35	Seepage	1.00
			Slope	1.00
			Content of large stones	0.30
616B:				
Chaseburg	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.08
619A:				
Vancecreek, undrained	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
626A:				
Arenzville	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
	Restricted permeability	0.46	Seepage	0.53
628A:				
Orion	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
629A:				
Ettrick, undrained	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Seepage	1.00

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
636A:				
Quarderer-----------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
	Restricted permeability	0.46	Seepage	0.53
646A:				
Dunnbot------------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
656A:				
Scotah--------------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	0.71
766A:				
Moppet, occasionally flooded-----------	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46		
804B2:				
Arland, dissected---	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
			Seepage	1.00
			Slope	0.32
804C2:				
Arland, dissected---	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	1.00
804D:				
Arland, dissected---	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	1.00
814D2:				
Renova, dissected---	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	0.28

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
816B2:				
Vlasaty, dissected	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Slope	0.32
	Restricted permeability	1.00	Seepage	0.28
			Depth to saturated zone	0.25
816C2:				
Vlasaty, dissected	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
	Restricted permeability	1.00	Seepage	0.28
	Slope	0.04	Depth to saturated zone	0.25
826B2:				
Hersey	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.72	Seepage	0.53
			Slope	0.32
826C2:				
Hersey	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.72	Slope	1.00
	Slope	0.04	Seepage	0.53
828B:				
Vasa	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.53
	Restricted permeability	1.00	Flooding	0.40
	Flooding	0.40	Slope	0.08
			Depth to saturated zone	0.01
836B2:				
Spencer, dissected	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Seepage	0.53
			Slope	0.32
836C2:				
Spencer, dissected	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Slope	1.00
	Slope	0.04	Seepage	0.53

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
838B:				
Almena, dissected	Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Seepage	0.53
	Restricted permeability	1.00	Flooding	0.40
	Flooding	0.40	Slope	0.08
			Depth to saturated zone	0.01
870B2:				
Santiago, dissected	Very limited		Somewhat limited	
	Restricted permeability	1.00	Seepage	0.53
			Slope	0.32
870C2:				
Santiago, dissected	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	0.04	Seepage	0.53
875B:				
Amery, dissected	Very limited		Very limited	
	Restricted permeability	1.00	Seepage	1.00
			Slope	0.32
875C2:				
Amery, dissected	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	0.04	Seepage	1.00
875D:				
Amery, dissected	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
1125F:				
Dorerton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Poor filtering capacity	1.00	Seepage	1.00
	Restricted permeability	0.72	Depth to hard bedrock	0.01
	Depth to bedrock	0.38		
	Content of large stones	0.03		
Elbaville	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
	Poor filtering capacity	1.00		
	Depth to bedrock	0.01		
1145F:				
Gaphill	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
	Depth to bedrock	0.25		

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1145F:				
Rockbluff	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
	Slope	1.00		
	Depth to bedrock	0.25		
1224F:				
Boone	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Slope	1.00
	Slope	1.00	Seepage	1.00
Elevasil	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00		
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
1233F:				
Boone	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Slope	1.00
	Slope	1.00	Seepage	1.00
Tarr	Very limited		Very limited	
	Poor filtering capacity	1.00	Slope	1.00
			Seepage	1.00
	Slope	1.00		
1275F:				
Hayriver	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Slope	1.00		
			Slope	1.00
			Seepage	1.00
Twinmound	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Poor filtering capacity	1.00		
			Slope	1.00
	Slope	1.00	Seepage	1.00
1648A:				
Northbend	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
			Depth to saturated zone	1.00
	Poor filtering capacity	1.00		
	Restricted permeability	0.46		

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1648A:				
Ettrick, flood plain, undrained	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Seepage	1.00
1658A:				
Algansee	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
Kalmarville, undrained	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage	1.00
	Poor filtering capacity	1.00	Depth to saturated zone	1.00
2002:				
Udorthents, earthen dams	Not rated		Not rated	
2003A:				
Riverwash	Not rated		Not rated	
2013:				
Pits, gravel	Not rated		Not rated	
2014:				
Pits, quarry, hard bedrock	Not rated		Not rated	
2016:				
Pits, quarry, soft bedrock	Not rated		Not rated	
2030:				
Udorthents, cut or fill	Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated	
2050:				
Landfill	Not rated		Not rated	

Table 20a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
M-W:				
Miscellaneous water	Not rated		Not rated	
W:				
Water---------------	Not rated		Not rated	

Table 20b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	1.00				
20A:						
Palms, undrained	Not rated		Very limited		Not rated	
			Ponding	1.00		
			Depth to saturated zone	1.00		
			Seepage	1.00		
Houghton, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Seepage	1.00	Content of organic matter	1.00
	Seepage	1.00			Seepage	0.16
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Seepage	1.00	Content of organic matter	1.00
	Seepage	1.00			Seepage	0.16
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Seepage	1.00	Content of organic matter	1.00
	Seepage	1.00			Seepage	0.16

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Seepage	1.00	Content of organic matter	1.00
101B:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
101C:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04			Slope	0.04
101E:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
115B2:						
Seaton	Not limited		Not limited		Not limited	
115C2:						
Seaton	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.04	Slope	0.04	Slope	0.04
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
116C2:						
Churchtown	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.04	Slope	0.04	Slope	0.04
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
125B2:						
Pepin	Very limited		Not limited		Not limited	
	Depth to bedrock	1.00				

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
125C2:						
Pepin	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Slope	0.04	Slope	0.04
	Slope	0.04				
125D2:						
Pepin	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Slope	1.00	Slope	1.00
	Slope	1.00				
125E2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00				
135C2:						
Wickware	Very limited		Somewhat limited		Somewhat limited	
	Seepage	1.00	Slope	0.04	Slope	0.04
	Slope	0.04				
135D2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00				
135E2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00				
136B:						
Doritty	Very limited		Not limited		Not limited	
	Seepage	1.00				
136C2:						
Doritty	Very limited		Somewhat limited		Somewhat limited	
	Seepage	1.00	Slope	0.04	Slope	0.04
	Slope	0.04				
144B2:						
NewGlarus	Very limited		Somewhat limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
	Too clayey	1.00			Hard to compact	1.00
					Depth to bedrock	0.42
144C2:						
NewGlarus	Very limited		Somewhat limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
	Too clayey	1.00	Slope	0.04	Hard to compact	1.00
	Slope	0.04			Depth to bedrock	0.42
					Slope	0.04
144D2:						
NewGlarus	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Slope	1.00	Too clayey	1.00
	Too clayey	1.00	Depth to bedrock	0.42	Hard to compact	1.00
	Slope	1.00			Slope	1.00
					Depth to bedrock	0.42

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
144E2:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
	Too clayey	1.00			Hard to compact	1.00
					Depth to bedrock	0.42
161E:						
Fivepoints	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
			Seepage	1.00	Seepage	0.22
					Gravel content	0.01
208A:						
Siouxcreek	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Depth to saturated zone	1.00
			Depth to bedrock	1.00	Seepage	0.52
213B2:						
Hixton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
			Depth to bedrock	1.00	Seepage	0.22
213C2:						
Hixton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Slope	0.04	Depth to bedrock	1.00	Seepage	0.22
			Slope	0.04	Slope	0.04
224B:						
Elevasil	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
224C2:						
Elevasil	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Slope	1.00	Depth to bedrock	1.00	Slope	1.00
	Seepage	1.00	Slope	1.00	Seepage	0.22
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
233C:						
Boone	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
243B2:						
Hixton, thin solum--	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
243C2:						
Hixton, thin solum--	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04
244B:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00				
244C2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Slope	0.04	Slope	0.04
	Slope	0.04				
244D2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00				
254B2:						
Norden--------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
			Seepage	1.00	Seepage	0.21
254C2:						
Norden--------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	0.04	Seepage	1.00	Seepage	0.21
			Slope	0.04	Slope	0.04
254D2:						
Norden--------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Seepage	1.00	Seepage	0.21
254E2:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
			Seepage	1.00	Seepage	0.21
254F:						
Norden--------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
			Seepage	1.00	Seepage	0.21
255B2:						
Urne----------------	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
255C2:						
Urne	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04
255D2:						
Urne	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
255E2:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
255F:						
Urne	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
265B:						
Garne	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	1.00
	Too sandy	1.00			Too sandy	0.50
265C:						
Garne	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	1.00
	Too sandy	1.00	Slope	0.04	Too sandy	0.50
	Slope	0.04			Slope	0.04
266B:						
Hiles	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
268A:						
Kert	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
269A:						
Veedum, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to bedrock	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
273B2:						
Dobie	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
			Seepage	1.00		

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
273B2:						
Hixton, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
			Depth to bedrock	1.00	Seepage	0.22
273C2:						
Dobie	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	0.04	Seepage	1.00	Slope	0.04
			Slope	0.04		
Hixton, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Slope	0.04	Depth to bedrock	1.00	Seepage	0.22
			Slope	0.04	Slope	0.04
273D2:						
Dobie	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Seepage	1.00		
Hixton, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Slope	1.00	Depth to bedrock	1.00	Slope	1.00
			Slope	1.00	Seepage	0.22
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
			Seepage	1.00		
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
			Depth to bedrock	1.00	Seepage	0.22
275B2:						
Hayriver	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
Elevasil, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
275C2:						
Hayriver	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04
Elevasil, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
275D2:						
Hayriver	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
Elevasil, frigid	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Slope	1.00	Depth to bedrock	1.00	Slope	1.00
	Seepage	1.00	Slope	1.00	Seepage	0.22
276B:						
Humbird, loamy subsoil	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Hard to compact	1.00
					Depth to saturated zone	0.86
278A:						
Merrillan, loamy subsoil	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
282C:						
Twinmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
282F:						
Twinmound	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
313D2:						
Plumcreek	Very limited		Very limited		Very limited	
	Too sandy	1.00	Slope	1.00	Too sandy	1.00
	Slope	1.00			Slope	1.00
313F:						
Plumcreek	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
316B2:						
Ella	Not limited		Not limited		Not limited	
316C2:						
Ella	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.04	Slope	0.04	Slope	0.04

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
318A:						
Bearpen	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40		
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
378A:						
Poskin, valley train	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Depth to saturated zone	1.00
403A:						
Dakota	Very limited		Very limited		Not limited	
	Seepage	1.00	Seepage	1.00		
413A:						
Rasset	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Too sandy	0.50
413B:						
Rasset	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Too sandy	0.50
416A:						
Menomin	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	1.00				
423A:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
423B2:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
423C2:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04			Slope	0.04

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
428A:						
Shiffer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Flooding	0.40	Depth to saturated zone	1.00
	Flooding	0.40				
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Flooding	0.40	Seepage	1.00
	Flooding	0.40				
432A:						
Kevilar	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	0.22
432B:						
Kevilar	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	0.22
432C2:						
Kevilar	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	0.22
	Slope	0.04			Slope	0.04
432D2:						
Kevilar	Very limited		Very limited		Very limited	
	Slope	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Slope	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	0.22
433A:						
Forkhorn	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.01
433B:						
Forkhorn	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.01
433C2:						
Forkhorn	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04			Slope	0.04
					Gravel content	0.01

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
433D2:						
Forkhorn------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
					Gravel content	0.01
434B:						
Bilson--------------	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Seepage	1.00	Seepage	0.22
436A:						
Rusktown------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
438A:						
Hoopeston-----------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Depth to saturated zone	1.00
453A:						
Burkhardt-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.29
453B:						
Burkhardt-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.29
454B:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.07
454C2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04			Gravel content	0.07
					Slope	0.04
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
					Gravel content	0.07

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
454E:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.08
468A:						
Oesterle, valley train	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Depth to saturated zone	1.00
					Gravel content	0.04
501A:						
Finchford	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.01
501B:						
Finchford	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.01
502B2:						
Chelsea	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
502C2:						
Chelsea	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
506A:						
Komro	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
508A:						
Farrington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00			Depth to saturated zone	1.00
510B:						
Boplain	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
510C:						
Boplain	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
511A:						
Plainfield	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
511B:						
Plainfield	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
511C:						
Plainfield	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
511F:						
Plainfield	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
512B:						
Drammen	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
512C:						
Drammen	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04			Slope	0.04
512D:						
Drammen	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
516A:						
Aldo	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
546A:						
Prissel	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Depth to saturated zone	0.47	Too sandy	0.50
	Depth to saturated zone	0.47			Depth to saturated zone	0.11

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
546B:						
Prissel	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Depth to saturated zone	0.47	Too sandy	0.50
	Depth to saturated zone	0.47			Depth to saturated zone	0.11
546C:						
Prissel	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Depth to saturated zone	0.47	Too sandy	0.50
	Depth to saturated zone	0.47	Slope	0.37	Slope	0.37
	Slope	0.37			Depth to saturated zone	0.11
546F:						
Prissel	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Depth to saturated zone	0.47	Too sandy	0.50
	Depth to saturated zone	0.47			Depth to saturated zone	0.11
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Ponding	1.00	Ponding	1.00	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Ponding	1.00
	Too sandy	1.00			Gravel content	0.03
561B:						
Tarr	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
566A:						
Tint	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00				
573B:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
573C:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
588A:						
Meehan, valley train	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
					Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to saturated zone	1.00
	Too sandy	1.00				
589A:						
Newson, undrained	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00				
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
601C:						
Beavercreek	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Flooding	1.00	Content of large stones	0.59
	Seepage	1.00	Seepage	1.00		
	Content of large stones	0.59			Seepage	0.52
616B:						
Chaseburg	Very limited		Very limited		Not limited	
	Flooding	1.00	Flooding	1.00		
619A:						
Vancecreek, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00		
	Ponding	1.00				
626A:						
Arenzville	Very limited		Very limited		Not limited	
	Flooding	1.00	Flooding	1.00		
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
628A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00		
	Ponding	1.00			Seepage	0.22
	Seepage	1.00	Seepage	1.00		
636A:						
Quarderer	Very limited		Very limited		Not limited	
	Flooding	1.00	Flooding	1.00		
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
646A:						
Dunnbot	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
	Seepage	1.00	Seepage	1.00		
	Too sandy	1.00				
656A:						
Scotah	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Too sandy	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
					Gravel content	0.02
	Seepage	1.00	Seepage	1.00		
	Too sandy	1.00				
766A:						
Moppet, occasionally flooded	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.47
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Seepage	1.00	Seepage	1.00		
804B2:						
Arland, dissected	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
804C2:						
Arland, dissected	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
	Slope	0.04	Slope	0.04	Slope	0.04
804D:						
Arland, dissected	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
814D2:						
Renova, dissected	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
816B2:						
Vlasaty, dissected	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
	Too clayey	0.50			Too clayey	0.50
816C2:						
Vlasaty, dissected	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
	Too clayey	0.50	Slope	0.04	Too clayey	0.50
	Slope	0.04			Slope	0.04
826B2:						
Hersey	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.47	Depth to saturated zone	0.47	Depth to saturated zone	0.11

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
826C2:						
Hersey-------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.47	Depth to saturated zone	0.47	Depth to saturated zone	0.11
	Slope	0.04	Slope	0.04	Slope	0.04
828B:						
Vasa---------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40		
836B2:						
Spencer, dissected--	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.47	Depth to saturated zone	0.47	Depth to saturated zone	0.11
836C2:						
Spencer, dissected--	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.47	Depth to saturated zone	0.47	Depth to saturated zone	0.11
	Slope	0.04	Slope	0.04	Slope	0.04
838B:						
Almena, dissected---	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40		
870B2:						
Santiago, dissected	Not limited		Not limited		Not limited	
870C2:						
Santiago, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.04	Slope	0.04	Slope	0.04
875B:						
Amery, dissected----	Not limited		Very limited		Not limited	
			Seepage	1.00		
875C2:						
Amery, dissected----	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.04	Seepage	1.00	Slope	0.04
			Slope	0.04		
875D:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Seepage	1.00		
1125F:						
Dorerton-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Depth to bedrock	0.01	Too sandy	0.50
	Content of large stones	0.29			Content of large stones	0.29
					Depth to bedrock	0.01

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
1125F:						
Elbaville-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
	Seepage	1.00			Content of large stones	0.01
	Content of large stones	0.01				
1145F:						
Gaphill-------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Seepage	1.00	Seepage	0.22
	Seepage	1.00				
Rockbluff-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Seepage	1.00	Too sandy	1.00
	Seepage	1.00			Seepage	1.00
	Too sandy	1.00				
1224F:						
Boone---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
Elevasil------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Seepage	0.22
1233F:						
Boone---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
Tarr----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
1275F:						
Hayriver------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	0.22
Twinmound-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
	Seepage	1.00	Depth to bedrock	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
1648A:						
Northbend	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Too sandy	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to saturated zone	1.00
	Too sandy	1.00				
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Seepage	0.22
	Seepage	1.00	Seepage	1.00		
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Too sandy	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to saturated zone	1.00
	Too sandy	1.00				
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Seepage	0.22
	Seepage	1.00	Seepage	1.00		
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	

Table 20b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water----------------	Not rated		Not rated		Not rated	

Table 21a.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
20A:						
Palms, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
Houghton, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Low adsorption	1.00	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
101B:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.19	Droughty	0.19
	Droughty	0.19	Too acid	0.07	Too acid	0.07
	Too acid	0.02				
101C:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.19	Too steep for surface application	1.00
	Droughty	0.19	Too acid	0.07	Too steep for sprinkler application	0.22
	Slope	0.04	Slope	0.04	Droughty	0.19
	Too acid	0.02			Too acid	0.07
101E:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
	Droughty	0.02	Droughty	0.02	Droughty	0.02
115B2:						
Seaton	Not limited		Not limited		Somewhat limited	
					Too steep for surface application	0.08
115C2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Too steep for surface application	1.00
					Too steep for sprinkler application	0.22

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
					Too steep for sprinkler application	1.00
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
					Too steep for sprinkler application	1.00
116C2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Too acid	0.07	Too steep for surface application	1.00
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
					Too acid	0.07
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
					Too acid	0.07
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
					Too acid	0.07
125B2:						
Pepin	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Restricted permeability	1.00
	Too acid	0.02	Restricted permeability	1.00	Too steep for surface application	0.08
			Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
125C2:						
Pepin	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Restricted permeability	1.00
	Slope	0.04	Restricted permeability	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
			Slope	0.04	Too acid	0.07
125D2:						
Pepin	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too acid	0.02	Slope	1.00	Too steep for sprinkler application	1.00
			Too acid	0.07	Too acid	0.07
125E2:						
Pepin	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Restricted permeability	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Restricted permeability	1.00	Restricted permeability	1.00
			Too acid	0.07	Too acid	0.07
135C2:						
Wickware	Somewhat limited		Somewhat limited		Very limited	
	Too acid	0.08	Too acid	0.31	Too steep for surface application	1.00
	Slope	0.04	Slope	0.04	Too acid	0.31
					Too steep for sprinkler application	0.22
135D2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	1.00
					Too acid	0.31

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
135E2:						
Wickware	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	1.00
					Too acid	0.31
136B:						
Doritty	Somewhat limited		Somewhat limited		Somewhat limited	
	Too acid	0.08	Too acid	0.31	Too acid	0.31
136C2:						
Doritty	Somewhat limited		Somewhat limited		Very limited	
	Too acid	0.08	Too acid	0.31	Too steep for surface application	1.00
	Slope	0.04	Slope	0.04	Too acid	0.31
					Too steep for sprinkler application	0.22
144B2:						
NewGlarus	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Restricted permeability	1.00
	Too acid	0.02	Restricted permeability	1.00	Too steep for surface application	0.08
			Too acid	0.07	Too acid	0.07
144C2:						
NewGlarus	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Restricted permeability	1.00
	Slope	0.04	Restricted permeability	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
			Slope	0.04	Too acid	0.07
144D2:						
NewGlarus	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too acid	0.02	Slope	1.00	Too steep for sprinkler application	1.00
			Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
144E2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Restricted permeability	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Restricted permeability	1.00	Restricted permeability	1.00
			Too acid	0.07	Too acid	0.07
161E:						
Fivepoints----------	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.62	Slope	1.00	Restricted permeability	1.00
	Droughty	0.56	Too acid	1.00	Too acid	1.00
208A:						
Siouxcreek----------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
	Droughty	0.02	Too acid	0.31	Droughty	0.02
	Filtering capacity	0.01	Droughty	0.02	Filtering capacity	0.01
213B2:						
Hixton--------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Droughty	0.02	Depth to bedrock	0.42	Too steep for surface application	0.08
	Too acid	0.02	Too acid	0.07	Too acid	0.07
			Droughty	0.02	Droughty	0.02
213C2:						
Hixton--------------	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	0.04	Depth to bedrock	0.42	Depth to bedrock	0.42
	Droughty	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
	Too acid	0.02	Slope	0.04	Too acid	0.07
			Droughty	0.02	Droughty	0.02

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
224B:						
Elevasil	Somewhat limited		Very limited		Somewhat limited	
	Droughty	0.60	Low adsorption	1.00	Droughty	0.60
	Depth to bedrock	0.42	Droughty	0.60	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
	Filtering capacity	0.01	Too acid	0.31	Too steep for surface application	0.08
			Filtering capacity	0.01	Filtering capacity	0.01
224C2:						
Elevasil	Somewhat limited		Very limited		Very limited	
	Droughty	0.60	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Droughty	0.60	Droughty	0.60
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Too acid	0.31	Too acid	0.31
	Filtering capacity	0.01	Slope	0.04	Too steep for sprinkler application	0.22
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.60	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Droughty	0.60	Droughty	0.60
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Filtering capacity	0.01	Too acid	0.31	Too acid	0.31
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.60	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Droughty	0.60	Droughty	0.60
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Filtering capacity	0.01	Too acid	0.31	Too acid	0.31
233C:						
Boone	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Depth to bedrock	0.42	Too steep for sprinkler application	0.60
	Slope	0.37	Slope	0.37	Depth to bedrock	0.42

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
243B2:						
Hixton, thin solum	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.99	Low adsorption	1.00	Depth to bedrock	0.99
	Droughty	0.72	Depth to bedrock	0.99	Droughty	0.72
			Droughty	0.72		
243C2:						
Hixton, thin solum	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.99	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.72	Depth to bedrock	0.99	Depth to bedrock	0.99
	Slope	0.04	Droughty	0.72	Droughty	0.72
			Slope	0.04	Too steep for sprinkler application	0.22
244B:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too acid	0.22	Low adsorption	1.00	Too acid	0.77
	Too stony	0.19	Too acid	0.77		
244C2:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too acid	0.22	Low adsorption	1.00	Too steep for surface application	1.00
	Too stony	0.19	Too acid	0.77	Too acid	0.77
	Slope	0.04	Slope	0.04	Too steep for sprinkler application	0.22
244D2:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.22	Slope	1.00	Too steep for sprinkler application	1.00
	Too stony	0.19	Too acid	0.77	Too acid	0.77
254B2:						
Norden	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Too acid	0.02	Depth to bedrock	0.42	Too steep for surface application	0.08
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
254C2:						
Norden	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	0.04	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
	Droughty	0.01	Slope	0.04	Too acid	0.07
			Droughty	0.01	Droughty	0.01
254D2:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01
254E2:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01
254F:						
Norden	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Too acid	1.00	Too acid	1.00
			Depth to bedrock	0.42	Depth to bedrock	0.42
255B2:						
Urne	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Droughty	0.23	Depth to bedrock	0.42	Droughty	0.23
	Too acid	0.02	Droughty	0.23	Too steep for surface application	0.08
			Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
255C2:						
Urne----------------	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.23	Depth to bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Droughty	0.23	Droughty	0.23
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
			Slope	0.04	Too acid	0.07
255D2:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Droughty	0.23	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Droughty	0.23	Droughty	0.23
			Too acid	0.07	Too acid	0.07
255E2:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Droughty	0.23	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Droughty	0.23	Droughty	0.23
			Too acid	0.07	Too acid	0.07
255F:						
Urne----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Droughty	0.27	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Droughty	0.27	Droughty	0.27
			Too acid	0.07	Too acid	0.07
265B:						
Garne---------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.98	Low adsorption	1.00	Droughty	0.98
	Leaching	0.45	Droughty	0.98	Depth to bedrock	0.42
	Depth to bedrock	0.42	Depth to bedrock	0.42	Too steep for surface application	0.08
	Too acid	0.02	Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
265C:						
Garne---------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.98	Low adsorption	1.00	Too steep for surface application	1.00
	Leaching	0.45	Droughty	0.98	Droughty	0.98
	Depth to bedrock	0.42	Depth to bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Too acid	0.07	Too steep for sprinkler application	0.22
266B:						
Hiles---------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Low adsorption	1.00	Depth to saturated zone	1.00
	Depth to bedrock	0.42	Depth to saturated zone	1.00	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
	Droughty	0.02	Too acid	0.31	Droughty	0.02
			Droughty	0.02		
268A:						
Kert----------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
			Too acid	0.31		
269A:						
Veedum, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Runoff	0.40	Depth to bedrock	0.42	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
273B2:						
Dobie---------------	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Too acid	0.02	Depth to bedrock	0.42	Too steep for surface application	0.08
			Too acid	0.07	Too acid	0.07
Hixton, frigid------	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Too acid	0.02	Depth to bedrock	0.42	Too steep for surface application	0.08
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
273C2:						
Dobie	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	0.04	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
			Slope	0.04	Too acid	0.07
Hixton, frigid	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Slope	0.04	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	0.22
	Droughty	0.01	Slope	0.04	Too acid	0.07
			Droughty	0.01	Droughty	0.01
273D2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
			Too acid	0.07	Too acid	0.07
Hixton, frigid	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
			Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
273E2:						
Hixton, frigid------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.02	Depth to bedrock	0.42	Depth to bedrock	0.42
	Droughty	0.01	Too acid	0.07	Too acid	0.07
			Droughty	0.01	Droughty	0.01
275B2:						
Hayriver------------	Somewhat limited		Very limited		Somewhat limited	
	Droughty	0.47	Low adsorption	1.00	Droughty	0.47
	Depth to bedrock	0.42	Droughty	0.47	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
			Too acid	0.31	Too steep for surface application	0.08
Elevasil, frigid----	Somewhat limited		Very limited		Somewhat limited	
	Droughty	0.45	Low adsorption	1.00	Droughty	0.45
	Depth to bedrock	0.42	Droughty	0.45	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
	Filtering capacity	0.01	Too acid	0.31	Too steep for surface application	0.08
			Filtering capacity	0.01	Filtering capacity	0.01
275C2:						
Hayriver------------	Somewhat limited		Very limited		Very limited	
	Droughty	0.47	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Droughty	0.47	Droughty	0.47
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Too acid	0.31	Too acid	0.31
			Slope	0.04	Too steep for sprinkler application	0.22
Elevasil, frigid----	Somewhat limited		Very limited		Very limited	
	Droughty	0.45	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Droughty	0.45	Droughty	0.45
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Slope	0.04	Too acid	0.31	Too acid	0.31
	Filtering capacity	0.01	Slope	0.04	Too steep for sprinkler application	0.22

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
275D2:						
Hayriver------------	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.47	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Droughty	0.47	Droughty	0.47
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
			Too acid	0.31	Too acid	0.31
Elevasil, frigid----	Very limited		Very limited		Very limited	
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.45	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Droughty	0.45	Droughty	0.45
	Too acid	0.08	Depth to bedrock	0.42	Depth to bedrock	0.42
	Filtering capacity	0.01	Too acid	0.31	Too acid	0.31
276B:						
Humbird, loamy subsoil------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Low adsorption	1.00	Depth to saturated zone	1.00
	Droughty	0.77	Depth to saturated zone	1.00	Droughty	0.77
	Depth to bedrock	0.46	Droughty	0.77	Depth to bedrock	0.46
	Too acid	0.08	Depth to bedrock	0.46	Too acid	0.31
			Too acid	0.31		
278A:						
Merrillan, loamy subsoil------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Droughty	0.45	Low adsorption	1.00	Droughty	0.45
	Depth to bedrock	0.42	Droughty	0.45	Depth to bedrock	0.42
	Too acid	0.08	Depth to bedrock	0.42	Too acid	0.31
			Too acid	0.31		
282C:						
Twinmound-----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Too acid	0.77	Too acid	0.77
	Slope	0.37	Depth to bedrock	0.42	Too steep for sprinkler application	0.60

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
282F:						
Twinmound----------	Very limited		Very limited		Very limited	
	Slope	1.00	Droughty	1.00	Droughty	1.00
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
313D2:						
Plumcreek----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
					Too acid	0.07
313F:						
Plumcreek----------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
					Too acid	0.07
316B2:						
Ella----------------	Somewhat limited		Somewhat limited		Somewhat limited	
	Too acid	0.02	Too acid	0.07	Too acid	0.07
316C2:						
Ella----------------	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Too acid	0.07	Too steep for surface application	1.00
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
					Too acid	0.07
318A:						
Bearpen------------	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.02	Flooding	0.40	Too acid	0.07
			Too acid	0.07		

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
349A:						
Rib, valley train, undrained----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Too acid	0.31	Too acid	0.31
	Too acid	0.08				
378A:						
Poskin, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.08	Too acid	0.31	Too acid	0.31
403A:						
Dakota--------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
413A:						
Rasset--------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
413B:						
Rasset--------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
					Too acid	0.07
416A:						
Menomin-------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
423A:						
Meridian------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
423B2:						
Meridian------------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
					Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
423C2:						
Meridian	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	0.04	Too acid	0.07	Too steep for surface application	1.00
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
					Too acid	0.07
428A:						
Shiffer	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Flooding	0.40		
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Runoff	0.40	Too acid	0.42	Too acid	0.42
	Too acid	0.11	Flooding	0.40		
432A:						
Kevilar	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
432B:						
Kevilar	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
					Too acid	0.07
432C2:						
Kevilar	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	0.04	Too acid	0.07	Too steep for surface application	1.00
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
					Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
432D2:						
Kevilar	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
					Too acid	0.07
433A:						
Forkhorn	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
	Droughty	0.01	Droughty	0.01	Droughty	0.01
433B:						
Forkhorn	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
	Droughty	0.01	Droughty	0.01	Too acid	0.07
					Droughty	0.01
433C2:						
Forkhorn	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	0.04	Too acid	0.07	Too steep for surface application	1.00
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
	Droughty	0.01	Droughty	0.01	Too acid	0.07
					Droughty	0.01
433D2:						
Forkhorn	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.02	Too acid	0.07	Too steep for sprinkler application	1.00
	Droughty	0.01	Droughty	0.01	Too acid	0.07
					Droughty	0.01
434B:						
Bilson	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
436A:						
Rusktown-----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Too acid	0.02	Too acid	0.07	Too acid	0.07
438A:						
Hoopeston----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.11	Too acid	0.42	Too acid	0.42
453A:						
Burkhardt----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.34	Too acid	0.42	Too acid	0.42
	Too acid	0.11	Droughty	0.34	Droughty	0.34
453B:						
Burkhardt----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.34	Too acid	0.42	Too acid	0.42
	Too acid	0.11	Droughty	0.34	Droughty	0.34
					Too steep for surface application	0.08
454B:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.44	Droughty	0.44	Droughty	0.44
	Too stony	0.19	Too acid	0.07	Too steep for surface application	0.08
	Too acid	0.02			Too acid	0.07
454C2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.44	Droughty	0.44	Too steep for surface application	1.00
	Too stony	0.19	Too acid	0.07	Droughty	0.44
	Slope	0.04	Slope	0.04	Too steep for sprinkler application	0.22
	Too acid	0.02			Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Droughty	0.44	Droughty	0.44	Too steep for sprinkler application	1.00
	Too stony	0.19	Too acid	0.07	Droughty	0.44
	Too acid	0.02			Too acid	0.07
454E:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to dense layer	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.62	Too acid	1.00	Too acid	1.00
	Too stony	0.19	Droughty	0.16	Droughty	0.16
468A:						
Oesterle, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.22	Too acid	0.77	Too acid	0.77
	Droughty	0.02	Droughty	0.02	Droughty	0.02
501A:						
Finchford	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.09	Droughty	0.09
	Droughty	0.09	Too acid	0.07	Too acid	0.07
	Too acid	0.02				
501B:						
Finchford	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.09	Droughty	0.09
	Droughty	0.09	Too acid	0.07	Too steep for surface application	0.08
	Too acid	0.02			Too acid	0.07
502B2:						
Chelsea	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Too acid	0.07	Too steep for surface application	0.08
	Too acid	0.02			Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
502C2:						
Chelsea	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Slope	0.37	Too steep for surface application	1.00
	Slope	0.37	Too acid	0.07	Too steep for sprinkler application	0.60
	Too acid	0.02			Too acid	0.07
506A:						
Komro	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.20	Droughty	0.20	Droughty	0.20
	Too acid	0.02	Too acid	0.07	Too acid	0.07
508A:						
Farrington	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Droughty	0.32	Droughty	0.32	Droughty	0.32
	Too acid	0.02	Too acid	0.07	Too acid	0.07
510B:						
Boplain	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Depth to bedrock	0.42
	Depth to bedrock	0.42	Depth to bedrock	0.42	Too acid	0.07
	Too acid	0.02	Too acid	0.07		
510C:						
Boplain	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Depth to bedrock	0.42	Too steep for sprinkler application	0.60
	Slope	0.37	Slope	0.37	Depth to bedrock	0.42
511A:						
Plainfield	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.32	Droughty	0.32
	Droughty	0.32	Too acid	0.07	Too acid	0.07
	Too acid	0.02				

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
511B:						
Plainfield	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.32	Droughty	0.32
	Droughty	0.32	Too acid	0.07	Too steep for surface application	0.08
	Too acid	0.02			Too acid	0.07
511C:						
Plainfield	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Slope	0.37	Too steep for surface application	1.00
	Slope	0.37	Droughty	0.32	Too steep for sprinkler application	0.60
	Droughty	0.32	Too acid	0.07	Droughty	0.32
	Too acid	0.02			Too acid	0.07
511F:						
Plainfield	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
	Droughty	0.09	Droughty	0.09	Droughty	0.09
512B:						
Drammen	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Too acid	0.07	Too acid	0.07
	Too acid	0.02				
512C:						
Drammen	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Too acid	0.07	Too steep for surface application	1.00
	Slope	0.04	Slope	0.04	Too steep for sprinkler application	0.22
	Too acid	0.02			Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
512D:						
Drammen	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Leaching	0.45	Too acid	0.07	Too steep for sprinkler application	1.00
	Too acid	0.02			Too acid	0.07
516A:						
Aldo	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Droughty	0.23	Droughty	0.23
	Droughty	0.23	Too acid	0.07	Too acid	0.07
	Too acid	0.02				
546A:						
Prissel	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
	Too acid	0.02	Too acid	0.07	Too acid	0.07
546B:						
Prissel	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
					Too acid	0.07
546C:						
Prissel	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Too steep for surface application	1.00
	Slope	0.37	Slope	0.37	Too steep for sprinkler application	0.60
	Too acid	0.02	Too acid	0.07	Depth to saturated zone	0.46
					Too acid	0.07

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
546F:						
Prissel	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to saturated zone	0.46	Too acid	1.00	Too acid	1.00
			Depth to saturated zone	0.46	Depth to saturated zone	0.46
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Runoff	0.40				
561B:						
Tarr	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.76	Droughty	0.76	Droughty	0.76
	Leaching	0.45	Too acid	0.31	Too acid	0.31
	Too acid	0.08			Too steep for surface application	0.08
566A:						
Tint	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Droughty	0.74	Too acid	0.77	Too acid	0.77
	Too acid	0.22	Droughty	0.74	Droughty	0.74
573B:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Too acid	0.77
	Depth to bedrock	0.42	Too acid	0.77	Depth to bedrock	0.42
	Too acid	0.22	Depth to bedrock	0.42		

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
573C:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
	Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Leaching	0.45	Low adsorption	1.00	Too steep for surface application	1.00
	Depth to bedrock	0.42	Too acid	0.77	Too acid	0.77
	Slope	0.37	Depth to bedrock	0.42	Too steep for sprinkler application	0.60
588A:						
Meehan, valley train	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Droughty	0.81	Too acid	0.85	Too acid	0.85
	Too acid	0.27	Droughty	0.81	Droughty	0.81
589A:						
Newson, undrained---	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too acid	0.50	Too acid	1.00	Too acid	1.00
	Runoff	0.40	Droughty	0.38	Droughty	0.38
601C:						
Beavercreek---------	Somewhat limited		Very limited		Very limited	
	Flooding	0.60	Flooding	1.00	Too steep for surface application	1.00
	Filtering capacity	0.01	Filtering capacity	0.01	Flooding	0.60
					Too steep for sprinkler application	0.10
					Filtering capacity	0.01
616B:						
Chaseburg-----------	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.60	Flooding	1.00	Flooding	0.60
619A:						
Vancecreek, undrained----------	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Runoff	0.40	Too acid	0.42	Too acid	0.42
	Too acid	0.11				
626A:						
Arenzville----------	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.60	Flooding	1.00	Flooding	0.60

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
628A:						
Orion	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	0.60	Flooding	1.00	Flooding	0.60
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
	Runoff	0.40				
636A:						
Quarderer	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.60	Flooding	1.00	Flooding	0.60
	Too acid	0.08	Too acid	0.31	Too acid	0.31
646A:						
Dunnbot	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.60	Flooding	1.00	Flooding	0.60
	Filtering capacity	0.01	Filtering capacity	0.01	Filtering capacity	0.01
656A:						
Scotah	Somewhat limited		Very limited		Somewhat limited	
	Flooding	0.60	Flooding	1.00	Flooding	0.60
	Droughty	0.56	Droughty	0.56	Droughty	0.56
	Filtering capacity	0.01	Filtering capacity	0.01	Filtering capacity	0.01
766A:						
Moppet, occasionally flooded	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	0.86	Flooding	1.00	Too acid	1.00
			Too acid	1.00	Depth to saturated zone	0.86
	Too acid	0.62	Depth to saturated zone	0.86		
	Flooding	0.60			Flooding	0.60
804B2:						
Arland, dissected	Somewhat limited		Very limited		Somewhat limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Depth to bedrock	0.42
	Droughty	0.36	Depth to bedrock	0.42	Droughty	0.36
	Too acid	0.08	Droughty	0.36	Too acid	0.31
			Too acid	0.31	Too steep for surface application	0.08

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
804C2:						
Arland, dissected---	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.42	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	0.36	Depth to bedrock	0.42	Depth to bedrock	0.42
	Too acid	0.08	Droughty	0.36	Droughty	0.36
	Slope	0.04	Too acid	0.31	Too acid	0.31
			Slope	0.04	Too steep for sprinkler application	0.22
804D:						
Arland, dissected---	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Slope	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Too acid	1.00	Too acid	1.00
	Droughty	0.19	Depth to bedrock	0.42	Depth to bedrock	0.42
814D2:						
Renova, dissected---	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
	Too acid	0.03	Too acid	0.14	Restricted permeability	0.31
					Too acid	0.14
816B2:						
Vlasaty, dissected--	Very limited		Very limited		Very limited	
	Depth to dense layer	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.31	Restricted permeability	0.31
	Restricted permeability	0.41	Too acid	0.03	Too steep for surface application	0.08
	Too acid	0.01			Too acid	0.03
816C2:						
Vlasaty, dissected--	Very limited		Very limited		Very limited	
	Depth to dense layer	1.00	Depth to saturated zone	1.00	Too steep for surface application	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.31	Depth to saturated zone	1.00
	Restricted permeability	0.41	Slope	0.04	Restricted permeability	0.31
	Slope	0.04	Too acid	0.03	Too steep for sprinkler application	0.22
	Too acid	0.01			Too acid	0.03

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
826B2:						
Hersey	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
	Too acid	0.02	Too acid	0.07	Too steep for surface application	0.08
					Too acid	0.07
826C2:						
Hersey	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Too steep for surface application	1.00
	Slope	0.04	Too acid	0.07	Depth to saturated zone	0.46
	Too acid	0.02	Slope	0.04	Too steep for sprinkler application	0.22
					Too acid	0.07
828B:						
Vasa	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.41	Flooding	0.40	Restricted permeability	0.31
			Restricted permeability	0.31		
836B2:						
Spencer, dissected	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.75	Restricted permeability	0.61	Restricted permeability	0.61
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Depth to saturated zone	0.46
	Too acid	0.08	Too acid	0.31	Too acid	0.31
					Too steep for surface application	0.08
836C2:						
Spencer, dissected	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.75	Restricted permeability	0.61	Too steep for surface application	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.46	Restricted permeability	0.61
	Too acid	0.08	Too acid	0.31	Depth to saturated zone	0.46
	Slope	0.04	Slope	0.04	Too acid	0.31
					Too steep for sprinkler application	0.22
838B:						
Almena, dissected	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.75	Restricted permeability	0.61	Restricted permeability	0.61
	Too acid	0.08	Flooding	0.40	Too acid	0.31
			Too acid	0.31		

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
870B2:						
Santiago, dissected	Very limited		Somewhat limited		Somewhat limited	
	Depth to dense layer	1.00	Too acid	0.31	Too acid	0.31
	Too acid	0.08			Too steep for surface application	0.08
870C2:						
Santiago, dissected	Very limited		Somewhat limited		Very limited	
	Depth to dense layer	1.00	Too acid	0.31	Too steep for surface application	1.00
	Too acid	0.08	Slope	0.04	Too acid	0.31
	Slope	0.04			Too steep for sprinkler application	0.22
875B:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too acid	0.08	Too acid	0.31	Too acid	0.31
					Too steep for surface application	0.08
875C2:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too acid	0.08	Too acid	0.31	Too steep for surface application	1.00
	Slope	0.04	Slope	0.04	Too acid	0.31
					Too steep for sprinkler application	0.22
875D:						
Amery, dissected----	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.08	Too acid	0.31	Too steep for sprinkler application	1.00
					Too acid	0.31
1125F:						
Dorerton------------	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Too steep for surface application	1.00
	Too stony	0.76	Too acid	0.42	Too steep for sprinkler application	1.00
	Too acid	0.11	Droughty	0.04	Too acid	0.42
	Droughty	0.04			Droughty	0.04

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
1125F:						
Elbaville	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Restricted permeability	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.62	Restricted permeability	1.00	Restricted permeability	1.00
			Too acid	1.00	Too acid	1.00
1145F:						
Gaphill	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
			Too acid	1.00	Too acid	1.00
Rockbluff	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
	Droughty	0.41	Droughty	0.41	Droughty	0.41
1224F:						
Boone	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.62	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
Elevasil	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Too acid	1.00	Too acid	1.00
	Droughty	0.25	Depth to bedrock	0.42	Depth to bedrock	0.42

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
1233F:						
Boone---------------	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Droughty	1.00	Slope	1.00	Too steep for sprinkler application	1.00
	Too acid	0.62	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
Tarr----------------	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Leaching	0.45	Too acid	1.00	Too acid	1.00
	Droughty	0.24	Droughty	0.24	Droughty	0.24
1275F:						
Hayriver------------	Very limited		Very limited		Very limited	
	Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Filtering capacity	1.00	Low adsorption	1.00	Too steep for surface application	1.00
	Too acid	0.62	Slope	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Too acid	1.00	Too acid	1.00
	Droughty	0.23	Depth to bedrock	0.42	Depth to bedrock	0.42
Twinmound-----------	Not rated		Not rated		Not rated	
1648A:						
Northbend-----------	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Too acid	0.50	Too acid	1.00	Too acid	1.00
Ettrick, flood plain, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
	Runoff	0.40				

Table 21a.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value	Disposal of wastewater by irrigation: Rating class and limiting features	Value
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Droughty	0.26	Droughty	0.26	Droughty	0.26
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Runoff	0.40				
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 21b.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Ponding	1.00	Filtering capacity	1.00
	Ponding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	0.69	Flooding	1.00
	Too acid	0.07			Too acid	0.07
20A:						
Palms, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.07
	Too acid	0.07				
Houghton, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	0.69	Too acid	0.07
	Too acid	0.07				
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Seepage	1.00	Restricted permeability	0.69	Depth to saturated zone	1.00
	Too acid	0.07			Too acid	0.07
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	0.69	Too acid	0.07
	Too acid	0.07				
45A:						
Seelyeville, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	0.69	Too acid	0.07
	Too acid	0.07				

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
45A:						
Cathro, undrained	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.07
	Too acid	0.07				
101B:						
Menahga, valley train	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
101C:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50			Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
101E:						
Menahga, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
115B2:						
Seaton	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
115C2:						
Seaton	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
115D2:						
Seaton	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
115E2:						
Seaton	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
116C2:						
Churchtown	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07
116D2:						
Churchtown	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
116E2:						
Churchtown	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
125B2:						
Pepin	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.98
	Too acid	0.07	Depth to bedrock	1.00	Too steep for surface application	0.08
					Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
125C2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Depth to bedrock	1.00	Restricted permeability	0.98
	Too acid	0.07	Slope	1.00	Too steep for sprinkler application	0.50
					Too acid	0.07
125D2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07	Depth to bedrock	1.00	Restricted permeability	0.98
					Too acid	0.07
125E2:						
Pepin---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07	Depth to bedrock	1.00	Restricted permeability	0.98
					Too acid	0.07
135C2:						
Wickware------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
135D2:						
Wickware------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
135E2:						
Wickware------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31
136B:						
Doritty-------------	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.31
	Too acid	0.31				
136C2:						
Doritty-------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
144B2:						
NewGlarus-----------	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.98
	Depth to bedrock	0.42	Depth to bedrock	1.00	Depth to bedrock	0.42
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
144C2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Depth to bedrock	1.00	Restricted permeability	0.98
	Depth to bedrock	0.42	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Depth to bedrock	0.42
					Too acid	0.07
144D2:						
NewGlarus-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Depth to bedrock	1.00	Restricted permeability	0.98
	Too acid	0.07			Depth to bedrock	0.42
					Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
144E2:						
NewGlarus	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Depth to bedrock	0.42	Depth to bedrock	1.00	Restricted permeability	0.98
	Too acid	0.07			Depth to bedrock	0.42
					Too acid	0.07
161E:						
Fivepoints	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
208A:						
Siouxcreek	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too acid	0.31
	Too acid	0.31			Filtering capacity	0.01
213B2:						
Hixton	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07
213C2:						
Hixton	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
224B:						
Elevasil	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too acid	0.31
	Too acid	0.31			Too steep for surface application	0.08
					Filtering capacity	0.01
224C2:						
Elevasil	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
					Filtering capacity	0.01
224D2:						
Elevasil	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31
					Filtering capacity	0.01
224E2:						
Elevasil	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31
					Filtering capacity	0.01
233C:						
Boone	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.31			Too steep for sprinkler application	0.94
					Too acid	0.31

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
243B2:						
Hixton, thin solum--	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00		
243C2:						
Hixton, thin solum--	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
244B:						
Elkmound------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too acid	0.77
	Too acid	0.77				
244C2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too acid	0.77	Slope	1.00	Too acid	0.77
	Too steep for surface application	0.50			Too steep for sprinkler application	0.50
244D2:						
Elkmound------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.77			Too acid	0.77
254B2:						
Norden--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07
254C2:						
Norden--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
254D2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
254E2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
254F:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
255B2:						
Urne	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07
255C2:						
Urne	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255D2:						
Urne----------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
255E2:						
Urne----------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
255F:						
Urne----------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
265B:						
Garne---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00			Depth to bedrock	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
265C:						
Garne---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
	Too steep for surface application	0.50			Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
266B:						
Hiles---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too acid	0.31
	Too acid	0.31	Too acid	0.21		
268A:						
Kert----------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too acid	0.31
	Too acid	0.31	Too acid	0.21		
269A:						
Veedum, undrained---	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.07
	Too acid	0.07	Too acid	0.03		
273B2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07
Hixton, frigid------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07
273C2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
273C2:						
Hixton, frigid------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07
273D2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
Hixton, frigid------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
273E2:						
Dobie---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
Hixton, frigid------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
275B2:						
Hayriver------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too acid	0.31
	Too acid	0.31			Too steep for surface application	0.08

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
275B2:						
Elevasil, frigid----	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too acid	0.31
	Too acid	0.31			Too steep for surface application	0.08
					Filtering capacity	0.01
275C2:						
Hayriver------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
Elevasil, frigid----	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
					Filtering capacity	0.01
275D2:						
Hayriver------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31
Elevasil, frigid----	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
	Too acid	0.31			Too acid	0.31
					Filtering capacity	0.01

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
276B:						
Humbird, loamy subsoil	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too acid	0.31
	Too acid	0.31	Too acid	0.21		
278A:						
Merrillan, loamy subsoil	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too acid	0.31
	Too acid	0.31	Too acid	0.21		
282C:						
Twinmound	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.77			Too steep for sprinkler application	0.94
					Too acid	0.77
282F:						
Twinmound	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
313D2:						
Plumcreek	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
313F:						
Plumcreek	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.07			Too acid	0.07
316B2:						
Ella	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.07
	Too acid	0.07				
316C2:						
Ella	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.07			Too acid	0.07
318A:						
Bearpen	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Too acid	0.07
	Flooding	0.40				
	Too acid	0.07				
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Filtering capacity	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Too acid	0.31			Too acid	0.31
378A:						
Poskin, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Too acid	0.31			Too acid	0.31
403A:						
Dakota	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
413A:						
Rasset	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
413B:						
Rasset	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
416A:						
Menomin	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Too acid	0.07	Restricted permeability	1.00	Too acid	0.07
423A:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
423B2:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
423C2:						
Meridian	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
428A:						
Shiffer	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Flooding	0.40				
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Filtering capacity	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Too acid	0.42			Too acid	0.42
	Flooding	0.40				

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432A:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
432B:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
432C2:						
Kevilar	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
432D2:						
Kevilar	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	1.00
					Too acid	0.07
433A:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
433B:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
433C2:						
Forkhorn	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
433D2:						
Forkhorn	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	1.00
					Too acid	0.07
434B:						
Bilson	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
436A:						
Rusktown	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Too acid	0.07	Restricted permeability	0.61	Too acid	0.07
438A:						
Hoopeston	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.61	Depth to saturated zone	1.00
	Too acid	0.42			Too acid	0.42
453A:						
Burkhardt	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.42			Too acid	0.42
453B:						
Burkhardt	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.42			Too acid	0.42
					Too steep for surface application	0.08

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
454B:						
Chetek, kame terrace	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
454C2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
454D2:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	1.00
					Too acid	0.07
454E:						
Chetek, kame terrace	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
468A:						
Oesterle, valley train--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.61	Depth to saturated zone	1.00
	Too acid	0.77			Too acid	0.77
501A:						
Finchford-----------	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
501B:						
Finchford	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
502B2:						
Chelsea	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
502C2:						
Chelsea	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.94
					Too acid	0.07
506A:						
Komro	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
508A:						
Farrington	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00			Depth to saturated zone	1.00
	Too acid	0.07			Too acid	0.07
510B:						
Boplain	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00			Depth to bedrock	1.00
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
510C:						
Boplain	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.94
					Too acid	0.07
511A:						
Plainfield	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
511B:						
Plainfield	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
511C:						
Plainfield	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.94
					Too acid	0.07
511F:						
Plainfield	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
512B:						
Drammen	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.31	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
512C:						
Drammen	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.50	Restricted permeability	0.31	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	0.50
					Too acid	0.07
512D:						
Drammen	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
	Too acid	0.07			Too steep for sprinkler application	1.00
					Too acid	0.07
516A:						
Aldo	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Too acid	0.07			Too acid	0.07
546A:						
Prissel	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Depth to saturated zone	0.46
	Too acid	0.07			Too acid	0.07
546B:						
Prissel	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Depth to saturated zone	0.46
	Too acid	0.07			Too steep for surface application	0.08
					Too acid	0.07
546C:						
Prissel	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	0.94	Restricted permeability	0.61	Too steep for surface application	1.00
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Too steep for sprinkler application	0.94
	Too acid	0.07			Depth to saturated zone	0.46
					Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
546F:						
Prissel	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	1.00	Depth to saturated zone	0.47	Too steep for sprinkler application	1.00
	Depth to saturated zone	0.46			Too acid	1.00
					Depth to saturated zone	0.46
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Filtering capacity	1.00
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
561B:						
Tarr	Very limited		Not limited		Very limited	
	Seepage	1.00			Filtering capacity	1.00
	Too acid	0.31			Too acid	0.31
					Too steep for surface application	0.08
566A:						
Tint	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Too acid	0.77			Too acid	0.77
573B:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00			Depth to bedrock	1.00
	Too acid	0.77			Too acid	0.77
573C:						
Plainbo, sand sheet	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
	Too steep for surface application	0.94			Too steep for surface application	1.00
	Too acid	0.77			Too steep for sprinkler application	0.94
					Too acid	0.77

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
588A:						
Meehan, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Depth to saturated zone	1.00			Depth to saturated zone	1.00
	Too acid	0.85			Too acid	0.85
589A:						
Newson, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Filtering capacity	1.00
	Too acid	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00			Depth to saturated zone	1.00
	Depth to saturated zone	1.00			Too acid	1.00
601C:						
Beavercreek	Very limited		Very limited		Very limited	
	Flooding	1.00	Cobble content	1.00	Too steep for surface application	1.00
	Seepage	1.00	Slope	1.00	Flooding	0.60
	Cobble content	1.00	Flooding	0.60	Too steep for sprinkler application	0.22
	Too steep for surface application	0.22	Restricted permeability	0.31	Filtering capacity	0.01
616B:						
Chaseburg	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Restricted permeability	1.00	Flooding	0.60
	Seepage	1.00	Flooding	0.60		
619A:						
Vancecreek, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Seepage	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Too acid	0.42
	Too acid	0.42				
626A:						
Arenzville	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	0.60
	Seepage	1.00	Restricted permeability	1.00		
			Flooding	0.60		
628A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Restricted permeability	1.00	Flooding	0.60
	Depth to saturated zone	1.00	Flooding	0.60		

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Seepage	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Restricted permeability	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	0.21
636A:						
Quarderer	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	0.60
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.31
	Too acid	0.31	Flooding	0.60		
646A:						
Dunnbot	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	0.60
	Seepage	1.00	Restricted permeability	0.61	Filtering capacity	0.01
			Flooding	0.60		
656A:						
Scotah	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	0.60
	Seepage	1.00	Flooding	0.60	Filtering capacity	0.01
766A:						
Moppet, occasionally flooded	Very limited		Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
	Seepage	1.00	Restricted permeability	1.00	Too acid	1.00
	Too acid	1.00	Flooding	0.60	Depth to saturated zone	0.86
	Depth to	0.86	Too acid	0.03	Flooding	0.60
804B2:						
Arland, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Restricted permeability	0.61	Too acid	0.31
	Too acid	0.31			Too steep for surface application	0.08
804C2:						
Arland, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Restricted permeability	0.61	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
804D:						
Arland, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
814D2:						
Renova, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.14			Restricted permeability	0.21
					Too acid	0.14
816B2:						
Vlasaty, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	0.21
	Too acid	0.03			Too steep for surface application	0.08
					Too acid	0.03
816C2:						
Vlasaty, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
	Too steep for surface application	0.50	Depth to saturated zone	1.00	Too steep for sprinkler application	0.50
	Too acid	0.03			Restricted permeability	0.21
					Too acid	0.03
826B2:						
Hersey	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Depth to saturated zone	0.46
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Too steep for surface application	0.08
	Too acid	0.07			Too acid	0.07

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
826C2:						
Hersey	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Depth to saturated zone	0.46
	Too acid	0.07			Too acid	0.07
828B:						
Vasa	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	0.21
	Flooding	0.40				
836B2:						
Spencer, dissected	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Depth to saturated zone	0.46
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Restricted permeability	0.43
	Too acid	0.31			Too acid	0.31
					Too steep for surface application	0.08
836C2:						
Spencer, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Depth to saturated zone	0.46	Depth to saturated zone	0.47	Depth to saturated zone	0.46
	Too acid	0.31			Restricted permeability	0.43
					Too acid	0.31
838B:						
Almena, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	0.43
	Flooding	0.40			Too acid	0.31
	Too acid	0.31				
870B2:						
Santiago, dissected	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Restricted permeability	1.00	Too acid	0.31
	Too acid	0.31			Too steep for surface application	0.08

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
870C2:						
Santiago, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
	Too acid	0.31			Too acid	0.31
875B:						
Amery, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too acid	0.31			Too acid	0.31
					Too steep for surface application	0.08
875C2:						
Amery, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Too steep for surface application	0.50	Slope	1.00	Too steep for surface application	1.00
	Too acid	0.31			Too steep for sprinkler application	0.50
					Too acid	0.31
875D:						
Amery, dissected	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
	Too acid	0.31			Restricted permeability	1.00
					Too acid	0.31
1125F:						
Dorerton	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
	Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
	Too acid	0.42	Restricted permeability	1.00	Too acid	0.42
	Cobble content	0.29	Cobble content	0.72	Depth to bedrock	0.01
	Depth to bedrock	0.01	Stone content	0.08		

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
1125F:						
Elbaville-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
	Too acid	1.00	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
			Cobble content	0.27	Too acid	1.00
					Restricted permeability	0.96
1145F:						
Gaphill-------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too acid	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
					Too acid	1.00
Rockbluff-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
1224F:						
Boone---------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
Elevasil------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater: Rating class and limiting features	Value	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
1233F:						
Boone	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
Tarr	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Too steep for surface application	1.00			Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
1275F:						
Hayriver	Very limited		Very limited		Very limited	
	Seepage	1.00	Slope	1.00	Filtering capacity	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for surface application	1.00
	Too acid	1.00			Too steep for sprinkler application	1.00
					Too acid	1.00
Twinmound	Very limited		Very limited		Not rated	
	Seepage	1.00	Slope	1.00		
	Depth to bedrock	1.00	Depth to bedrock	1.00		
	Too steep for surface application	1.00				
	Too acid	1.00				
1648A:						
Northbend	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Filtering capacity	1.00
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Flooding	1.00
	Too acid	1.00			Too acid	1.00
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Seepage	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Restricted permeability	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Restricted permeability	0.21

Table 21b.--Agricultural Waste Management--Continued

Map symbol and soil name	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Filtering capacity	1.00
	Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.31	Flooding	1.00
			permeability	0.31		
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Flooding	1.00	Ponding	1.00	Filtering capacity	1.00
	Seepage	1.00	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	1.00	Flooding	1.00
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 22a.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
11A:				
Markey, flood plain, undrained	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.64
20A:				
Palms, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Houghton, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
40A:				
Markey, undrained	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.50
Seelyeville, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
45A:				
Seelyeville, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Cathro, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
101B:				
Menahga, valley train	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.72
	Thickest layer	0.00	Bottom layer	0.86
101C:				
Menahga, valley train	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.72
	Thickest layer	0.00	Bottom layer	0.86
101E:				
Menahga, valley train	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.72
	Thickest layer	0.00	Bottom layer	0.86

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
115B2:				
Seaton---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
115C2:				
Seaton---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
115D2:				
Seaton---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
115E2:				
Seaton---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
116C2:				
Churchtown-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
116D2:				
Churchtown-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
116E2:				
Churchtown-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
125B2:				
Pepin----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
125C2:				
Pepin----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
125D2:				
Pepin----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
125E2:				
Pepin----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
135C2:				
Wickware-------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
135D2:				
Wickware------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
135E2:				
Wickware------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
136B:				
Doritty-------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
136C2:				
Doritty-------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
144B2:				
NewGlarus-----------	Fair		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.01	Thickest layer	0.00
144C2:				
NewGlarus-----------	Fair		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.01	Thickest layer	0.00
144D2:				
NewGlarus-----------	Fair		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.01	Thickest layer	0.00
144E2:				
NewGlarus-----------	Fair		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.01	Thickest layer	0.00
161E:				
Fivepoints----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
208A:				
Siouxcreek----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
213B2:				
Hixton--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
213C2:				
Hixton--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
224B:				
Elevasil------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.04
224C2:				
Elevasil------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.04
224D2:				
Elevasil------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.04
224E2:				
Elevasil------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.04
233C:				
Boone---------------	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.00	Bottom layer	0.86
243B2:				
Hixton, thin solum--	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
243C2:				
Hixton, thin solum--	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
244B:				
Elkmound------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
244C2:				
Elkmound------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
244D2:				
Elkmound------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
254B2:				
Norden--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
254C2:				
Norden--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
254D2:				
Norden--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
254E2:				
Norden--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
254F:				
Norden--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
255B2:				
Urne----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
255C2:				
Urne----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
255D2:				
Urne----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
255E2:				
Urne----------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
255F:				
Urne----------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
265B:				
Garne---------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.69
265C:				
Garne---------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.69
266B:				
Hiles---------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
268A:				
Kert----------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
269A:				
Veedum, undrained---	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
273B2:				
Dobie---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Hixton, frigid------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
273C2:				
Dobie---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Hixton, frigid------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
273D2:				
Dobie---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Hixton, frigid------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
273E2:				
Dobie---------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Hixton, frigid------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
275B2:				
Hayriver------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Elevasil, frigid----	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
275C2:				
Hayriver------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Elevasil, frigid----	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
275D2:				
Hayriver------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Elevasil, frigid----	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
276B:				
Humbird, loamy subsoil-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
278A:				
Merrillan, loamy subsoil-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
282C:				
Twinmound-----------	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.36
282F:				
Twinmound-----------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.07
	Thickest layer	0.00	Bottom layer	0.36
313D2:				
Plumcreek-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
313F:				
Plumcreek-----------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
316B2:				
Ella----------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
316C2:				
Ella----------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
318A:				
Bearpen-------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
349A:				
Rib, valley train, undrained----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.08	Bottom layer	0.86

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel: Rating class	Value	Potential as source of sand: Rating class	Value
378A:				
Poskin, valley train	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.08	Bottom layer	0.86
403A:				
Dakota	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.16	Bottom layer	0.54
413A:				
Rasset	Fair		Fair	
	Bottom layer	0.16	Thickest layer	0.19
	Thickest layer	0.16	Bottom layer	0.50
413B:				
Rasset	Fair		Fair	
	Bottom layer	0.16	Thickest layer	0.19
	Thickest layer	0.16	Bottom layer	0.50
416A:				
Menomin	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.10
	Thickest layer	0.00	Bottom layer	0.54
423A:				
Meridian	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.08	Bottom layer	0.54
423B2:				
Meridian	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.08	Bottom layer	0.54
423C2:				
Meridian	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.08	Bottom layer	0.54
428A:				
Shiffer	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.64
429A:				
Lows, undrained	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.64
432A:				
Kevilar	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.66
432B:				
Kevilar	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.66

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
432C2:				
Kevilar-------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.66
432D2:				
Kevilar-------------	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.66
433A:				
Forkhorn------------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.16	Bottom layer	0.46
433B:				
Forkhorn------------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.16	Bottom layer	0.46
433C2:				
Forkhorn------------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.16	Bottom layer	0.46
433D2:				
Forkhorn------------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.16	Bottom layer	0.46
434B:				
Bilson--------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.04
	Thickest layer	0.00	Bottom layer	0.12
436A:				
Rusktown------------	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.46
438A:				
Hoopeston-----------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.10
	Thickest layer	0.00	Bottom layer	0.64
453A:				
Burkhardt-----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.24	Bottom layer	0.86
453B:				
Burkhardt-----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.24	Bottom layer	0.86
454B:				
Chetek, kame terrace	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.20	Bottom layer	0.77

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
454C2:				
Chetek, kame terrace	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.20	Bottom layer	0.77
454D2:				
Chetek, kame terrace	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.20	Bottom layer	0.77
454E:				
Chetek, kame terrace	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.20	Bottom layer	0.77
468A:				
Oesterle, valley train	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.16	Bottom layer	0.86
501A:				
Finchford	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.21
	Bottom layer	0.16	Bottom layer	0.50
501B:				
Finchford	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.21
	Bottom layer	0.16	Bottom layer	0.50
502B2:				
Chelsea	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.11
	Thickest layer	0.00	Thickest layer	0.12
502C2:				
Chelsea	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.11
	Thickest layer	0.00	Thickest layer	0.12
506A:				
Komro	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.76
	Thickest layer	0.00	Bottom layer	0.84
508A:				
Farrington	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.11
	Thickest layer	0.00	Bottom layer	0.50
510B:				
Boplain	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.34
	Thickest layer	0.00	Bottom layer	0.75
510C:				
Boplain	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.34
	Thickest layer	0.00	Bottom layer	0.75

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
511A:				
Plainfield----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.72
	Bottom layer	0.16	Bottom layer	0.86
511B:				
Plainfield----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.72
	Bottom layer	0.16	Bottom layer	0.86
511C:				
Plainfield----------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.72
	Bottom layer	0.16	Bottom layer	0.86
511F:				
Plainfield----------	Fair		Fair	
	Thickest layer	0.00	Bottom layer	0.58
	Bottom layer	0.16	Thickest layer	0.72
512B:				
Drammen-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.69
	Thickest layer	0.00	Bottom layer	0.82
512C:				
Drammen-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.69
	Thickest layer	0.00	Bottom layer	0.82
512D:				
Drammen-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.69
	Thickest layer	0.00	Bottom layer	0.82
516A:				
Aldo----------------	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.69
	Bottom layer	0.16	Bottom layer	0.86
546A:				
Prissel-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.75
546B:				
Prissel-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.75
546C:				
Prissel-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.75
546F:				
Prissel-------------	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.75

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
555A:				
Fordum, frequently flooded	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.16	Bottom layer	0.53
561B:				
Tarr	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.59
	Thickest layer	0.00	Bottom layer	0.91
566A:				
Tint	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.51
	Thickest layer	0.00	Bottom layer	0.82
573B:				
Plainbo, sand sheet	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.39
	Thickest layer	0.00	Bottom layer	0.72
573C:				
Plainbo, sand sheet	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.39
	Thickest layer	0.00	Bottom layer	0.72
588A:				
Meehan, valley train	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.39
	Thickest layer	0.00	Bottom layer	0.82
589A:				
Newson, undrained	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.70
	Thickest layer	0.00	Thickest layer	0.72
601C:				
Beavercreek	Poor		Poor	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.00
616B:				
Chaseburg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
619A:				
Vancecreek, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
626A:				
Arenzville	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
628A:				
Orion	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel: Rating class	Value	Potential as source of sand: Rating class	Value
629A:				
Ettrick, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
636A:				
Quarderer	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
646A:				
Dunnbot	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
656A:				
Scotah	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.13
	Bottom layer	0.16	Bottom layer	0.76
766A:				
Moppet, occasionally flooded	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.42
804B2:				
Arland, dissected	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
804C2:				
Arland, dissected	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
804D:				
Arland, dissected	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
814D2:				
Renova, dissected	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
816B2:				
Vlasaty, dissected	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
816C2:				
Vlasaty, dissected	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
826B2:				
Hersey	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
826C2:				
Hersey--------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
828B:				
Vasa----------------	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
836B2:				
Spencer, dissected--	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.02
836C2:				
Spencer, dissected--	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.02
838B:				
Almena, dissected---	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.02
870B2:				
Santiago, dissected	Fair		Fair	
	Bottom layer	0.00	Bottom layer	0.02
	Thickest layer	0.01	Thickest layer	0.03
870C2:				
Santiago, dissected	Fair		Fair	
	Bottom layer	0.00	Bottom layer	0.02
	Thickest layer	0.01	Thickest layer	0.03
875B:				
Amery, dissected----	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.02
	Thickest layer	0.00	Thickest layer	0.03
875C2:				
Amery, dissected----	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.02
	Thickest layer	0.00	Thickest layer	0.03
875D:				
Amery, dissected----	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.02
	Thickest layer	0.00	Thickest layer	0.03
1125F:				
Dorerton------------	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
Elbaville-----------	Poor		Poor	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.00
1145F:				
Gaphill-------------	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.04
	Bottom layer	0.00	Bottom layer	0.75

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel: Rating class	Value	Potential as source of sand: Rating class	Value
1145F:				
Rockbluff	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.51
	Thickest layer	0.00	Bottom layer	0.86
1224F:				
Boone	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.21
	Bottom layer	0.00	Bottom layer	0.86
Elevasil	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.04
	Thickest layer	0.00	Thickest layer	0.04
1233F:				
Boone	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.21
	Bottom layer	0.00	Bottom layer	0.86
Tarr	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.59
	Thickest layer	0.00	Bottom layer	0.91
1275F:				
Hayriver	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Twinmound	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.07
	Thickest layer	0.00	Bottom layer	0.36
1648A:				
Northbend	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.75
Ettrick, flood plain, undrained	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
1658A:				
Algansee	Fair		Fair	
	Thickest layer	0.00	Thickest layer	0.07
	Bottom layer	0.01	Bottom layer	0.10
Kalmarville, undrained	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.17
2002:				
Udorthents, earthen dams	Not rated		Not rated	
2003A:				
Riverwash	Not rated		Not rated	
2013:				
Pits, gravel	Not rated		Not rated	

Table 22a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
2014:				
Pits, quarry, hard bedrock	Not rated		Not rated	
2016:				
Pits, quarry, soft bedrock	Not rated		Not rated	
2030:				
Udorthents, cut or fill	Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated	
2050:				
Landfill	Not rated		Not rated	
M-W:				
Miscellaneous water	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 22b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Poor		Poor		Poor	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50			Content of organic matter	0.00
	Too acid	0.84				
20A:						
Palms, undrained	Poor		Not rated		Poor	
	Wind erosion	0.00			Depth to saturated zone	0.00
	Too acid	0.97			Content of organic matter	0.00
Houghton, undrained	Poor		Poor		Poor	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too acid	0.97			Content of organic matter	0.00
40A:						
Markey, undrained	Poor		Poor		Poor	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50			Content of organic matter	0.00
	Too acid	0.84				
Seelyeville, undrained	Poor		Poor		Poor	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too acid	0.88			Content of organic matter	0.00
45A:						
Seelyeville, undrained	Not rated		Poor		Not rated	
			Depth to saturated zone	0.00		
Cathro, undrained	Poor		Poor		Poor	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too acid	0.97			Content of organic matter	0.00

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
101B:						
Menahga, valley train	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Droughty	0.81				
	Too acid	0.84				
101C:						
Menahga, valley train	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.96
	Low content of organic matter	0.12				
	Droughty	0.81				
	Too acid	0.84				
101E:						
Menahga, valley train	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.32	Too sandy	0.00
	Wind erosion	0.00			Slope	0.00
	Low content of organic matter	0.12				
	Too acid	0.50				
	Droughty	0.98				
115B2:						
Seaton	Fair		Poor		Good	
	Low content of organic matter	0.12	Low strength	0.00		
			Shrink-swell	0.94		
	Water erosion	0.68				
	Too acid	0.97				
115C2:						
Seaton	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.96
			Shrink-swell	0.94		
	Water erosion	0.68				
	Too acid	0.97				
115D2:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
			Shrink-swell	0.94		
	Water erosion	0.68	Slope	0.98		
	Too acid	0.97				
115E2:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
			Low strength	0.00		
	Water erosion	0.68	Shrink-swell	0.94		
	Too acid	0.97				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
116C2:						
Churchtown----------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.96
	Water erosion	0.90				
	Too acid	0.97				
116D2:						
Churchtown----------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
			Slope	0.98		
	Water erosion	0.90				
	Too acid	0.97				
116E2:						
Churchtown----------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
			Low strength	0.00		
	Water erosion	0.90				
	Too acid	0.97				
125B2:						
Pepin---------------	Fair		Poor		Good	
	Low content of organic matter	0.12	Low strength	0.00		
			Shrink-swell	0.77		
	Water erosion	0.68				
	Too acid	0.84				
125C2:						
Pepin---------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.96
			Shrink-swell	0.77		
	Water erosion	0.68				
	Too acid	0.84				
125D2:						
Pepin---------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
			Shrink-swell	0.77		
	Water erosion	0.68	Slope	0.98		
	Too acid	0.84				
125E2:						
Pepin---------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
			Low strength	0.00		
	Water erosion	0.68	Shrink-swell	0.77		
	Too acid	0.84				
135C2:						
Wickware------------	Fair		Fair		Fair	
	Low content of organic matter	0.12	Low strength	0.22	Slope	0.96
	Water erosion	0.68				
	Too acid	0.68				
135D2:						
Wickware------------	Fair		Fair		Poor	
	Low content of organic matter	0.12	Low strength	0.22	Slope	0.00
			Slope	0.98		
	Water erosion	0.68				
	Too acid	0.68				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
135E2:						
Wickware------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Water erosion	0.68	Low strength	0.22		
	Too acid	0.68				
136B:						
Doritty-------------	Fair		Poor		Good	
	Low content of organic matter	0.12	Low strength	0.00		
	Too acid	0.68	Shrink-swell	0.99		
	Water erosion	0.90				
136C2:						
Doritty-------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.96
	Too acid	0.68	Shrink-swell	0.99		
	Water erosion	0.90				
144B2:						
NewGlarus-----------	Poor		Poor		Poor	
	Too clayey	0.00	Low strength	0.00	Too clayey	0.00
	Low content of organic matter	0.12	Depth to bedrock	0.58	Hard to reclaim	0.32
	Water erosion	0.68	Shrink-swell	0.96	Rock fragments	0.50
	Too acid	0.68				
144C2:						
NewGlarus-----------	Poor		Poor		Poor	
	Too clayey	0.00	Low strength	0.00	Too clayey	0.00
	Low content of organic matter	0.12	Depth to bedrock	0.58	Hard to reclaim	0.32
	Water erosion	0.68	Shrink-swell	0.96	Rock fragments	0.50
	Too acid	0.68			Slope	0.96
144D2:						
NewGlarus-----------	Poor		Poor		Poor	
	Too clayey	0.00	Low strength	0.00	Too clayey	0.00
	Low content of organic matter	0.12	Depth to bedrock	0.58	Slope	0.00
	Water erosion	0.68	Shrink-swell	0.96	Hard to reclaim	0.32
	Too acid	0.68	Slope	0.98	Rock fragments	0.50
144E2:						
NewGlarus-----------	Poor		Poor		Poor	
	Too clayey	0.00	Slope	0.00	Slope	0.00
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
	Water erosion	0.68	Depth to bedrock	0.58	Hard to reclaim	0.32
	Too acid	0.68	Shrink-swell	0.96	Rock fragments	0.50
161E:						
Fivepoints----------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Droughty	0.44	Slope	0.00	Rock fragments	0.00
	Too acid	0.50	Shrink-swell	0.92	Depth to bedrock	0.54
	Depth to bedrock	0.54				
	Water erosion	0.99				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
208A:						
Siouxcreek----------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to saturated zone	0.14
	Too acid	0.54	Depth to saturated zone	0.14	Depth to bedrock	0.58
	Depth to bedrock	0.58			Rock fragments	0.88
	Droughty	0.98			Too acid	0.98
	Water erosion	0.99				
213B2:						
Hixton--------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58				
	Too acid	0.68				
	Water erosion	0.90				
	Droughty	0.98				
213C2:						
Hixton--------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
					Slope	0.96
	Depth to bedrock	0.58				
	Too acid	0.68				
	Water erosion	0.90				
	Droughty	0.98				
224B:						
Elevasil------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Droughty	0.40				
	Depth to bedrock	0.58				
	Too acid	0.68				
224C2:						
Elevasil------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
					Slope	0.96
	Droughty	0.40				
	Depth to bedrock	0.58				
	Too acid	0.68				
224D2:						
Elevasil------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Slope	0.98	Depth to bedrock	0.58
	Droughty	0.40				
	Depth to bedrock	0.58				
	Too acid	0.68				
224E2:						
Elevasil------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Slope	0.00	Depth to bedrock	0.58
	Droughty	0.40				
	Depth to bedrock	0.58				
	Too acid	0.68				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
233C:						
Boone---------------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to bedrock	0.58
	Droughty	0.00			Slope	0.63
	Low content of organic matter	0.12			Rock fragments	0.88
	Depth to bedrock	0.58				
	Too acid	0.68				
243B2:						
Hixton, thin solum--	Fair		Poor		Fair	
	Depth to bedrock	0.01	Depth to bedrock	0.00	Depth to bedrock	0.01
	Droughty	0.28				
	Too acid	0.50				
	Water erosion	0.90				
243C2:						
Hixton, thin solum--	Fair		Poor		Fair	
	Depth to bedrock	0.01	Depth to bedrock	0.00	Depth to bedrock	0.01
	Droughty	0.28			Slope	0.96
	Too acid	0.50				
	Water erosion	0.90				
244B:						
Elkmound------------	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00			Rock fragments	0.88
	Too acid	0.50				
244C2:						
Elkmound------------	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00			Rock fragments	0.88
	Too acid	0.50			Slope	0.96
244D2:						
Elkmound------------	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00	Slope	0.98	Slope	0.00
	Too acid	0.50			Rock fragments	0.88
254B2:						
Norden--------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54				
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
254C2:						
Norden--------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54			Slope	0.96
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
254D2:						
Norden	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.98	Depth to bedrock	0.58
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
254E2:						
Norden	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
254F:						
Norden	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.50	Slope	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58				
	Water erosion	0.90				
255B2:						
Urne	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54			Rock fragments	0.88
	Depth to bedrock	0.58				
	Droughty	0.77				
255C2:						
Urne	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54			Rock fragments	0.88
	Depth to bedrock	0.58			Slope	0.96
	Droughty	0.77				
255D2:						
Urne	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.98	Depth to bedrock	0.58
	Depth to bedrock	0.58			Rock fragments	0.88
	Droughty	0.77				
255E2:						
Urne	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58			Rock fragments	0.88
	Droughty	0.77				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
255F:						
Urne----------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58			Rock fragments	0.88
	Droughty	0.73				
265B:						
Garne---------------	Poor		Poor		Fair	
	Wind erosion	0.00	Depth to bedrock	0.00	Too sandy	0.26
	Droughty	0.02			Depth to bedrock	0.58
	Too sandy	0.26				
	Too acid	0.54				
	Depth to bedrock	0.58				
265C:						
Garne---------------	Poor		Poor		Fair	
	Wind erosion	0.00	Depth to bedrock	0.00	Too sandy	0.26
	Droughty	0.02			Depth to bedrock	0.58
	Too sandy	0.26			Slope	0.96
	Too acid	0.54				
	Depth to bedrock	0.58				
266B:						
Hiles---------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Too acid	0.50
	Too acid	0.50	Depth to saturated zone	0.53	Rock fragments	0.50
	Depth to bedrock	0.58	Shrink-swell	0.91	Depth to saturated zone	0.53
	Water erosion	0.90			Depth to bedrock	0.58
	Droughty	0.98				
268A:						
Kert----------------	Fair		Poor		Fair	
	Too acid	0.50	Depth to bedrock	0.00	Depth to saturated zone	0.14
	Depth to bedrock	0.58	Low strength	0.00	Depth to bedrock	0.58
	Low content of organic matter	0.88	Depth to saturated zone	0.14	Too acid	0.98
	Water erosion	0.90	Shrink-swell	0.87		
269A:						
Veedum, undrained---	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to saturated zone	0.00
	Too acid	0.50	Depth to saturated zone	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58	Low strength	0.00	Too acid	0.76
	Water erosion	0.90	Shrink-swell	0.98		
273B2:						
Dobie---------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54	Low strength	0.22		
	Depth to bedrock	0.58	Shrink-swell	0.96		
	Water erosion	0.90				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
273B2:						
Hixton, frigid------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54				
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
273C2:						
Dobie---------------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
			Low strength	0.22	Slope	0.96
	Too acid	0.54	Shrink-swell	0.96		
	Depth to bedrock	0.58				
	Water erosion	0.90				
Hixton, frigid------	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
					Slope	0.96
	Too acid	0.54				
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
273D2:						
Dobie---------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Low strength	0.22	Depth to bedrock	0.58
	Too acid	0.54	Shrink-swell	0.96		
	Depth to bedrock	0.58	Slope	0.98		
	Water erosion	0.90				
Hixton, frigid------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Slope	0.98	Depth to bedrock	0.58
	Too acid	0.54				
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				
273E2:						
Dobie---------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Slope	0.00	Depth to bedrock	0.58
	Too acid	0.54	Low strength	0.22		
	Depth to bedrock	0.58	Shrink-swell	0.96		
	Water erosion	0.90				
Hixton, frigid------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
			Slope	0.00	Depth to bedrock	0.58
	Too acid	0.54				
	Depth to bedrock	0.58				
	Water erosion	0.90				
	Droughty	0.99				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
275B2:						
Hayriver	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.50
	Droughty	0.53			Depth to bedrock	0.58
	Too acid	0.54			Too acid	0.98
	Depth to bedrock	0.58				
Elevasil, frigid	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54				
	Droughty	0.55				
	Depth to bedrock	0.58				
275C2:						
Hayriver	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.50
	Droughty	0.53			Depth to bedrock	0.58
	Too acid	0.54			Slope	0.96
	Depth to bedrock	0.58			Too acid	0.98
Elevasil, frigid	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.58
	Too acid	0.54			Slope	0.96
	Droughty	0.55				
	Depth to bedrock	0.58				
275D2:						
Hayriver	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Droughty	0.53	Slope	0.98	Rock fragments	0.50
	Too acid	0.54			Depth to bedrock	0.58
	Depth to bedrock	0.58			Too acid	0.98
Elevasil, frigid	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.54	Slope	0.98	Depth to bedrock	0.58
	Droughty	0.55				
	Depth to bedrock	0.58				
276B:						
Humbird, loamy subsoil	Fair		Poor		Fair	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Too acid	0.50
	Droughty	0.23	Low strength	0.00	Rock fragments	0.50
	Too acid	0.50	Depth to saturated zone	0.53	Depth to saturated zone	0.53
	Depth to bedrock	0.54			Depth to bedrock	0.54
278A:						
Merrillan, loamy subsoil	Fair		Poor		Fair	
	Too acid	0.50	Depth to bedrock	0.00	Depth to saturated zone	0.14
	Droughty	0.55	Depth to saturated zone	0.14	Depth to bedrock	0.58
	Depth to bedrock	0.58			Too acid	0.98
	Low content of organic matter	0.88				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
282C:						
Twinmound-----------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.50
	Droughty	0.00			Depth to bedrock	0.58
	Low content of organic matter	0.12			Slope	0.63
	Depth to bedrock	0.58				
	Too acid	0.68				
282F:						
Twinmound-----------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Slope	0.00
	Wind erosion	0.00	Slope	0.00	Too sandy	0.00
	Droughty	0.00			Rock fragments	0.50
	Low content of organic matter	0.12			Depth to bedrock	0.58
	Too acid	0.50				
	Depth to bedrock	0.58				
313D2:						
Plumcreek-----------	Fair		Fair		Poor	
	Low content of organic matter	0.12	Shrink-swell	0.87	Slope	0.00
			Slope	0.98		
	Water erosion	0.90				
	Too acid	0.97				
313F:						
Plumcreek-----------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
			Shrink-swell	0.87		
	Water erosion	0.90				
	Too acid	0.97				
316B2:						
Ella----------------	Fair		Poor		Good	
	Low content of organic matter	0.50	Low strength	0.00		
			Shrink-swell	0.87		
	Water erosion	0.90				
	Too acid	0.97				
316C2:						
Ella----------------	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Slope	0.96
			Shrink-swell	0.87		
	Water erosion	0.90				
	Too acid	0.97				
318A:						
Bearpen-------------	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Depth to saturated zone	0.14
			Depth to saturated zone	0.14		
	Water erosion	0.90				
	Too acid	0.97				
349A:						
Rib, valley train, undrained----------	Fair		Poor		Poor	
	Too acid	0.88	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Water erosion	0.90				
					Hard to reclaim	0.00

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
378A:						
Poskin, valley train	Fair		Fair		Fair	
	Low content of organic matter	0.12	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.68			Hard to reclaim	0.32
	Water erosion	0.90				
403A:						
Dakota	Fair		Good		Fair	
	Too acid	0.84			Hard to reclaim	0.32
	Low content of organic matter	0.88				
	Water erosion	0.99				
413A:						
Rasset	Fair		Good		Fair	
	Too acid	0.84			Hard to reclaim	0.32
	Low content of organic matter	0.88				
413B:						
Rasset	Fair		Good		Fair	
	Too acid	0.84			Hard to reclaim	0.32
	Low content of organic matter	0.88				
416A:						
Menomin	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
	Water erosion	0.90				
423A:						
Meridian	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.68
	Too acid	0.84				
	Water erosion	0.90				
423B2:						
Meridian	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.68
	Too acid	0.84				
	Water erosion	0.90				
423C2:						
Meridian	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.68
					Slope	0.96
	Too acid	0.84				
	Water erosion	0.90				
428A:						
Shiffer	Fair		Fair		Fair	
	Low content of organic matter	0.12	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.68				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
429A:						
Lows, undrained-----	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too acid	0.84				
432A:						
Kevilar-------------	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.97				
432B:						
Kevilar-------------	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.97				
432C2:						
Kevilar-------------	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.96
	Too acid	0.97				
432D2:						
Kevilar-------------	Fair		Fair		Poor	
	Low content of organic matter	0.12	Slope	0.98	Slope	0.00
	Too acid	0.97				
433A:						
Forkhorn------------	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.32
					Rock fragments	0.97
	Too acid	0.84				
	Droughty	0.99				
433B:						
Forkhorn------------	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.32
					Rock fragments	0.97
	Too acid	0.84				
	Droughty	0.99				
433C2:						
Forkhorn------------	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.32
					Slope	0.96
	Too acid	0.84			Rock fragments	0.97
	Droughty	0.99				
433D2:						
Forkhorn------------	Fair		Fair		Poor	
	Low content of organic matter	0.12	Slope	0.98	Slope	0.00
					Hard to reclaim	0.32
	Too acid	0.84			Rock fragments	0.97
	Droughty	0.99				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
434B:						
Bilson	Fair		Good		Good	
	Low content of organic matter	0.50				
	Too acid	0.68				
436A:						
Rusktown	Fair		Good		Fair	
	Low content of organic matter	0.12			Rock fragments	0.88
	Too acid	0.84				
438A:						
Hoopeston	Poor		Fair		Poor	
	Too sandy	0.00	Depth to saturated zone	0.14	Too sandy	0.00
	Low content of organic matter	0.12			Depth to saturated zone	0.14
	Too acid	0.84				
453A:						
Burkhardt	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.08
	Droughty	0.66				
	Too acid	0.84				
453B:						
Burkhardt	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.08
	Droughty	0.66				
	Too acid	0.84				
454B:						
Chetek, kame terrace	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.32
	Droughty	0.56				
	Too acid	0.97				
454C2:						
Chetek, kame terrace	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.32
	Droughty	0.56			Slope	0.96
	Too acid	0.97				
454D2:						
Chetek, kame terrace	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.98	Too sandy	0.00
	Low content of organic matter	0.12			Slope	0.00
					Rock fragments	0.00
	Droughty	0.56			Hard to reclaim	0.32
	Too acid	0.97				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
454E:						
Chetek, kame terrace	Poor		Poor		Poor	
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Low content of organic matter	0.12			Too sandy	0.00
					Rock fragments	0.00
	Too acid	0.50			Hard to reclaim	0.32
	Droughty	0.84				
468A:						
Oesterle, valley train	Fair		Fair		Fair	
	Low content of organic matter	0.12	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.68			Hard to reclaim	0.32
	Droughty	0.98			Rock fragments	0.88
501A:						
Finchford	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.02
	Too sandy	0.02			Hard to reclaim	0.32
	Low content of organic matter	0.12				
	Droughty	0.91				
	Too acid	0.97				
501B:						
Finchford	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.02
	Too sandy	0.02			Hard to reclaim	0.32
	Low content of organic matter	0.12				
	Droughty	0.91				
	Too acid	0.97				
502B2:						
Chelsea	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Too acid	0.84				
502C2:						
Chelsea	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.63
	Low content of organic matter	0.12				
	Too acid	0.84				
506A:						
Komro	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.88
	Low content of organic matter	0.12				
	Droughty	0.80				
	Too acid	0.84				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
508A:						
Farrington----------	Poor		Fair		Fair	
	Wind erosion	0.00	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Low content of organic matter	0.12			Too sandy	0.30
	Too sandy	0.30				
	Droughty	0.68				
	Too acid	0.97				
510B:						
Boplain-------------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to bedrock	0.58
	Droughty	0.00				
	Low content of organic matter	0.12				
	Depth to bedrock	0.58				
	Too acid	0.68				
510C:						
Boplain-------------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to bedrock	0.58
	Droughty	0.00			Slope	0.63
	Low content of organic matter	0.12				
	Depth to bedrock	0.58				
	Too acid	0.68				
511A:						
Plainfield----------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim	0.32
	Low content of organic matter	0.12			Rock fragments	0.97
	Droughty	0.68				
	Too acid	0.84				
511B:						
Plainfield----------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim	0.32
	Low content of organic matter	0.12			Rock fragments	0.97
	Droughty	0.68				
	Too acid	0.84				
511C:						
Plainfield----------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim	0.32
	Low content of organic matter	0.12			Slope	0.63
	Droughty	0.68			Rock fragments	0.97
	Too acid	0.84				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
511F:						
Plainfield----------	Poor		Poor		Poor	
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Wind erosion	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Hard to reclaim	0.32
					Rock fragments	0.97
	Too acid	0.50				
	Droughty	0.91				
512B:						
Drammen-------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Too acid	0.97				
512C:						
Drammen-------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.96
	Low content of organic matter	0.12				
	Too acid	0.97				
512D:						
Drammen-------------	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.98	Too sandy	0.00
	Wind erosion	0.00			Slope	0.00
	Low content of organic matter	0.12				
	Too acid	0.97				
516A:						
Aldo----------------	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim	0.32
	Droughty	0.77			Rock fragments	0.88
	Low content of organic matter	0.88				
	Too acid	0.97				
546A:						
Prissel-------------	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.19
	Too sandy	0.19				
	Low content of organic matter	0.88				
	Too acid	0.97				
546B:						
Prissel-------------	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.19
	Too sandy	0.19				
	Low content of organic matter	0.88				
	Too acid	0.97				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
546C:						
Prissel	Poor		Good		Fair	
	Wind erosion	0.00			Too sandy	0.19
	Too sandy	0.19			Slope	0.63
	Low content of organic matter	0.88				
	Too acid	0.97				
546F:						
Prissel	Poor		Poor		Poor	
	Wind erosion	0.00	Slope	0.00	Slope	0.00
	Too sandy	0.19			Too sandy	0.19
	Too acid	0.20				
	Low content of organic matter	0.88				
555A:						
Fordum, frequently flooded	Fair		Poor		Poor	
	Low content of organic matter	0.88	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Water erosion	0.99			Rock fragments	0.12
					Hard to reclaim	0.50
561B:						
Tarr	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Droughty	0.24				
	Too acid	0.68				
566A:						
Tint	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Droughty	0.26				
	Too acid	0.68				
573B:						
Plainbo, sand sheet	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to bedrock	0.58
	Droughty	0.00			Too acid	0.92
	Low content of organic matter	0.12				
	Too acid	0.50				
	Depth to bedrock	0.58				
573C:						
Plainbo, sand sheet	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to bedrock	0.58
	Droughty	0.00			Slope	0.63
	Low content of organic matter	0.12			Too acid	0.92
	Too acid	0.50				
	Depth to bedrock	0.58				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
588A:						
Meehan, valley train	Poor		Fair		Poor	
	Too sandy	0.00	Depth to saturated zone	0.14	Too sandy	0.00
	Wind erosion	0.00			Depth to saturated zone	0.14
	Low content of organic matter	0.12			Too acid	0.88
	Droughty	0.19				
	Too acid	0.50				
589A:						
Newson, undrained---	Poor		Poor		Poor	
	Too sandy	0.00	Depth to saturated zone	0.00	Too sandy	0.00
	Wind erosion	0.00			Depth to saturated zone	0.00
	Low content of organic matter	0.12			Rock fragments	0.88
	Too acid	0.50				
	Droughty	0.62				
601C:						
Beavercreek---------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Cobble content	0.00	Hard to reclaim	0.00
	Cobble content	0.41			Rock fragments	0.00
	Too sandy	0.99			Too sandy	0.99
616B:						
Chaseburg-----------	Fair		Good		Good	
	Water erosion	0.99				
619A:						
Vancecreek, undrained----------	Fair		Poor		Poor	
	Too acid	0.84	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Water erosion	0.90	Low strength	0.00		
626A:						
Arenzville----------	Fair		Good		Good	
	Low content of organic matter	0.12				
	Water erosion	0.99				
628A:						
Orion---------------	Fair		Fair		Fair	
	Water erosion	0.99	Depth to saturated zone	0.14	Depth to saturated zone	0.14
629A:						
Ettrick, undrained--	Fair		Poor		Poor	
	Low content of organic matter	0.50	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
636A:						
Quarderer-----------	Fair		Good		Good	
	Too acid	0.54				
	Low content of organic matter	0.88				
	Water erosion	0.90				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
646A:						
Dunnbot	Good		Good		Fair	
					Hard to reclaim	0.32
656A:						
Scotah	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Hard to reclaim	0.32
	Low content of organic matter	0.12				
	Droughty	0.44				
766A:						
Moppet, occasionally flooded	Fair		Fair		Fair	
	Too acid	0.50	Depth to saturated zone	0.89	Too acid	0.76
	Low content of organic matter	0.88			Depth to saturated zone	0.89
					Hard to reclaim	0.92
804B2:						
Arland, dissected	Fair		Poor		Fair	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Depth to bedrock	0.58
	Droughty	0.64			Rock fragments	0.88
	Too acid	0.68				
804C2:						
Arland, dissected	Fair		Poor		Fair	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Depth to bedrock	0.58
	Droughty	0.64			Rock fragments	0.88
	Too acid	0.68			Slope	0.96
804D:						
Arland, dissected	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.50	Slope	0.68	Depth to bedrock	0.58
	Depth to bedrock	0.58			Rock fragments	0.88
	Droughty	0.81				
814D2:						
Renova, dissected	Fair		Fair		Poor	
	Low content of organic matter	0.12	Shrink-swell	0.87	Slope	0.00
	Too acid	0.54	Slope	0.98		
	Water erosion	0.68				
816B2:						
Vlasaty, dissected	Fair		Fair		Fair	
	Low content of organic matter	0.12	Depth to saturated zone	0.53	Depth to saturated zone	0.53
	Water erosion	0.68	Shrink-swell	0.88		
	Too acid	0.74				
816C2:						
Vlasaty, dissected	Fair		Fair		Fair	
	Low content of organic matter	0.12	Depth to saturated zone	0.53	Depth to saturated zone	0.53
	Water erosion	0.68	Shrink-swell	0.88	Slope	0.96
	Too acid	0.74				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
826B2:						
Hersey	Fair		Poor		Good	
	Low content of organic matter	0.50	Low strength	0.00		
			Shrink-swell	0.87		
	Water erosion	0.90				
	Too acid	0.97				
826C2:						
Hersey	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Slope	0.96
			Shrink-swell	0.87		
	Water erosion	0.90				
	Too acid	0.97				
828B:						
Vasa	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Depth to saturated zone	0.14
			Depth to saturated zone	0.14		
	Water erosion	0.90				
	Too acid	0.97	Shrink-swell	0.87		
836B2:						
Spencer, dissected	Fair		Good		Fair	
	Low content of organic matter	0.12			Too acid	0.98
	Too acid	0.54				
	Water erosion	0.68				
836C2:						
Spencer, dissected	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.96
					Too acid	0.98
	Too acid	0.54				
	Water erosion	0.68				
838B:						
Almena, dissected	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Hard to reclaim	0.01
			Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.54				
	Water erosion	0.90	Shrink-swell	0.99	Too acid	0.98
870B2:						
Santiago, dissected	Fair		Good		Poor	
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.05
	Too acid	0.68				
	Water erosion	0.90				
870C2:						
Santiago, dissected	Fair		Good		Poor	
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim	0.05
	Too acid	0.68			Slope	0.96
	Water erosion	0.90				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
875B:						
Amery, dissected----	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.84
					Rock fragments	0.88
	Too acid	0.54			Too acid	0.98
875C2:						
Amery, dissected----	Fair		Good		Fair	
	Low content of organic matter	0.12			Hard to reclaim	0.84
					Rock fragments	0.88
	Too acid	0.54			Slope	0.96
					Too acid	0.98
875D:						
Amery, dissected----	Fair		Fair		Poor	
	Low content of organic matter	0.12	Slope	0.98	Slope	0.00
					Hard to reclaim	0.84
	Too acid	0.54			Rock fragments	0.88
					Too acid	0.98
1125F:						
Dorerton------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
			Cobble content	0.71	Hard to reclaim	0.00
	Too acid	0.84	Depth to bedrock	0.99		
	Stone content	0.92	Stone content	0.99		
	Droughty	0.96				
	Cobble content	0.98				
Elbaville-----------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
					Hard to reclaim	0.00
	Too acid	0.50			Rock fragments	0.00
	Too clayey	0.50			Too clayey	0.29
	Water erosion	0.90				
1145F:						
Gaphill-------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.20				
Rockbluff-----------	Poor		Poor		Poor	
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Wind erosion	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.88
	Too acid	0.50				
	Droughty	0.59				
1224F:						
Boone---------------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Slope	0.00
	Wind erosion	0.00	Slope	0.00	Too sandy	0.00
	Droughty	0.00			Depth to bedrock	0.58
	Low content of organic matter	0.12			Rock fragments	0.88
	Too acid	0.50				
	Depth to bedrock	0.58				

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
1224F:						
Elevasil------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.50	Slope	0.00	Depth to bedrock	0.58
	Depth to bedrock	0.58				
	Droughty	0.75				
1233F:						
Boone---------------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Slope	0.00
	Wind erosion	0.00	Slope	0.00	Too sandy	0.00
	Droughty	0.00			Depth to bedrock	0.58
	Low content of organic matter	0.12			Rock fragments	0.88
	Too acid	0.50				
	Depth to bedrock	0.58				
Tarr----------------	Poor		Poor		Poor	
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Wind erosion	0.00			Too sandy	0.00
	Low content of organic matter	0.12				
	Too acid	0.50				
	Droughty	0.76				
1275F:						
Hayriver------------	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
	Too acid	0.50	Slope	0.00	Rock fragments	0.50
	Depth to bedrock	0.58			Depth to bedrock	0.58
	Droughty	0.77			Too acid	0.98
Twinmound-----------	Poor		Poor		Poor	
	Too sandy	0.00	Depth to bedrock	0.00	Slope	0.00
	Wind erosion	0.00	Slope	0.00	Too sandy	0.00
	Droughty	0.00			Rock fragments	0.50
	Low content of organic matter	0.12			Depth to bedrock	0.58
	Too acid	0.50				
	Depth to bedrock	0.58				
1648A:						
Northbend-----------	Fair		Fair		Fair	
	Low content of organic matter	0.50	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.50			Too acid	0.88
	Water erosion	0.90				
Ettrick, flood plain, undrained---	Fair		Poor		Poor	
	Low content of organic matter	0.50	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.22		
1658A:						
Algansee------------	Poor		Fair		Poor	
	Too sandy	0.00	Depth to saturated zone	0.14	Too sandy	0.00
	Low content of organic matter	0.12			Depth to saturated zone	0.14
	Droughty	0.74			Hard to reclaim	0.92

Table 22b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material: Rating class and limiting features	Value	Potential as source of roadfill: Rating class and limiting features	Value	Potential as source of topsoil: Rating class and limiting features	Value
1658A:						
Kalmarville, undrained	Good		Poor		Poor	
			Depth to saturated zone	0.00	Depth to saturated zone	0.00
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	
2014:						
Pits, quarry, hard bedrock	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill	Not rated		Not rated		Not rated	
Udipsamments, cut or fill	Not rated		Not rated		Not rated	
2050:						
Landfill	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 23.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
11A:						
Markey, flood plain, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.64		
20A:						
Palms, undrained	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Content of organic matter	1.00	Cutbanks cave	0.10
			Ponding	1.00		
			Depth to saturated zone	1.00		
Houghton, undrained	Very limited		Not rated		Somewhat limited	
	Seepage	1.00			Cutbanks cave	0.10
40A:						
Markey, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.50		
Seelyeville, undrained	Very limited		Not rated		Somewhat limited	
	Seepage	1.00			Cutbanks cave	0.10
45A:						
Seelyeville, undrained	Very limited		Not rated		Somewhat limited	
	Seepage	1.00			Cutbanks cave	0.10
Cathro, undrained	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Content of organic matter	1.00	Cutbanks cave	0.10
			Ponding	1.00		
			Depth to saturated zone	1.00		
101B:						
Menahga, valley train	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.86	Depth to water	1.00
101C:						
Menahga, valley train	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.86	Depth to water	1.00

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101E:						
Menahga, valley train	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.86	Depth to water	1.00
	Slope	0.15				
115B2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.93	Depth to water	1.00
115C2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.93	Depth to water	1.00
115D2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.93	Depth to water	1.00
	Slope	0.04				
115E2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.93	Depth to water	1.00
	Slope	0.28				
116C2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.98	Depth to water	1.00
116D2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.98	Depth to water	1.00
	Slope	0.04				
116E2:						
Churchtown	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.98	Depth to water	1.00
	Slope	0.28				
125B2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
125C2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
125D2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Slope	0.04				
125E2:						
Pepin	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Slope	0.28				
135C2:						
Wickware	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
135D2:						
Wickware	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
	Slope	0.04				
135E2:						
Wickware	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
	Slope	0.28				
136B:						
Doritty	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
136C2:						
Doritty	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
144B2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Depth to bedrock	0.10	Thin layer	0.11		
144C2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Depth to bedrock	0.10	Thin layer	0.11		
144D2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Depth to bedrock	0.10	Thin layer	0.11		
	Slope	0.04				
144E2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.12	Depth to water	1.00
	Slope	0.28	Thin layer	0.11		
	Depth to bedrock	0.10				
161E:						
Fivepoints	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.86	Depth to water	1.00
	Depth to bedrock	0.86	Seepage	0.19		
	Slope	0.28	Piping	0.01		
208A:						
Siouxcreek	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Piping	1.00		
			Thin layer	0.85		
			Seepage	0.01		
213B2:						
Hixton	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
213C2:						
Hixton	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
224B:						
Elevasil	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.04		
224C2:						
Elevasil	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.04		
224D2:						
Elevasil	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.04		
	Slope	0.04				
224E2:						
Elevasil	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.28	Seepage	0.04		
	Depth to bedrock	0.11				
233C:						
Boone	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.89	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
	Slope	0.01				
243B2:						
Hixton, thin solum	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.41	Thin layer	1.00		
243C2:						
Hixton, thin solum	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.41	Thin layer	1.00		
244B:						
Elkmound	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.66	Thin layer	1.00	Depth to water	1.00
	Seepage	0.02				
244C2:						
Elkmound	Somewhat limited		Very limited		Very limited	
	Depth to bedrock	0.66	Thin layer	1.00	Depth to water	1.00
	Seepage	0.02				
244D2:						
Elkmound	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
	Slope	0.04				
	Seepage	0.02				

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
254B2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
254C2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
254D2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
	Slope	0.04				
254E2:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.28	Thin layer	0.85		
	Depth to bedrock	0.11				
254F:						
Norden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.82	Thin layer	0.85		
	Depth to bedrock	0.11				
255B2:						
Urne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
255C2:						
Urne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
255D2:						
Urne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
	Slope	0.04				
255E2:						
Urne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.28	Seepage	0.01		
	Depth to bedrock	0.11				
255F:						
Urne	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.82	Thin layer	0.85		
	Depth to bedrock	0.11	Seepage	0.01		
265B:						
Garne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.69		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
265C:						
Garne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.69		
266B:						
Hiles	Somewhat limited		Very limited		Very limited	
	Seepage	0.54	Depth to saturated zone	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Piping	0.97		
			Thin layer	0.85		
268A:						
Kert	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Piping	0.86		
			Thin layer	0.85		
269A:						
Veedum, undrained	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Ponding	1.00	Cutbanks cave	0.10
	Depth to bedrock	0.11	Depth to saturated zone	1.00		
			Thin layer	0.85		
273B2:						
Dobie	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
Hixton, frigid	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
273C2:						
Dobie	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
Hixton, frigid	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
273D2:						
Dobie	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
	Slope	0.04				
Hixton, frigid	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Depth to bedrock	0.11	Thin layer	0.85		
	Slope	0.04				
273E2:						
Dobie	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.28	Thin layer	0.85		
	Depth to bedrock	0.11				

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
273E2:						
Hixton, frigid------	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.28	Thin layer	0.85		
	Depth to bedrock	0.11				
275B2:						
Hayriver------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
Elevasil, frigid----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11				
275C2:						
Hayriver------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
Elevasil, frigid----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11				
275D2:						
Hayriver------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.01		
	Slope	0.04				
Elevasil, frigid----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11				
	Slope	0.04				
276B:						
Humbird, loamy subsoil------------	Somewhat limited		Very limited		Very limited	
	Seepage	0.54	Depth to saturated zone	1.00	Depth to water	1.00
	Depth to bedrock	0.11				
			Thin layer	0.86		
278A:						
Merrillan, loamy subsoil------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
	Depth to bedrock	0.11				
			Thin layer	0.85		
			Seepage	0.01		
282C:						
Twinmound-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.36		
	Slope	0.01				
282F:						
Twinmound-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.72	Seepage	0.36		
	Depth to bedrock	0.11				

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
313D2:						
Plumcreek	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.99	Depth to water	1.00
	Slope	0.04				
313F:						
Plumcreek	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.99	Depth to water	1.00
	Slope	0.64				
316B2:						
Ella	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
316C2:						
Ella	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
318A:						
Bearpen	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
			Piping	1.00		
349A:						
Rib, valley train, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.97		
378A:						
Poskin, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.97		
403A:						
Dakota	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.54	Depth to water	1.00
413A:						
Rasset	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.50	Depth to water	1.00
413B:						
Rasset	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.50	Depth to water	1.00
416A:						
Menomin	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.54	Cutbanks cave	1.00
					Depth to water	0.81
423A:						
Meridian	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.54	Depth to water	1.00
423B2:						
Meridian	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.54	Depth to water	1.00

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
423C2:						
Meridian	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.54	Depth to water	1.00
428A:						
Shiffer	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.64		
429A:						
Lows, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.64		
432A:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
432B:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
432C2:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
432D2:						
Kevilar	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
	Slope	0.04				
433A:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.46	Depth to water	1.00
433B:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.46	Depth to water	1.00
433C2:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.46	Depth to water	1.00
433D2:						
Forkhorn	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.46	Depth to water	1.00
	Slope	0.04				
434B:						
Bilson	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.12	Depth to water	1.00
436A:						
Rusktown	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.46	Cutbanks cave	1.00
					Depth to water	0.81

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
438A:						
Hoopeston-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.64		
453A:						
Burkhardt-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
453B:						
Burkhardt-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
454B:						
Chetek, kame terrace	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
454C2:						
Chetek, kame terrace	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
454D2:						
Chetek, kame terrace	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
	Slope	0.04				
454E:						
Chetek, kame terrace	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	Depth to water	1.00
	Slope	0.36				
468A:						
Oesterle, valley train--------------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.90		
501A:						
Finchford-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.50	Depth to water	1.00
501B:						
Finchford-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.50	Depth to water	1.00
502B2:						
Chelsea-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.12	Depth to water	1.00
502C2:						
Chelsea-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.12	Depth to water	1.00
	Slope	0.01				
506A:						
Komro---------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.84	Cutbanks cave	1.00
					Depth to water	0.81

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
508A:						
Farrington----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.50		
510B:						
Boplain-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.75		
510C:						
Boplain-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.75		
	Slope	0.01				
511A:						
Plainfield----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.92	Depth to water	1.00
511B:						
Plainfield----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.92	Depth to water	1.00
511C:						
Plainfield----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.92	Depth to water	1.00
	Slope	0.01				
511F:						
Plainfield----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.72	Depth to water	1.00
	Slope	0.82				
512B:						
Drammen-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.82	Depth to water	1.00
512C:						
Drammen-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.82	Depth to water	1.00
512D:						
Drammen-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.82	Depth to water	1.00
	Slope	0.04				
516A:						
Aldo----------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.92	Cutbanks cave	1.00
					Depth to water	0.81
546A:						
Prissel-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
			Depth to saturated zone	0.46		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
546B:						
Prissel	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
			Depth to saturated zone	0.46		
546C:						
Prissel	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
	Slope	0.01	Depth to saturated zone	0.46		
546F:						
Prissel	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
	Slope	0.82	Depth to saturated zone	0.46		
555A:						
Fordum, frequently flooded	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Ponding	1.00		
			Seepage	0.53		
561B:						
Tarr	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.91	Depth to water	1.00
566A:						
Tint	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.82	Cutbanks cave	1.00
					Depth to water	0.81
573B:						
Plainbo, sand sheet	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.72		
573C:						
Plainbo, sand sheet	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.72		
	Slope	0.01				
588A:						
Meehan, valley train	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.82		
589A:						
Newson, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.72		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
601C:						
Beavercreek	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Content of large stones	0.35	Depth to water	1.00
			Seepage	0.08		
616B:						
Chaseburg	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
619A:						
Vancecreek, undrained	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00	Slow refill	0.28
			Piping	0.96		
626A:						
Arenzville	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Cutbanks cave	1.00
					Depth to water	0.81
					Slow refill	0.28
628A:						
Orion	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Cutbanks cave	1.00
					Slow refill	0.28
			Piping	1.00		
629A:						
Ettrick, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Piping	0.09		
636A:						
Quarderer	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Piping	1.00	Depth to water	0.81
					Slow refill	0.28
					Cutbanks cave	0.10
646A:						
Dunnbot	Very limited		Not limited		Very limited	
	Seepage	1.00			Cutbanks cave	1.00
					Depth to water	0.81
656A:						
Scotah	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.76	Cutbanks cave	1.00
					Depth to water	0.81
766A:						
Moppet, occasionally flooded	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.86	Cutbanks cave	1.00
					Depth to water	0.06
			Seepage	0.42		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
804B2:						
Arland, dissected---	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.03		
804C2:						
Arland, dissected---	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.03		
804D:						
Arland, dissected---	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Depth to bedrock	0.11	Seepage	0.03		
	Slope	0.10				
814D2:						
Renova, dissected---	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Piping	0.71	Depth to water	1.00
	Seepage	0.04				
816B2:						
Vlasaty, dissected--	Somewhat limited		Very limited		Very limited	
	Seepage	0.04	Depth to saturated zone	1.00	Depth to water	1.00
			Piping	0.89		
816C2:						
Vlasaty, dissected--	Somewhat limited		Very limited		Very limited	
	Seepage	0.04	Depth to saturated zone	1.00	Depth to water	1.00
			Piping	0.89		
826B2:						
Hersey--------------	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Depth to saturated zone	0.46		
826C2:						
Hersey--------------	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Depth to saturated zone	0.46		
828B:						
Vasa----------------	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
			Piping	1.00		
836B2:						
Spencer, dissected--	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Depth to saturated zone	0.46		
			Seepage	0.02		

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
836C2:						
Spencer, dissected--	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Depth to saturated zone	0.46		
			Seepage	0.02		
838B:						
Almena, dissected---	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
			Piping	1.00		
			Seepage	0.02		
870B2:						
Santiago, dissected	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Seepage	0.03		
870C2:						
Santiago, dissected	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	Depth to water	1.00
			Seepage	0.03		
875B:						
Amery, dissected----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.03	Depth to water	1.00
875C2:						
Amery, dissected----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.03	Depth to water	1.00
875D:						
Amery, dissected----	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.03	Depth to water	1.00
	Slope	0.04				
1125F:						
Dorerton------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Content of large stones	0.03	Depth to water	1.00
	Slope	0.97				
	Depth to bedrock	0.01	Thin layer	0.01		
Elbaville-----------	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	Depth to water	1.00
	Slope	0.82	Seepage	0.02		
1145F:						
Gaphill-------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.75	Depth to water	1.00
	Slope	0.97				
Rockbluff-----------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.89	Depth to water	1.00
	Slope	0.97				
1224F:						
Boone---------------	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.89	Depth to water	1.00
	Slope	0.64	Thin layer	0.85		
	Depth to bedrock	0.11				

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1224F:						
Elevasil	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.64	Seepage	0.04		
	Depth to bedrock	0.11				
1233F:						
Boone	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.89	Depth to water	1.00
	Slope	0.64	Thin layer	0.85		
	Depth to bedrock	0.11				
Tarr	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.91	Depth to water	1.00
	Slope	0.50				
1275F:						
Hayriver	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.50	Seepage	0.01		
	Depth to bedrock	0.11				
Twinmound	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.85	Depth to water	1.00
	Slope	0.50	Seepage	0.36		
	Depth to bedrock	0.11				
1648A:						
Northbend	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.75		
Ettrick, flood plain, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Piping	0.09		
1658A:						
Algansee	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.10		
Kalmarville, undrained	Very limited		Very limited		Very limited	
	Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
			Depth to saturated zone	1.00		
			Seepage	0.17		
2002:						
Udorthents, earthen dams	Not rated		Not rated		Not rated	
2003A:						
Riverwash	Not rated		Not rated		Not rated	
2013:						
Pits, gravel	Not rated		Not rated		Not rated	

Table 23.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2014:						
Pits, quarry, hard bedrock------------	Not rated		Not rated		Not rated	
2016:						
Pits, quarry, soft bedrock------------	Not rated		Not rated		Not rated	
2030:						
Udorthents, cut or fill---------------	Not rated		Not rated		Not rated	
Udipsamments, cut or fill---------------	Not rated		Not rated		Not rated	
2050:						
Landfill------------	Not rated		Not rated		Not rated	
M-W:						
Miscellaneous water	Not rated		Not rated		Not rated	
W:						
Water---------------	Not rated		Not rated		Not rated	

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 24 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 25 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.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 25, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The 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 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 25, 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 25 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 described in the "National Soil Survey Handbook" (USDA, NRCS).

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 26 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.

Water Features

Soil moisture status is an estimate of the fluctuating water content in a soil. It greatly influences vegetation type and plant growth; physical properties of soils, such as permeability, workability, strength, linear extensibility, and frost action; and chemical interactions and transport. Many other properties, qualities, and interpretations also are affected. Soil moisture status is important in the classification of soils, wetland, and habitat.

Table 27 gives estimates of soil moisture for each component of a map unit at various depths for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most commonly. *Dry* indicates a moisture condition under which most plants (especially crops) cannot extract water for growth. *Moist* indicates a moisture condition under which soil water is most readily available for plant growth. *Wet* indicates a condition under which water will stand in an unlined hole or at least a condition under which the soil is too wet for the growth of most agricultural species. A moisture status of 4.0-6.7 (wet) indicates that most of the time the component is saturated at some depth between 4.0 feet and 6.7 feet during the month designated. In some years the soil may be saturated at a depth of less than 4.0 feet or more than 6.7 feet; however, field observations indicate that the soil will be saturated between these depths in most years. In the summer, the soil may show the effects of drying plus intermittent rains that result in a moist or wet layer over a dry layer that gets moist or wet again.

In table 27, *hydrologic soil groups* are groups of soils that, when saturated, have the same runoff potential under similar storm and ground cover conditions. The soil properties that affect the runoff potential are those that influence the minimum rate of infiltration in a bare soil after prolonged wetting and when the soil is not frozen. These properties include the depth to a zone in which the soil moisture status is wet, the infiltration rate, permeability after prolonged wetting, and the depth to a very slowly permeable horizon or horizons. The influences of ground cover and slope are treated independently and are not taken into account in hydrologic soil groups.

In the definitions of the hydrologic soil groups, the infiltration rate is the rate at which water enters the soil at the surface and is controlled by surface conditions. The transmission rate is the rate at which water moves through the soil and is controlled by properties of the soil horizons.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist chiefly of very 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 a moderately fine 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 horizon or horizons that impede the downward movement of water or soils that have a moderately fine 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 clayey soils that have a high linear extensibility; soils that have a zone, high in the profile, in which the soil moisture status is wet on a permanent basis; soils that have a claypan or clay horizon or horizons 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.

Flooding, the temporary covering of the soil surface by flowing water, is caused by overflow from streams or by runoff from adjacent slopes. Shallow water standing or flowing for short periods after rainfall or snowmelt is not considered flooding. Standing water in marshes and swamps or in closed depressions is considered to be ponding.

Table 28 gives estimates of the frequency and duration of flooding for every month of the year. Flooding frequency is the annual probability of a flood event expressed as a class. *None* indicates no reasonable possibility of flooding (the chance of flooding is nearly 0 percent in any year, or flooding is likely less than once in 500 years). *Very rare* indicates that flooding is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year, or flooding is likely less than once in 100 years but more than once in 500 years). *Rare* indicates that flooding is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year, or flooding is likely 1 to 5 times in 100 years). *Occasional* indicates that flooding occurs infrequently under usual weather conditions (the chance of flooding is 5 to 50 percent in any year, or flooding is likely 5 to 50 times in 100 years). *Frequent* indicates that flooding is likely to occur often under usual weather conditions (the chance of flooding is more than 50 percent in any year, or flooding is likely more than 50 times in 100 years; but the chance of flooding is less than 50 percent in all months in any year). *Very frequent* indicates that flooding is likely to occur very often under usual weather conditions (the chance of flooding is more than 50 percent in all months of any year).

Flooding duration is the average duration of inundation per flood occurrence expressed as a class. *Extremely brief* is 0.1 hour to 4.0 hours; *very brief* is 4 to 48 hours; *brief* is 2 to 7 days; *long* is 7 to 30 days; and *very long* is more than 30 days. About two-thirds to three-fourths of all flooding occurs during the stated period.

The information on flooding 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 level 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.

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 29 gives estimates of the frequency, duration, and depth of ponding for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most of the time.

Ponding frequency is the number of times ponding occurs over a period of time. *None* indicates no reasonable possibility of ponding (the chance of ponding is nearly 0 percent in any year). *Rare* indicates that ponding is unlikely but possible under unusual weather conditions (the chance of ponding ranges from nearly 0 percent to 5 percent in any year, or ponding is likely 0 to 5 times in 100 years). *Occasional* indicates that ponding is expected infrequently under usual weather conditions (the chance of ponding ranges from 5 to 50 percent in any one year, or ponding is likely 5 to 50 times in 100 years). *Frequent* indicates that ponding is likely to occur under usual weather conditions (the chance of ponding is more than 50 percent in any year, or ponding is likely more than 50 times in 100 years).

Ponding duration is the average length of time of the ponding occurrence. It is expressed as *very brief* (less than 2 days), *brief* (2 to 7 days), *long* (7 to 30 days), and *very long* (more than 30 days).

Soil Features

Table 30 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer, which significantly affects the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a zone of saturation close to the surface 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.

Table 24.--Engineering Index Properties

(See text for definitions of terms used in this table. Absence of an entry indicates that the data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
11A:												
Markey, flood plain, undrained------	0-27	Muck	PT	A-8	0	0	100	100	---	---	---	---
	27-60	Stratified loamy sand to coarse sand, sand	SM, SP-SM	A-2, A-3	0	0	85-100	75-100	25-75	5-35	0-20	NP-3
20A:												
Palms, undrained	0-40	Muck	PT	A-8	0	0	100	100	---	---	---	---
	40-60	Silt loam, silty clay loam, loam, sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	85-100	80-100	70-95	40-90	24-50	6-20
Houghton, undrained------	0-22	Muck	PT	A-8	0	0	100	100	---	---	---	---
	22-28	Mucky peat	PT	A-8	0	0	100	100	---	---	---	---
	28-60	Muck		A-8	0	0	100	100	---	---	---	---
40A:												
Markey, undrained------	0-27	Muck	PT	A-8	0	0	100	100	---	---	---	---
	27-60	Stratified sand to gravelly coarse sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0	60-100	50-100	15-75	0-20	0-20	NP-3
Seelyeville, undrained------	0-12	Muck	PT	A-8	0	0	100	100	---	---	---	---
	12-72	Muck	PT	A-8	0	0	100	100	---	---	---	---
45A:												
Seelyeville, undrained------	0-12	Muck	PT	A-8	0	0	100	100	---	---	---	---
	12-72	Muck	PT	A-8	0	0	---	---	---	---	---	---

Table 24.--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	
45A:												
Cathro, undrained------	0-16	Muck	PT	A-8	0	0	100	100	---	---	---	---
	16-30	Muck	PT	A-8	0	0	100	100	---	---	---	---
	30-60	Silt loam, sandy loam, silty clay loam		A-2-4, A-2-6, A-4, A-6	0	0-5	80-100	65-100	40-100	25-90	20-45	3-15
101B:												
Menahga, valley train----------	0-9	Sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	85-100	25-70	1-25	0-20	NP-3
	9-33	Sand, loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	80-100	25-75	1-35	0-20	NP-4
	33-80	Sand, coarse sand	SP, SP-SM, SM	A-1-b, A-2-4, A-3	0	0	95-100	85-100	25-70	1-25	0-14	NP
101C:												
Menahga, valley train----------	0-9	Sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	85-100	25-70	1-25	0-20	NP-3
	9-33	Sand, loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	80-100	25-75	1-35	0-20	NP-4
	33-80	Sand, coarse sand	SP, SP-SM, SM	A-1-b, A-2-4, A-3	0	0	95-100	85-100	25-70	1-25	0-14	NP
101E:												
Menahga, valley train----------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-5	Sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	85-100	25-70	1-25	0-30	NP-3
	5-33	Sand, loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0	90-100	80-100	25-75	1-35	0-20	NP-4
	33-80	Sand, coarse sand	SP, SP-SM, SM	A-1-b, A-2-4, A-3	0	0	95-100	85-100	25-70	1-25	0-14	NP
115B2:												
Seaton----------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	8-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	13-55	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	7-20
	55-80	Silt loam, silt	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-30	5-15

Table 24.--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	
115C2:												
Seaton----------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	8-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	13-55	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	7-20
	55-80	Silt loam, silt	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-30	5-15
115D2:												
Seaton----------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	8-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	13-55	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	7-20
	55-80	Silt loam, silt	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-30	5-15
115E2:												
Seaton----------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	8-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	13-55	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	7-20
	55-80	Silt loam, silt	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-30	5-15
116C2:												
Churchtown------	0-9	Silt loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	80-100	65-90	20-35	5-15
	9-26	Silt loam, loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	65-95	55-90	25-35	5-15
	26-63	Silty clay loam, silt loam	CL	A-6, A-4	0	0	100	100	85-100	85-95	25-40	7-20
	63-80	Silt loam	CL-ML, CL	A-6, A-4	0	0	100	100	100	90-100	20-30	5-15
116D2:												
Churchtown------	0-9	Silt loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	80-100	65-90	20-35	5-15
	9-26	Silt loam, loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	65-95	55-90	25-35	5-15
	26-63	Silty clay loam, silt loam	CL	A-6, A-4	0	0	100	100	85-100	85-95	25-40	7-20
	63-80	Silt loam	CL-ML, CL	A-6, A-4	0	0	100	100	100	90-100	20-30	5-15
116E2:												
Churchtown------	0-9	Silt loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	80-100	65-90	20-35	5-15
	9-26	Silt loam, loam	CL-ML, CL	A-6, A-4	0-5	0-10	90-100	90-100	65-95	55-90	25-35	5-15
	26-63	Silty clay loam, silt loam	CL	A-6, A-4	0	0	100	100	85-100	85-95	25-40	7-20
	63-80	Silt loam	CL-ML, CL	A-6, A-4	0	0	100	100	100	90-100	20-30	5-15

Table 24.--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	Plas-ticity index
	In				Pct	Pct					Pct	
125B2:												
Pepin-----------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	9-48	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	9-20
	48-58	Clay, channery clay, clay loam, flaggy clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	58-66	Very flaggy loam, clay loam, channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	66-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
125C2:												
Pepin-----------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	9-48	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	9-20
	48-58	Clay, channery clay, clay loam, flaggy clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	58-66	Very flaggy loam, clay loam, channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	66-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
125D2:												
Pepin-----------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	9-48	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	9-20
	48-58	Clay, channery clay, clay loam, flaggy clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	58-66	Very flaggy loam, clay loam, channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	66-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
125E2:												
Pepin-----------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	9-48	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	9-20
	48-58	Clay, channery clay, clay loam, flaggy clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	58-66	Very flaggy loam, clay loam, channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	66-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
135C2:												
Wickware--------	0-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-30	4-13
	10-17	Silt loam	CL	A-4, A-6	0	0	100	100	80-100	70-90	25-35	7-15
	17-36	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	9-16
	36-71	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-35	4-15
	71-80	Stratified silt loam to sand	ML, CL-ML	A-4	0	0	100	100	75-100	60-95	0-25	NP-7

Table 24.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
135D2:												
Wickware--------	0-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-30	4-13
	10-17	Silt loam	CL	A-4, A-6	0	0	100	100	80-100	70-90	25-35	7-15
	17-36	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	9-16
	36-71	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-35	4-15
	71-80	Stratified silt loam to sand	ML, CL-ML	A-4	0	0	100	100	75-100	60-95	0-25	NP-7
135E2:												
Wickware--------	0-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-30	4-13
	10-17	Silt loam	CL	A-4, A-6	0	0	100	100	80-100	70-90	25-35	7-15
	17-36	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	9-16
	36-71	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	100	90-100	20-35	4-15
	71-80	Stratified silt loam to sand	ML, CL-ML	A-4	0	0	100	100	75-100	60-95	0-25	NP-7
136B:												
Doritty---------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-30	4-13
	9-12	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	4-11
	12-18	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	7-15
	18-38	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	9-16
	38-45	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	90-100	20-35	4-15
	45-60	Stratified gravelly coarse sand to silt loam		A-1-b, A-3, A-2-4	0	0	60-100	50-100	20-90	5-85	0-20	NP-6
136C2:												
Doritty---------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-30	4-13
	9-12	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	4-11
	12-18	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	7-15
	18-38	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-35	9-16
	38-45	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	90-100	20-35	4-15
	45-60	Stratified gravelly coarse sand to silt loam		A-1-b, A-3, A-2-4	0	0	60-100	50-100	20-90	5-85	0-20	NP-6

Table 24.--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	
144B2:												
NewGlarus-------	0-9	Silt loam	CL-ML	A-4, A-6	0	0	90-100	85-100	85-100	75-100	23-32	6-13
	9-13	Silt loam, silty clay loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	70-100	21-32	3-13
	13-23	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	85-100	75-100	65-100	55-95	28-40	6-18
	23-35	Clay, clay loam, flaggy clay loam, silty clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	35-45	Very channery loam, extremely channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	45-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
144C2:												
NewGlarus-------	0-9	Silt loam	CL-ML	A-4, A-6	0	0	90-100	85-100	85-100	75-100	23-32	6-13
	9-13	Silt loam, silty clay loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	70-100	21-32	3-13
	13-23	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	85-100	75-100	65-100	55-95	28-40	6-18
	23-35	Clay, clay loam, flaggy clay loam, silty clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	35-45	Very channery loam, extremely channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	45-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
144D2:												
NewGlarus-------	0-9	Silt loam	CL-ML	A-4, A-6	0	0	90-100	85-100	85-100	75-100	23-32	6-13
	9-13	Silt loam, silty clay loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	70-100	21-32	3-13
	13-23	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	85-100	75-100	65-100	55-95	28-40	6-18
	23-35	Clay, clay loam, flaggy clay loam, silty clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	35-45	Very channery loam, extremely channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	45-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
144E2:												
NewGlarus-------	0-9	Silt loam	CL-ML	A-4, A-6	0	0	90-100	85-100	85-100	75-100	23-32	6-13
	9-13	Silt loam, silty clay loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	70-100	21-32	3-13
	13-23	Silty clay loam, silt loam	CL, CL-ML	A-4, A-6	0	0	85-100	75-100	65-100	55-95	28-40	6-18
	23-35	Clay, clay loam, flaggy clay loam, silty clay loam	CH, SC	A-7	0-10	0-25	55-100	50-95	40-95	30-90	50-85	25-60
	35-45	Very channery loam, extremely channery sandy loam	CL, CL-ML, GC, SC	A-1-b, A-2, A-4, A-6	1-20	2-30	50-100	40-80	25-75	10-60	23-36	6-16
	45-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
161E:												
Fivepoints------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-4	Silt loam	CL, CL-ML	A-4, A-6	0	0-2	80-100	75-100	70-100	55-90	18-35	4-15
	4-10	Silty clay loam, silt loam	CL	A-4, A-6, A-7	0	0-2	80-100	75-100	70-100	55-95	25-50	9-25
	10-19	Clay, silty clay, channery clay, silty clay loam, clay loam, flaggy clay loam	CH, SC	A-7	0	1-15	80-100	55-95	50-90	40-85	50-85	25-60
	19-35	Extremely channery sandy loam, very channery loam	GC, GC-GM	A-1, A-2-4	0-15	20-30	35-60	30-55	20-50	12-40	18-30	4-10
	35-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
208A:												
Siouxcreek------	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	80-100	75-100	60-95	50-90	20-30	NP-11
	8-14	Silt loam, loam	CL, ML, SC, SM	A-4	0	0	80-100	75-100	55-95	45-85	20-26	NP-8
	14-22	Silt loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	55-95	45-85	25-34	6-14
	22-32	Fine sandy loam, sandy loam, loam	SM, ML	A-1, A-4	0	0	80-100	75-100	45-90	20-70	15-28	NP-9
	32-38	Fine sand, fine sandy loam, channery fine sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	20-90	5-50	0-20	NP-3
	38-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
213B2:												
Hixton----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, channery fine sand	SP-SM, SP	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-3
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
213C2:												
Hixton----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, channery fine sand	SP-SM, SP	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-3
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
224B:												
Elevasil--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	55-100	50-100	30-90	2-35	15-21	NP-4
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
224C2:												
Elevasil--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	55-100	50-100	30-90	2-35	15-21	NP-4
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
224D2:												
Elevasil--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	55-100	50-100	30-90	2-35	15-21	NP-4
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
224E2:												
Elevasil--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	55-100	50-100	30-90	2-35	15-21	NP-4
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	Plas- ticity index
	In				Pct	Pct					Pct	
233C:												
Boone-----------	0-8	Sand	SM, SP-SM	A-2-4, A-3	0	0-9	80-100	75-100	55-90	5-15	0-18	NP
	8-21	Sand, fine sand, loamy sand, channery sand, loamy fine sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-9	55-100	50-100	20-85	2-15	0-17	NP
	21-35	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	20-85	1-10	0-17	NP
	35-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
243B2:												
Hixton, thin solum----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-11
	8-15	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	15-21	Channery loam, sandy loam, channery sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-10	80-100	75-90	35-85	20-50	20-30	4-11
	21-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
243C2:												
Hixton, thin solum----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-11
	8-15	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	15-21	Channery loam, sandy loam, channery sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-10	80-100	75-90	35-85	20-50	20-30	4-11
	21-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
244B:												
Elkmound--------	0-8	Loam	CL-ML, ML, SC-SM, SM	A-4	0	0-10	80-100	75-90	55-85	45-70	15-23	NP-6
	8-12	Channery loam, sandy loam, channery sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-10	75-95	50-90	35-85	20-60	20-30	4-11
	12-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
244C2:												
Elkmound--------	0-8	Loam	CL-ML, ML, SC-SM, SM	A-4	0	0-10	80-100	75-90	55-85	45-70	15-23	NP-6
	8-12	Channery loam, sandy loam, channery sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-10	75-95	50-90	35-85	20-60	20-30	4-11
	12-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
244D2:												
Elkmound--------	0-8	Loam	CL-ML, ML, SC-SM, SM	A-4	0	0-10	80-100	75-90	55-85	45-70	15-23	NP-6
	8-12	Channery loam, sandy loam, channery sandy loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0-10	75-95	50-90	35-85	20-60	20-30	4-11
	12-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
254B2:												
Norden----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	28-39	7-15
	20-37	Loam, fine sandy loam, channery sandy loam, sandy clay loam	SC-SM, CL, SC, CL-ML	A-2-4, A-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
254C2:												
Norden----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	28-39	7-15
	20-37	Loam, fine sandy loam, channery sandy loam, sandy clay loam	SC-SM, CL, SC, CL-ML	A-2-4, A-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
254D2:												
Norden----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	28-39	7-15
	20-37	Loam, fine sandy loam, channery sandy loam, sandy clay loam	SC-SM, CL, SC, CL-ML	A-2-4, A-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
254E2:												
Norden----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	28-39	7-15
	20-37	Loam, fine sandy loam, channery sandy loam, sandy clay loam	SC-SM, CL, SC, CL-ML	A-2-4, A-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
254F:												
Norden----------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-3	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	3-20	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	70-90	28-39	7-15
	20-37	Loam, fine sandy loam, channery sandy loam, sandy clay loam	SC-SM, CL, SC, CL-ML	A-2-4, A-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
255B2:												
Urne------------	0-9	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	55-90	30-50	20-30	5-10
	9-28	Fine sandy loam, sandy loam, channery fine sandy loam, channery loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	55-100	50-100	35-95	25-80	15-35	4-15
	28-36	Fine sandy loam, channery sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
255C2:												
Urne------------	0-9	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	55-90	30-50	20-30	5-10
	9-28	Fine sandy loam, sandy loam, channery fine sandy loam, channery loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	55-100	50-100	35-95	25-80	15-35	4-15
	28-36	Fine sandy loam, channery sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
255D2:												
Urne------------	0-9	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	55-90	30-50	20-30	5-10
	9-28	Fine sandy loam, sandy loam, channery fine sandy loam, channery loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	55-100	50-100	35-95	25-80	15-35	4-15
	28-36	Fine sandy loam, channery sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
255E2:												
Urne------------	0-9	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	55-90	30-50	20-30	5-10
	9-28	Fine sandy loam, sandy loam, channery fine sandy loam, channery loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	55-100	50-100	35-95	25-80	15-35	4-15
	28-36	Fine sandy loam, channery sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
255F:												
Urne------------	0-2	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	55-90	30-50	20-30	5-10
	2-28	Fine sandy loam, sandy loam, channery fine sandy loam, channery loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	55-100	50-100	35-95	25-80	15-35	4-15
	28-36	Fine sandy loam, channery sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-3	55-100	50-100	35-95	25-80	15-35	4-15
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
265B:												
Garne-----------	0-18	Loamy sand	SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-25	NP-4
	18-23	Loamy sand, sand, loamy fine sand	SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-25	NP-4
	23-27	Sand, loamy fine sand, loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-20	NP-4
	27-34	Very fine sandy loam, channery sandy loam, channery fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-9	75-100	50-100	35-95	25-80	15-35	4-15
	34-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
265C:												
Garne-----------	0-18	Loamy sand	SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-25	NP-4
	18-23	Loamy sand, sand, loamy fine sand	SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-25	NP-4
	23-27	Sand, loamy fine sand, loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	90-100	75-100	30-70	10-30	0-20	NP-4
	27-34	Very fine sandy loam, channery sandy loam, channery fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-2-4, A-6	0	0-9	75-100	50-100	35-95	25-80	15-35	4-15
	34-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
266B:												
Hiles-----------	0-9	Silt loam	CL, CL-ML	A-4	0	0	80-100	75-100	75-95	65-85	20-30	4-10
	9-19	Silt loam	CL	A-6	0	0	80-100	75-100	75-95	65-85	25-35	10-15
	19-29	Loam, clay loam, channery sandy loam, fine sandy loam	CL, SC	A-2-6, A-6	0	0-3	60-100	50-95	30-80	15-75	25-40	10-20
	29-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
268A:												
Kert------------	0-9	Silt loam	CL, CL-ML	A-4	0	0	80-100	75-100	75-95	65-85	20-30	4-10
	9-22	Silt loam	CL	A-6	0	0	80-100	75-100	75-95	65-85	30-40	10-20
	22-34	Loam, clay loam, channery sandy loam, fine sandy loam	CL, SC	A-2-6, A-6	0	0-3	60-100	50-95	30-80	15-75	25-40	10-20
	34-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
269A:												
Veedum, undrained------	0-5	Muck	PT	A-8	0	0	100	100	---	---	---	---
	5-7	Silt loam	CL, CL-ML	A-4	0	0	80-100	75-100	65-95	55-85	20-30	4-10
	7-9	Silt loam, loam	CL	A-6	0	0	80-100	75-100	65-95	55-85	30-40	10-20
	9-20	Silt loam, loam		A-6	0	0	80-100	75-100	65-95	55-85	30-40	10-20
	20-26	Clay loam, silty clay loam, channery sandy loam, sandy loam	SC, CL	A-2-6, A-6, A-7	0	0-3	60-100	50-95	30-80	15-75	30-45	10-20
	26-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
273B2:												
Dobie-----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-9
	8-26	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	26-37	Very fine sandy loam, channery very fine sandy loam, loam, sandy loam	CL, ML, SC, SM	A-1-b, A-2-4, A-4	0	0	60-100	50-100	30-90	20-60	0-30	NP-9
	37-60	Weathered bedrock	---	---	---	---	0	0	---	---	---	---
Hixton, frigid--	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-13	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	13-20	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, fine sand	SP-SM, SP	A-1-b, A-3	0-2	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
273C2:												
Dobie-----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-9
	8-26	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	26-37	Very fine sandy loam, channery very fine sandy loam, loam, sandy loam	CL, ML, SC, SM	A-1-b, A-2-4, A-4	0	0	60-100	50-100	30-90	20-60	0-30	NP-9
	37-60	Weathered bedrock	---	---	---	---	0	0	---	---	---	---
Hixton, frigid--	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-13	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	13-20	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, fine sand	SP-SM, SP	A-1-b, A-3	0-2	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
273D2:												
Dobie-----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-9
	8-26	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	26-37	Very fine sandy loam, channery very fine sandy loam, loam, sandy loam	CL, ML, SC, SM	A-1-b, A-2-4, A-4	0	0	60-100	50-100	30-90	20-60	0-30	NP-9
	37-60	Weathered bedrock	---	---	---	---	0	0	---	---	---	---

Table 24.--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	
273D2:												
Hixton, frigid--	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-13	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	13-20	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, fine sand	SP-SM, SP	A-1-b, A-3	0-2	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
273E2:												
Dobie-----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	20-30	4-9
	8-26	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	26-37	Very fine sandy loam, channery very fine sandy loam, loam, sandy loam	CL, ML, SC, SM	A-1-b, A-2-4, A-4	0	0	60-100	50-100	30-90	20-60	0-30	NP-9
	37-60	Weathered bedrock	---	---	---	---	0	0	---	---	---	---
Hixton, frigid--	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	95-100	70-90	23-26	5-10
	8-13	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	13-20	Silt loam	CL	A-4, A-6	0	0	95-100	90-100	85-100	70-90	25-35	7-15
	20-32	Loam, sandy loam, fine sandy loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-60	21-28	4-9
	32-37	Channery sand, sand, fine sand	SP-SM, SP	A-1-b, A-3	0-2	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
275B2:												
Hayriver--------	0-8	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	55-90	30-55	0-25	NP-7
	8-13	Fine sandy loam, sandy loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	50-90	25-60	0-25	NP-6
	13-30	Fine sandy loam, sandy loam, channery sandy loam, very fine sandy loam	CL, ML, SC, SM	A-4, A-2	0	0-9	75-100	50-100	35-85	20-60	0-25	NP-9
	30-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Elevasil, frigid	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-3	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Fine sandy loam, sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	30-90	2-35	15-21	NP-6
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	75-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
275C2:												
Hayriver--------	0-8	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	55-90	30-55	0-25	NP-7
	8-13	Fine sandy loam, sandy loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	50-90	25-60	0-25	NP-6
	13-30	Fine sandy loam, sandy loam, channery sandy loam, very fine sandy loam	CL, ML, SC, SM	A-4, A-2	0	0-9	75-100	50-100	35-85	20-60	0-25	NP-9
	30-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Elevasil, frigid	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-3	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Fine sandy loam, sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	30-90	2-35	15-21	NP-6
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	75-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	Plas- ticity index
	In				Pct	Pct					Pct	
275D2:												
Hayriver--------	0-8	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	55-90	30-55	0-25	NP-7
	8-13	Fine sandy loam, sandy loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	50-90	25-60	0-25	NP-6
	13-30	Fine sandy loam, sandy loam, channery sandy loam, very fine sandy loam	CL, ML, SC, SM	A-4, A-2	0	0-9	75-100	50-100	35-85	20-60	0-25	NP-9
	30-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Elevasil, frigid	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-3	80-100	75-100	60-90	20-45	18-25	3-7
	9-27	Fine sandy loam, sandy loam, loam	SC, CL, CL-ML, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	30-90	2-35	15-21	NP-6
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	75-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
276B:												
Humbird, loamy subsoil--------	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	55-85	25-55	15-25	NP-7
	9-15	Sandy loam, fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	55-85	25-55	20-28	NP-9
	15-27	Channery loam, clay loam, fine sandy loam, sandy loam	CH, CL	A-7	0	0-9	75-100	50-95	30-80	15-75	43-66	21-39
	27-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
278A:												
Merrillan, loamy subsoil--------	0-9	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	45-90	20-50	15-23	NP-6
	9-29	Fine sandy loam, sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	45-90	20-50	18-25	NP-7
	29-34	Channery loam, clay loam, sandy loam, fine sandy loam	CH, CL	A-7-6	0	0-9	75-100	50-95	30-80	15-75	43-65	21-40
	34-60	Weathered bedrock	---	---	---	---	0	0	---	---	---	---
282C:												
Twinmound-------	0-8	Fine sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-100	20-70	5-25	0-20	NP
	8-17	Fine sand, channery sand, sand	SP-SM, SP	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	17-26	Channery fine sand, fine sand, sand	SP-SM, SP	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	26-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
282F:												
Twinmound-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	1-3	Fine sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-100	20-70	5-25	0-20	NP
	3-17	Fine sand, channery sand, sand	SP-SM, SP	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	17-26	Channery fine sand, fine sand, sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	26-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
313D2:												
Plumcreek-------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-35	5-15
	9-28	Silt loam, loam, sandy loam	CL, SC	A-6	0	0	100	100	70-100	40-80	30-35	10-15
	28-36	Stratified silty clay loam to sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	65-100	35-75	20-35	5-15
	36-60	Stratified silty clay loam to sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	65-100	35-75	20-35	5-15
313F:												
Plumcreek-------	0-4	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	80-100	70-90	20-35	5-15
	4-7	Silt loam, loam	CL, CL-ML	A-4	0	0	100	100	75-100	60-90	20-30	5-10
	7-28	Silt loam, loam, sandy loam	CL, SC	A-6	0	0	100	100	70-100	40-80	30-35	10-15
	28-36	Stratified silty clay loam to sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	65-100	35-75	20-35	5-15
	36-60	Stratified silty clay loam to sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	65-100	35-75	20-35	5-15
316B2:												
Ella------------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	80-100	20-35	4-15
	8-55	Silt loam, silty clay loam	CL	A-6	0	0	100	100	90-100	80-100	28-35	9-15
	55-72	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	100	100	65-100	35-75	20-28	4-9
	72-80	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	100	100	65-100	35-75	20-28	4-9

Table 24.--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	
316C2:												
Ella------------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	80-100	20-35	4-15
	8-55	Silt loam, silty clay loam	CL	A-6	0	0	100	100	90-100	80-100	28-35	9-15
	55-72	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	100	100	65-100	35-75	20-28	4-9
	72-80	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	100	100	65-100	35-75	20-28	4-9
318A:												
Bearpen---------	0-18	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	85-100	80-95	20-35	4-15
	18-41	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	85-100	80-95	28-36	9-16
	41-50	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-2-6, A-4, A-6	0	0	100	100	55-95	30-80	23-32	6-13
	50-60	Stratified silty clay loam to sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0	0	100	100	55-95	30-80	20-28	4-9
349A:												
Rib, valley train, undrained------	0-8	Silt loam	CL-ML, CL	A-4, A-6	0	0-9	95-100	90-100	70-100	65-85	20-30	4-11
	8-32	Silt loam, silty clay loam	CL	A-6	0	0-9	95-100	90-100	70-100	65-85	30-40	10-20
	32-36	Gravelly loam, loam, very gravelly sandy loam	CL, ML, SC, SM	A-2-4, A-2-6, A-4, A-6	0	0-9	55-100	50-100	30-90	25-70	17-40	1-20
	36-60	Stratified sand to extremely gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1	0	0-9	45-95	40-95	10-30	2-10	0-18	NP

Table 24.--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	
378A:												
Poskin, valley train----------	0-9	Silt loam	CL, CL-ML	A-4	0	0-9	95-100	90-100	70-100	65-85	20-30	5-10
	9-12	Silt loam	CL-ML	A-4	0	0-9	95-100	90-100	70-100	65-85	20-25	4-7
	12-19	Silt loam	CL	A-4, A-6	0	0-9	95-100	90-100	70-100	65-85	25-35	7-15
	19-36	Silt loam	CL	A-4, A-6	0	0-9	95-100	90-100	70-100	65-85	25-35	9-15
	36-39	Sandy loam, loam, very gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-1, A-2, A-4	0	0-9	55-100	45-100	30-90	20-70	0-25	NP-7
	39-60	Stratified sand to extremely gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1	0	0-9	50-95	40-95	10-30	2-10	0-18	NP
403A:												
Dakota----------	0-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	80-100	65-90	20-35	5-15
	10-13	Silt loam, loam, sandy clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	85-100	60-100	50-90	20-35	5-15
	13-35	Silt loam, loam, sandy loam, silty clay loam, sandy clay loam	CL, SC	A-6	0	0	95-100	85-100	50-90	35-80	25-40	10-20
	35-38	Loamy sand, loamy coarse sand, gravelly coarse sand	SM, SP, SP-SM	A-1, A-2-4	0	0-9	60-100	50-100	20-75	2-15	15-25	1-7
	38-60	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0	0-9	60-100	50-100	20-70	1-10	0-18	NP

Table 24.--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	
413A:												
Rasset----------	0-10	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0-9	90-100	75-100	45-80	20-50	15-25	NP-8
	10-18	Sandy loam, loam	SC, SC-SM, SM	A-2-4, A-4	0	0-9	90-100	75-100	45-80	20-60	15-25	NP-8
	18-30	Sandy loam, loam	SC, SC-SM, SM	A-4, A-6	0	0-9	90-100	75-100	45-80	20-70	20-35	3-13
	30-50	Loamy sand, sand, loamy coarse sand, gravelly coarse sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-25	0-25	NP-6
	50-60	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0	0-9	60-100	50-100	25-75	2-8	0-20	NP-2
413B:												
Rasset----------	0-10	Sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0-9	90-100	75-100	45-80	20-50	15-25	NP-8
	10-18	Sandy loam, loam	SC, SC-SM, SM	A-2-4, A-4	0	0-9	90-100	75-100	45-80	20-60	15-25	NP-8
	18-30	Sandy loam, loam	SC, SC-SM, SM	A-4, A-6	0	0-9	90-100	75-100	45-80	20-70	20-35	3-13
	30-50	Loamy sand, sand, loamy coarse sand, gravelly coarse sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-25	0-25	NP-6
	50-60	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0	0-9	60-100	50-100	25-75	2-8	0-20	NP-2
416A:												
Menomin---------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	5-10
	9-32	Loam, sandy loam, silt loam, sandy clay loam	CL	A-4, A-6	0	0	95-100	90-100	55-85	30-80	28-39	9-18
	32-55	Loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	15-75	2-35	0-18	NP
	55-72	Stratified gravelly coarse sand to sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	15-70	2-25	0-18	NP

Table 24.--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	
423A:												
Meridian--------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	5-10
	9-28	Silt loam, loam, silty clay loam	CL	A-4, A-6	0	0	95-100	90-100	65-95	55-85	28-39	9-18
	28-32	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	55-85	30-70	25-35	5-15
	32-41	Loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-35	0-18	NP
	41-72	Stratified gravelly coarse sand to sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-70	2-25	0-18	NP
423B2:												
Meridian--------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	5-10
	9-28	Silt loam, loam, silty clay loam	CL	A-4, A-6	0	0	95-100	90-100	65-95	55-85	28-39	9-18
	28-32	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	55-85	30-70	25-35	5-15
	32-41	Loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-35	0-18	NP
	41-72	Stratified gravelly coarse sand to sand	SP-SM, SM, SP	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-70	2-25	0-18	NP

Table 24.--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	
423C2:												
Meridian--------	0-9	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	5-10
	9-28	Silt loam, loam, silty clay loam	CL	A-4, A-6	0	0	95-100	90-100	65-95	55-85	28-39	9-18
	28-32	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	55-85	30-70	25-35	5-15
	32-41	Loamy coarse sand, gravelly coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-35	0-18	NP
	41-72	Stratified gravelly coarse sand to sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-70	2-25	0-18	NP
428A:												
Shiffer---------	0-7	Loam	CL, CL-ML	A-4, A-6	0	0	90-100	85-100	65-95	55-75	20-35	6-15
	7-24	Loam, sandy loam	CL, SC	A-4, A-6	0	0	90-100	85-100	60-95	35-75	25-35	7-15
	24-32	Sandy loam, loamy sand	SM, SC-SM	A-1, A-2, A-4	0	0	90-100	85-100	35-75	15-45	17-27	NP-7
	32-60	Sand, coarse sand, loamy sand	SP-SM, SP, SM	A-1, A-2, A-3	0	0	90-100	85-100	25-65	1-25	0-20	NP-4
429A:												
Lows, undrained-	0-6	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	65-95	50-80	25-30	5-15
	6-13	Loam, sandy loam, silt loam	CL, SC-SM	A-2, A-4	0	0	95-100	90-100	60-95	30-80	20-30	5-15
	13-28	Loam, silt loam, sandy clay loam	CL, SC	A-6	0	0	95-100	90-100	60-95	30-80	30-35	10-15
	28-60	Sand, loamy sand, fine sand, coarse sand	SM, SP-SM	A-2, A-3	0	0	85-100	75-100	20-60	5-30	0-20	NP-4

Table 24.--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	Plas- ticity index
	In				Pct	Pct					Pct	
432A:												
Kevilar---------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	50-80	20-50	0-25	NP-7
	9-29	Loam, sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	85-100	75-100	50-90	20-80	0-28	NP-9
	29-50	Sand, fine sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	30-70	5-35	0-20	NP-3
	50-80	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	40-90	20-80	0-28	NP-9
432B:												
Kevilar---------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	50-80	20-50	0-25	NP-7
	9-29	Loam, sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	85-100	75-100	50-90	20-80	0-28	NP-9
	29-50	Sand, fine sand, loamy fine sand	SM, SP-SM	A-3, A-1-b, A-2-4	0	0	85-100	75-100	30-70	5-35	0-20	NP-3
	50-80	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	40-90	20-80	0-28	NP-9
432C2:												
Kevilar---------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	50-80	20-50	0-25	NP-7
	9-29	Loam, sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	85-100	75-100	50-90	20-80	0-28	NP-9
	29-50	Sand, fine sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	30-70	5-35	0-20	NP-3
	50-80	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	40-90	20-80	0-28	NP-9
432D2:												
Kevilar---------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	85-100	75-100	50-80	20-50	0-25	NP-7
	9-29	Loam, sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0	85-100	75-100	50-90	20-80	0-28	NP-9
	29-50	Sand, fine sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	30-70	5-35	0-20	NP-3
	50-80	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	40-90	20-80	0-28	NP-9

Table 24.--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	
433A:												
Forkhorn--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-80	20-50	0-25	NP-7
	9-25	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-95	20-80	0-28	NP-9
	25-32	Gravelly loamy sand, coarse sand, sand, loamy coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	20-70	5-30	0-25	NP-6
	32-72	Stratified gravelly coarse sand to sand	SP-SM, SP	A-1-b, A-3	0	0-9	60-100	50-100	15-75	2-10	0-20	NP-4
433B:												
Forkhorn--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-80	20-50	0-25	NP-7
	9-25	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-95	20-80	0-28	NP-9
	25-32	Gravelly loamy sand, coarse sand, sand, loamy coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	20-70	5-30	0-25	NP-6
	32-72	Stratified gravelly coarse sand to sand	SP-SM, SP	A-1-b, A-3	0	0-9	60-100	50-100	15-75	2-10	0-20	NP-4
433C2:												
Forkhorn--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-80	20-50	0-25	NP-7
	9-25	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-95	20-80	0-28	NP-9
	25-32	Gravelly loamy sand, coarse sand, sand, loamy coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	20-70	5-30	0-25	NP-6
	32-72	Stratified gravelly coarse sand to sand	SP-SM, SP	A-1-b, A-3	0	0-9	60-100	50-100	15-75	2-10	0-20	NP-4

Table 24.--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	
433D2:												
Forkhorn--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-80	20-50	0-25	NP-7
	9-25	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-95	20-80	0-28	NP-9
	25-32	Gravelly loamy sand, coarse sand, sand, loamy coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	20-70	5-30	0-25	NP-6
	32-72	Stratified gravelly coarse sand to sand	SP-SM, SP	A-1-b, A-3	0	0-9	60-100	50-100	15-75	2-10	0-20	NP-4
434B:												
Bilson----------	0-8	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-50	15-25	NP-7
	8-32	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	60-95	25-65	15-28	NP-9
	32-38	Stratified sand to loamy sand	SM, SP-SM, SP	A-3, A-2-4	0	0	80-100	75-100	55-90	1-25	0-20	NP-4
	38-60	Stratified sand to sandy loam	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	55-90	5-25	0-20	NP-4
436A:												
Rusktown--------	0-9	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	85-100	75-100	45-80	20-50	15-25	NP-6
	9-25	Loam, fine sandy loam, sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0-9	85-100	75-100	45-95	20-80	15-30	NP-10
	25-38	Loamy sand, coarse sand, sand, gravelly coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	20-70	5-30	0-25	NP-6
	38-72	Stratified gravelly coarse sand to sand	SP-SM, SP	A-1-b, A-3	0	0-9	75-100	50-100	15-75	2-10	0-20	NP-4

Table 24.--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	
438A:												
Hoopeston-------	0-13	Sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-80	25-45	0-25	NP-10
	13-22	Sandy loam, fine sandy loam, loam	SC, SC-SM, SM	A-2-4, A-4	0	0	90-100	85-100	60-90	30-65	0-30	NP-10
	22-37	Loamy sand, sand	SC-SM, SM, SP-SM	A-2, A-3	0	0	90-100	85-100	45-75	5-25	0-25	NP-6
	37-72	Sand, loamy sand, fine sand	SC-SM, SM	A-2, A-3	0	0	90-100	85-100	50-75	5-25	0-20	NP-4
453A:												
Burkhardt-------	0-10	Sandy loam	SC-SM, SM	A-2, A-4	0	0-9	85-100	75-100	55-70	25-40	0-26	2-7
	10-17	Sandy loam, loam	CL, ML, SC, SM	A-2, A-4	0	0-9	85-100	75-100	50-95	25-75	15-30	2-10
	17-19	Loamy sand, very gravelly coarse sand, sand	GP, SP, SP-SM, GW	A-1-a, A-1-b	0	0-9	30-100	25-100	20-60	1-30	0-20	NP-4
	19-60	Stratified sand to very gravelly coarse sand	GP, SP, SP-SM, GW	A-1-a, A-1-b	0	0-9	30-100	25-100	20-50	1-10	0-17	NP
453B:												
Burkhardt-------	0-10	Sandy loam	SC-SM, SM	A-2, A-4	0	0-9	85-100	75-100	55-70	25-40	0-26	2-7
	10-17	Sandy loam, loam	CL, ML, SC, SM	A-2, A-4	0	0-9	85-100	75-100	50-95	25-75	15-30	2-10
	17-19	Loamy sand, very gravelly coarse sand, sand	GP, SP, SP-SM, GW	A-1-a, A-1-b	0	0-9	30-100	25-100	20-60	1-30	0-20	NP-4
	19-60	Stratified sand to very gravelly coarse sand	GP, SP, SP-SM, GW	A-1-a, A-1-b	0	0-9	30-100	25-100	20-50	1-10	0-17	NP

Table 24.--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	
454B:												
Chetek, kame terrace--------	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-15	80-100	75-100	45-80	20-50	0-23	NP-6
	10-16	Sandy loam, loam, gravelly sandy loam	SC, SM, SC-SM	A-2, A-4, A-6	0-5	0-15	75-100	50-100	30-80	15-45	0-31	NP-13
	16-20	Stratified very gravelly coarse sand to loamy sand	SM, SP-SM	A-1, A-2-4, A-3	0-5	0-15	45-95	40-95	20-65	5-25	0-25	NP-6
	20-60	Stratified very gravelly coarse sand to sand	SP, SP-SM	A-1-b	0-5	0-15	45-95	40-95	10-60	1-15	0-17	NP
454C2:												
Chetek, kame terrace--------	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-15	80-100	75-100	45-80	20-50	0-23	NP-6
	10-16	Sandy loam, loam, gravelly sandy loam	SC, SM, SC-SM	A-2, A-4, A-6	0-5	0-15	75-100	50-100	30-80	15-45	0-31	NP-13
	16-20	Stratified very gravelly coarse sand to loamy sand	SM, SP-SM	A-1, A-2-4, A-3	0-5	0-15	45-95	40-95	20-65	5-25	0-25	NP-6
	20-60	Stratified very gravelly coarse sand to sand	SP, SP-SM	A-1-b	0-5	0-15	45-95	40-95	10-60	1-15	0-17	NP
454D2:												
Chetek, kame terrace--------	0-10	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-15	80-100	75-100	45-80	20-50	0-23	NP-6
	10-16	Sandy loam, loam, gravelly sandy loam	SC, SM, SC-SM	A-2, A-4, A-6	0-5	0-15	75-100	50-100	30-80	15-45	0-31	NP-13
	16-20	Stratified very gravelly coarse sand to loamy sand	SM, SP-SM	A-1, A-2-4, A-3	0-5	0-15	45-95	40-95	20-65	5-25	0-25	NP-6
	20-60	Stratified very gravelly coarse sand to sand	SP, SP-SM	A-1-b	0-5	0-15	45-95	40-95	10-60	1-15	0-17	NP

Table 24.--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	
454E:												
Chetek, kame terrace--------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-4	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-15	80-100	75-100	45-80	20-50	0-23	NP-6
	4-11	Sandy loam, loam, gravelly sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-15	55-100	50-100	30-80	15-45	0-23	NP-6
	11-16	Sandy loam, loam, gravelly sandy loam	SC, SM, SC-SM	A-2, A-4, A-6	0-5	0-15	75-100	50-100	30-80	15-45	0-31	NP-13
	16-20	Stratified very gravelly coarse sand to loamy sand	SM, SP-SM	A-1, A-2-4, A-3	0-5	0-15	45-95	40-95	20-65	5-25	0-25	NP-6
	20-60	Stratified very gravelly coarse sand to sand	SP, SP-SM	A-1-b	0-5	0-15	45-95	40-95	10-60	1-15	0-17	NP
468A:												
Oesterle, valley train----------	0-8	Sandy loam	SC, SC-SM, SM	A-1, A-2, A-4	0	0-9	80-100	75-100	30-80	20-50	18-26	3-8
	8-11	Sandy loam, loam, fine sandy loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-9	80-100	75-100	30-80	20-50	18-26	3-8
	11-25	Sandy loam, loam, fine sandy loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-9	80-100	75-100	30-80	20-60	0-28	NP-9
	25-31	Loamy sand, very gravelly coarse sand, sand	GP, SP, SP-SM, GW	A-1	0	0-9	45-100	40-95	20-60	1-30	0-20	NP-4
	31-60	Stratified sand to very gravelly coarse sand	GP, SP, SP-SM, GW	A-1	0	0-9	45-100	40-95	10-50	1-10	0-17	NP

Table 24.--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	
501A:												
Finchford-------	0-15	Loamy sand	SM, SP-SM	A-2-4	0	0-8	85-100	75-100	35-75	10-25	20-30	2-6
	15-19	Loamy sand, sand, coarse sand	SM, SP-SM	A-2-4	0	0-8	85-100	75-100	30-75	5-25	18-25	2-6
	19-26	Sand, loamy sand, gravelly coarse sand	SP-SM, SW-SM, SM	A-1-b, A-3	0	0-8	80-95	50-95	25-70	5-20	0-22	NP-4
	26-80	Stratified gravelly coarse sand to sand	SP, SP-SM, SW, SW-SM	A-3, A-1-b	0	0-8	60-95	50-95	20-60	0-10	0-20	NP-4
501B:												
Finchford-------	0-15	Loamy sand	SM, SP-SM	A-2-4	0	0-8	85-100	75-100	35-75	10-25	20-30	2-6
	15-19	Loamy sand, sand, coarse sand	SM, SP-SM	A-2-4	0	0-8	85-100	75-100	30-75	5-25	18-25	2-6
	19-26	Sand, loamy sand, gravelly coarse sand	SP-SM, SW-SM, SM	A-1-b, A-3	0	0-8	80-95	50-95	25-70	5-20	0-22	NP-4
	26-80	Stratified gravelly coarse sand to sand	SP, SP-SM, SW, SW-SM	A-3, A-1-b	0	0-8	60-95	50-95	20-60	0-10	0-20	NP-4
502B2:												
Chelsea---------	0-9	Fine sand	SM	A-2-4	0	0	100	100	75-100	15-25	0-22	NP-4
	9-30	Fine sand, loamy fine sand	SM	A-2-4	0	0	100	100	75-100	15-30	15-25	2-6
	30-80	Stratified fine sand to fine sandy loam	SM	A-2-4, A-4	0	0	100	100	75-100	15-45	15-25	2-6
502C2:												
Chelsea---------	0-9	Fine sand	SM	A-2-4	0	0	100	100	75-100	15-25	0-22	NP-4
	9-30	Fine sand, loamy fine sand	SM	A-2-4	0	0	100	100	75-100	15-30	15-25	2-6
	30-80	Stratified fine sand to fine sandy loam	SM	A-2-4, A-4	0	0	100	100	75-100	15-45	15-25	2-6

Table 24.--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	Plas- ticity index
	In				Pct	Pct					Pct	
506A:												
Komro-----------	0-14	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0-9	85-100	75-100	30-75	10-35	0-30	NP-6
	14-18	Sand, loamy sand, coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	85-100	75-100	20-75	5-35	0-25	NP-4
	18-38	Sand, loamy sand, gravelly coarse sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-75	2-35	0-20	NP-4
	38-72	Stratified sand to very gravelly coarse sand	SM, SP, SP-SM	A-1-b, A-3	0	0-9	60-100	50-100	20-70	2-25	0-20	NP-2
508A:												
Farrington------	0-14	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	85-100	75-100	30-75	10-35	0-30	NP-6
	14-18	Loamy sand, sand, coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	20-75	5-35	0-25	NP-4
	18-41	Loamy sand, sand, coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	20-75	5-35	0-20	NP-4
	41-72	Coarse sand, sand	SM, SP-SM	A-1-b, A-3	0	0	85-100	75-100	20-70	5-25	0-20	NP-2
510B:												
Boplain---------	0-9	Sand	SM, SP-SM	A-3, A-2-4	0	0	85-100	75-100	20-70	5-25	0-25	NP-3
	9-32	Sand, coarse sand, loamy sand, loamy coarse sand	SM, SP-SM	A-3, A-2-4	0	0	85-100	75-100	20-75	5-35	0-25	NP-6
	32-37	Sand, fine sand, channery sand	SP, SP-SM	A-3, A-2-4, A-1-b	0	0-9	75-100	55-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
510C:												
Boplain----------	0-9	Sand	SM, SP-SM	A-3, A-2-4	0	0	85-100	75-100	20-70	5-25	0-25	NP-3
	9-32	Sand, coarse sand, loamy sand, loamy coarse sand	SM, SP-SM	A-3, A-2-4	0	0	85-100	75-100	20-75	5-35	0-25	NP-6
	32-37	Sand, fine sand, channery sand	SP, SP-SM	A-3, A-2-4, A-1-b	0	0-9	75-100	55-100	30-90	1-10	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
511A:												
Plainfield-------	0-9	Sand	SM, SP-SM	A-2, A-3, A-1	0	0	75-100	75-100	20-70	5-25	0-22	NP
	9-32	Sand, loamy sand, coarse sand, loamy coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	75-100	75-100	20-70	5-25	0-20	NP-4
	32-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	60-100	50-100	15-55	1-10	0-17	NP
511B:												
Plainfield-------	0-9	Sand	SM, SP-SM	A-2, A-3, A-1	0	0	75-100	75-100	20-70	5-25	0-22	NP
	9-32	Sand, loamy sand, coarse sand, loamy coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	75-100	75-100	20-70	5-25	0-20	NP-4
	32-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	60-100	50-100	15-55	1-10	0-17	NP
511C:												
Plainfield-------	0-9	Sand	SM, SP-SM	A-2, A-3, A-1	0	0	75-100	75-100	20-70	5-25	0-22	NP
	9-32	Sand, loamy sand, coarse sand, loamy coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	75-100	75-100	20-70	5-25	0-20	NP-4
	32-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	60-100	50-100	15-55	1-10	0-17	NP

Table 24.--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	
511F:												
Plainfield------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-4	Sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	75-100	75-100	20-70	5-25	0-22	NP-4
	4-32	Sand, loamy sand, coarse sand, loamy coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	75-100	75-100	20-70	5-25	0-20	NP
	32-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	60-100	50-100	15-55	1-10	0-17	NP
512B:												
Drammen---------	0-9	Loamy sand	SM, SP-SM	A-1, A-2	0	0	85-100	75-100	45-65	10-20	0-25	NP-4
	9-44	Sand, loamy fine sand, fine sand, loamy sand	SM	A-1, A-2, A-3	0	0	85-100	75-100	40-60	5-20	0-20	NP-4
	44-65	Stratified sand to loamy fine sand	SM	A-2, A-3	0	0	85-100	75-100	45-75	9-25	0-25	NP-6
	65-72	Sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	30-60	5-20	0-17	NP
512C:												
Drammen---------	0-9	Loamy sand	SM, SP-SM	A-1, A-2	0	0	85-100	75-100	45-65	10-20	0-25	NP-4
	9-44	Sand, loamy fine sand, fine sand, loamy sand	SM	A-1, A-2, A-3	0	0	85-100	75-100	40-60	5-20	0-20	NP-4
	44-65	Stratified sand to loamy fine sand	SM	A-2, A-3	0	0	85-100	75-100	45-75	9-25	0-25	NP-6
	65-72	Sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	30-60	5-20	0-17	NP

Table 24.--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	
512D:												
Drammen---------	0-9	Loamy sand	SM, SP-SM	A-1, A-2	0	0	85-100	75-100	45-65	10-20	0-25	NP-4
	9-44	Sand, loamy fine sand, fine sand, loamy sand	SM	A-1, A-2, A-3	0	0	85-100	75-100	40-60	5-20	0-20	NP-4
	44-65	Stratified sand to loamy fine sand	SM	A-2, A-3	0	0	85-100	75-100	45-75	9-25	0-25	NP-6
	65-72	Sand, loamy sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	30-60	5-20	0-17	NP
516A:												
Aldo------------	0-7	Sand	SP-SM	A-2	0	0	85-100	75-100	20-70	5-25	0-22	NP-2
	7-42	Sand, coarse sand, gravelly coarse sand, loamy sand	SM, SP-SM	A-2	0	0-9	75-100	50-100	20-75	5-35	0-22	NP-4
	42-80	Sand, coarse sand, gravelly coarse sand	SP	A-1	0	0-9	60-100	50-100	15-55	1-10	0-17	NP
546A:												
Prissel---------	0-9	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	30-70	10-30	0-25	NP-4
	9-48	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
	48-56	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	45-95	20-80	18-30	4-12
	56-72	Sand, fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
546B:												
Prissel---------	0-9	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	30-70	10-30	0-25	NP-4
	9-48	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
	48-56	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	45-95	20-80	18-30	4-12
	56-72	Sand, fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-70	5-35	0-20	NP-4

Table 24.--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	
546C:												
Prissel---------	0-9	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	30-70	10-30	0-25	NP-4
	9-48	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
	48-56	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	45-95	20-80	18-30	4-12
	56-72	Sand, fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
546F:												
Prissel---------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-4	Loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	30-70	10-30	0-25	NP-4
	4-48	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
	48-56	Stratified silt loam to sand	CL, ML, SC, SM	A-2-4, A-4	0	0	80-100	75-100	45-95	20-80	18-30	4-12
	56-72	Sand, fine sand	SP-SM, SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-70	5-35	0-20	NP-4
555A:												
Fordum, frequently flooded--------	0-6	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0-7	80-100	75-100	70-100	65-85	20-35	3-15
	6-18	Silt loam, fine sandy loam, mucky sandy loam, gravelly loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-15	60-100	50-100	35-100	15-85	0-30	3-10
	18-30	Fine sandy loam, silt loam, mucky sandy loam, gravelly loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-15	60-100	50-100	30-100	15-85	0-30	3-10
	30-60	Sand, very gravelly loamy fine sand, gravelly coarse sand, fine sand	GP, SM, SP	A-1, A-2, A-3	0	0-15	30-100	25-100	7-95	1-50	0-14	NP

Table 24.--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	
561B:												
Tarr------------	0-9	Sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	55-90	5-15	0-22	NP-2
	9-34	Sand, fine sand	SP, SP-SM	A-3	0	0	80-100	75-100	55-90	1-10	0-20	NP-4
	34-62	Sand, fine sand	SP, SP-SM	A-3	0	0	80-100	75-100	55-90	1-10	0-14	NP
566A:												
Tint------------	0-9	Sand	SM, SP-SM	A-2-4	0	0	80-100	75-100	55-90	5-15	16-25	1-4
	9-34	Sand, fine sand	SP, SP-SM	A-3	0	0	80-100	75-100	55-90	1-10	0-20	NP-2
	34-60	Sand, fine sand	SM, SP-SM, SP	A-2-4, A-3	0	0	80-100	75-100	55-90	1-20	0-14	NP-2
573B:												
Plainbo, sand sheet----------	0-8	Sand	SC-SM, SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-25	0-25	NP-3
	8-32	Sand, loamy sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-85	5-35	0-25	NP-6
	32-37	Sand, fine sand, channery sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	55-100	30-90	1-25	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
573C:												
Plainbo, sand sheet----------	0-8	Sand	SC-SM, SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	20-70	5-25	0-25	NP-3
	8-32	Sand, loamy sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-85	5-35	0-25	NP-6
	32-37	Sand, fine sand, channery sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	55-100	30-90	1-25	0-20	NP-4
	37-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
588A:												
Meehan, valley train----------	0-8	Loamy sand	SM	A-1, A-2	0	0	80-100	75-100	40-90	15-30	15-30	1-6
	8-28	Sand, loamy sand, coarse sand	SM, SP, SP-SM	A-1, A-2	0	0	90-100	75-100	40-90	3-30	15-22	1-5
	28-60	Sand, coarse sand	SP, SP-SM	A-1, A-2, A-3	0	0	90-100	75-100	40-90	0-5	0-17	NP

Table 24.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
589A:												
Newson, undrained------	0-3	Mucky loamy sand	SM, SP-SM	A-1-b, A-2-4	0	0	80-100	75-100	30-75	10-35	0-65	NP-5
	3-8	Loamy sand, loamy fine sand	SM, SP-SM	A-2-4, A-1-b	0	0	80-100	75-100	30-75	10-35	0-40	NP-6
	8-22	Sand, coarse sand, loamy sand, loamy coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	80-100	75-100	20-75	5-30	0-20	NP-5
	22-60	Sand, loamy sand, coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	80-100	75-100	20-60	5-35	0-20	NP-5
601C:												
Beavercreek-----	0-5	Cobbly fine sandy loam	SM	A-2-4, A-4	0	1-25	70-100	50-75	35-70	25-50	20-35	2-12
	5-12	Stratified cobbly fine sandy loam to silt loam	SM	A-2-4, A-4	0	1-25	70-100	65-92	35-70	15-45	20-35	2-12
	12-60	Stratified very cobbly silt loam to extremely gravelly sand	SM, GM	A-1, A-2-4	0	30-60	45-80	40-70	25-50	10-30	20-35	2-12
616B:												
Chaseburg-------	0-9	Silt loam	ML, CL-ML	A-4	0	0	85-100	75-100	65-95	55-85	20-28	3-10
	9-60	Silt loam	ML, CL-ML	A-4	0	0	85-100	75-100	65-95	55-85	20-28	3-10
619A:												
Vancecreek, undrained------	0-16	Silt loam	CL	A-4, A-6	0	0	100	100	80-100	70-90	25-35	7-14
	16-49	Silt loam	CL	A-4, A-6	0	0	100	100	80-100	70-90	28-36	9-16
	49-60	Stratified very fine sand to silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	70-100	50-90	18-36	3-16

Table 24.--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	
626A:												
Arenzville------	0-10	Silt loam	ML, CL-ML	A-4	0	0	100	100	80-100	70-90	19-28	3-9
	10-25	Silt loam	ML, CL-ML	A-4	0	0	100	100	80-100	70-90	19-28	3-9
	25-40	Silt loam, silty clay loam	CL-ML, ML, CL	A-6, A-4	0	0	100	100	80-100	70-90	19-39	3-18
	40-60	Stratified silt loam to very fine sand	CL, CL-ML, ML	A-4	0	0	75-100	75-100	75-100	70-95	19-30	3-11
628A:												
Orion-----------	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	100	100	85-100	80-100	19-28	3-9
	8-32	Silt loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	70-80	19-28	3-9
	32-40	Silt loam, silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	85-100	85-100	19-39	3-18
	40-60	Stratified silt loam to very fine sand	CL, CL-ML, ML	A-4	0	0	80-100	80-100	80-100	75-95	19-28	3-9
629A:												
Ettrick, undrained------	0-16	Silt loam	CL	A-6, A-7	0	0	100	100	90-100	70-90	30-50	10-25
	16-35	Silt loam, silty clay loam	CH, CL	A-7	0	0	100	100	90-100	85-100	40-55	15-30
	35-60	Stratified silt loam to fine sand	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6, A-7	0	0	100	100	60-100	30-100	20-45	4-25
636A:												
Quarderer-------	0-13	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-27	4-9
	13-22	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-27	4-9
	22-29	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-27	4-9
	29-55	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-30	4-11
	55-72	Silt loam	CL, CL-ML	A-4	0	0	100	100	80-100	70-90	20-26	4-8

Table 24.--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	
646A:												
Dunnbot---------	0-9	Fine sandy loam	CL-ML, SC-SM	A-4	0	0	100	100	75-90	40-55	15-30	5-10
	9-36	Stratified sandy loam to silt loam	CL-ML, SC-SM	A-4	0	0	100	100	60-90	35-75	15-30	5-10
	36-45	Stratified sandy loam to silt loam	SC-SM	A-4	0	0	100	100	60-90	35-75	15-30	5-10
	45-72	Stratified loamy fine sand to gravelly coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	75-100	50-100	15-85	5-35	0-25	NP-6
656A:												
Scotah----------	0-4	Loamy fine sand	SM	A-2-4, A-4	0	0	85-100	75-100	55-95	20-50	0-35	NP-10
	4-22	Fine sand, sand, loamy sand, loamy fine sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	85-100	75-100	20-95	5-50	0-24	NP-6
	22-60	Stratified loamy fine sand to gravelly coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0-9	60-100	50-100	15-85	5-35	0-20	NP-4
766A:												
Moppet, occasionally flooded--------	0-4	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0	0	100	100	60-95	30-65	21-26	4-8
	4-10	Fine sandy loam, loam, silt loam	CL, ML, SC, SM	A-4	0	0	100	100	75-100	40-85	18-28	3-9
	10-39	Fine sandy loam, loam, silt loam	CL, ML, SC, SM	A-4	0	0	100	100	75-100	40-85	18-28	3-9
	39-60	Gravelly sand, fine sand, loamy fine sand	SM, SP, SP-SM	A-4, A-2-4, A-1-b	0	0	55-100	50-100	15-95	2-50	15-21	NP-4

Table 24.--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	
804B2: Arland, dissected------	0-8	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	55-90	30-55	0-25	NP-6
	8-10	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	0-25	NP-8
	10-15	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	0-25	NP-8
	15-23	Sandy loam, fine sandy loam, loam	CL-ML, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	20-25	4-8
	23-36	Sandy loam, fine sandy loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	21-28	4-9
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
804C2: Arland, dissected------	0-8	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	55-90	30-55	0-25	NP-6
	8-10	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	0-25	NP-8
	10-15	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	0-25	NP-8
	15-23	Sandy loam, fine sandy loam, loam	CL-ML, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	20-25	4-8
	23-36	Sandy loam, fine sandy loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	21-28	4-9
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
804D:												
Arland, dissected	0-1	Moderately decomposed plant material	---	A-8	0	0-5	---	---	---	---	---	---
	1-4	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-100	75-98	55-90	30-55	0-25	NP-6
	4-10	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-100	75-98	45-85	20-60	0-25	NP-8
	10-15	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	0-25	NP-8
	15-23	Sandy loam, fine sandy loam, loam	CL-ML, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	20-25	4-8
	23-36	Sandy loam, fine sandy loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0-5	80-98	75-98	45-85	20-60	21-28	4-9
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
814D2:												
Renova, dissected	0-8	Silt loam	CL-ML, ML, CL	A-4	0	0	95-100	95-100	95-100	85-100	20-30	3-11
	8-10	Silt loam	ML, CL, CL-ML	A-4	0	0	95-100	95-100	95-100	85-100	20-30	3-11
	10-19	Silty clay loam, silt loam	CL	A-6	0	0	95-100	95-100	80-100	80-95	35-42	15-21
	19-52	Loam, clay loam, sandy loam	SC, CL	A-6	0	0-9	95-100	85-95	50-90	35-75	25-40	10-20
	52-60	Loam, clay loam, sandy loam	CL	A-6	0	0-9	90-98	85-95	50-90	35-75	25-40	10-20

Table 24.--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	
816B2:												
Vlasaty, dissected------	0-7	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	80-95	30-40	5-15
	7-9	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	80-95	30-40	5-15
	9-16	Silt loam, silty clay loam	CL	A-4, A-6	0	0	98-100	95-100	80-100	80-95	25-40	8-15
	16-42	Clay loam, loam, sandy loam	CL	A-6, A-7	0	0-9	90-98	85-95	50-90	35-75	30-45	10-20
	42-60	Loam, clay loam, sandy loam	CL, CL-ML	A-4, A-6	0	0-9	90-98	85-95	50-90	35-75	25-40	5-15
816C2:												
Vlasaty, dissected------	0-7	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	80-95	30-40	5-15
	7-9	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	80-95	30-40	5-15
	9-16	Silt loam, silty clay loam	CL	A-4, A-6	0	0	98-100	95-100	80-100	80-95	25-40	8-15
	16-42	Clay loam, loam, sandy loam	CL	A-6, A-7	0	0-9	90-98	85-95	50-90	35-75	30-45	10-20
	42-60	Loam, clay loam, sandy loam	CL, CL-ML	A-4, A-6	0	0-9	90-98	85-95	50-90	35-75	25-40	5-15
826B2:												
Hersey----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	8-58	Silt loam	CL, CL-ML	A-6, A-4	0	0	98-100	95-100	90-100	85-100	25-40	5-15
	58-115	Clay loam, loam, sandy loam	CL, CL-ML, SC	A-4, A-6	0	0-9	90-100	85-95	50-90	35-75	23-40	6-18
826C2:												
Hersey----------	0-8	Silt loam	CL, CL-ML	A-4	0	0	100	100	100	90-100	20-30	4-10
	8-58	Silt loam	CL, CL-ML	A-6, A-4	0	0	98-100	95-100	90-100	85-100	25-40	5-15
	58-115	Clay loam, loam, sandy loam	CL, CL-ML, SC	A-4, A-6	0	0-9	90-100	85-95	50-90	35-75	23-40	6-18

Table 24.--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	
828B:												
Vasa------------	0-9	Silt loam	ML	A-4	0	0	100	100	100	95-100	30-40	5-10
	9-13	Silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	12-20
	13-60	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	98-100	95-100	90-100	85-100	25-40	5-15
	60-70	Loam, sandy loam, clay loam	CL-ML, SC-SM, SC, CL	A-4, A-6	0	0-9	90-100	85-95	50-90	35-75	25-40	5-20
836B2:												
Spencer, dissected------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	21-28	2-13
	9-22	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	21-28	2-13
	22-42	Silt loam	CL	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	28-35	9-15
	42-48	Loam, gravelly sandy loam, sandy loam	CL, CL-ML, SC, SC-SM	A-1-b, A-2-4, A-4	0	0-5	55-95	50-90	30-80	15-55	21-30	4-11
	48-72	Sandy loam, gravelly loam, loam	CL-ML, SC-SM	A-1-b, A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	18-25	NP-7
836C2:												
Spencer, dissected------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	21-28	2-13
	9-22	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	21-28	2-13
	22-42	Silt loam	CL	A-4, A-6	0	0-5	95-100	85-100	85-100	75-100	28-35	9-15
	42-48	Loam, gravelly sandy loam, sandy loam	CL, CL-ML, SC, SC-SM	A-1-b, A-2-4, A-4	0	0-5	55-95	50-90	30-80	15-55	21-30	4-11
	48-72	Sandy loam, gravelly loam, loam	CL-ML, SC-SM	A-1-b, A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	18-25	NP-7
838B:												
Almena, dissected------	0-9	Silt loam	CL	A-4, A-6	0	0-5	85-100	85-100	85-100	75-100	25-32	7-13
	9-13	Silt loam	CL, CL-ML	A-4, A-6	0	0-5	85-100	85-100	85-100	75-100	21-32	4-13
	13-21	Silt loam	CL	A-4, A-6	0	0-5	85-100	85-100	85-100	75-100	25-35	7-15
	21-42	Silt loam	CL	A-4, A-6	0	0-5	85-100	85-100	85-100	70-100	28-35	9-15
	42-60	Sandy loam, loam, gravelly sandy loam	CL, SC, SM	A-1, A-2, A-4	0	0-5	55-95	50-95	30-80	15-55	21-30	3-11

Table 24.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
870B2:												
Santiago,												
dissected------	0-10	Silt loam	CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-8
	10-15	Silt loam, silt	CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-7
	15-23	Silt loam	CL, CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-9
	23-87	Gravelly sandy loam, sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	0-25	NP-9
	87-102	Sandy loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	0-25	NP-8
870C2:												
Santiago,												
dissected------	0-10	Silt loam	CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-8
	10-15	Silt loam, silt	CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-7
	15-23	Silt loam	CL, CL-ML, ML	A-4	0	0-5	95-100	85-100	85-100	75-100	0-25	NP-9
	23-87	Gravelly sandy loam, sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	0-25	NP-9
	87-102	Sandy loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-2-4, A-4	0	0-5	55-95	50-95	30-80	15-55	0-25	NP-8

Table 24.--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	
875B:												
Amery, dissected	0-9	Sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	80-100	75-98	45-80	20-50	0-23	NP-6
	9-22	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-1-b, A-2-4	0	0-15	75-100	70-98	40-95	20-80	0-23	NP-7
	22-34	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	34-41	Gravelly sandy loam, sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	41-71	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-28	NP-9
	71-80	Sandy loam, fine sandy loam, gravelly sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-23	NP-7

Table 24.--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	
875C2:												
Amery, dissected	0-9	Sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	80-100	75-98	45-80	20-50	0-23	NP-6
	9-22	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-1-b, A-2-4	0	0-15	75-100	70-98	40-95	20-80	0-23	NP-7
	22-34	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	34-41	Gravelly sandy loam, sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	41-71	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-28	NP-9
	71-80	Sandy loam, fine sandy loam, gravelly sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-23	NP-7
875D:												
Amery, dissected	0-3	Sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	80-100	75-98	45-80	20-50	0-23	NP-6
	3-22	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-1-b, A-2-4	0	0-15	75-100	70-98	40-95	20-80	0-23	NP-7
	22-34	Sandy loam, fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	34-41	Gravelly sandy loam, sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	15-23	NP-7
	41-71	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-28	NP-9
	71-80	Sandy loam, fine sandy loam, gravelly sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-95	50-95	30-80	15-55	0-23	NP-7

Table 24.--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	
1125F:												
Dorerton--------	0-3	Loam	CL-ML, CL	A-4	1-3	0-5	95-100	85-100	70-95	55-80	20-30	5-10
	3-15	Loam, sandy loam, fine sandy loam, silt loam	ML, SM	A-4	0	0-10	95-100	85-100	55-80	35-70	15-30	NP-10
	15-18	Loam, clay loam, silty clay loam, silt loam	CL, ML	A-4, A-6	0	0-10	95-100	85-100	70-95	50-85	30-40	5-15
	18-30	Very channery clay loam, very channery loam, extremely flaggy loam	GC, SC, SC-SM	A-1, A-2	1-20	20-55	40-75	35-70	25-50	20-40	30-45	5-20
	30-60	Extremely flaggy loamy sand, extremely channery loam, very flaggy sand, very channery sandy loam	GM, GW-GM, SM	A-1, A-2-4	1-20	20-55	40-75	35-70	15-40	5-30	15-25	NP-10

Table 24.--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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plas- ticity index
	In				Pct	Pct					Pct	
1125F:												
Elbaville-------	0-1	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	1-5	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	90-95	20-35	4-15
	5-11	Silt loam, silt	CL-ML, CL	A-4	0	0	100	100	90-100	90-95	20-35	4-15
	11-21	Silt loam, silty clay loam, loam	CL	A-4, A-6, A-7	0	0	100	100	95-100	80-95	30-45	8-20
	21-26	Silty clay, silty clay loam, channery clay, flaggy clay loam	CH, CL, MH, ML	A-7	0-10	0-20	90-100	80-100	75-100	65-95	40-65	20-32
	26-37	Very flaggy silty clay loam, very channery clay, very channery clay loam, extremely flaggy loam, extremely channery silty clay	GC, GM, SC, SM	A-2, A-4, A-6, A-7	1-10	20-55	35-75	35-75	25-65	20-50	30-45	5-20
	37-60	Extremely flaggy sandy loam, very channery loam, very flaggy loamy sand, extremely channery sand	GM, SM	A-1, A-2-4	1-10	20-55	40-80	35-75	15-50	10-30	0-20	NP-4

Table 24.--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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
1145F:												
Gaphill---------	0-2	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	2-5	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-9	80-100	75-100	45-80	20-50	18-25	3-7
	5-11	Sandy loam, fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-1	0-9	80-100	75-100	45-95	20-80	15-23	NP-6
	11-32	Sandy loam, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-4	0-3	0-9	80-100	75-100	45-95	20-80	18-28	3-9
	32-50	Sand, fine sand, loamy sand, channery sand, flaggy sand	SM, SP	A-1-b, A-2-4, A-3	0-5	0-9	55-100	50-100	20-85	2-35	0-21	NP-4
	50-56	Sand, fine sand, channery sand, flaggy sand	SP-SM, SP	A-1-b, A-3	0-5	0-9	55-100	50-100	20-85	1-10	0-20	NP-4
	56-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Rockbluff-------	0-2	Moderately decomposed plant material	---	A-8	0	0	100	100	---	---	---	---
	2-4	Loamy sand	SM	A-1-b	0	0-9	80-100	75-100	30-75	10-35	0-35	NP-3
	4-9	Loamy sand, sand, fine sand, loamy fine sand	SM, SP-SM	A-1-b, A-3	0	0-9	80-100	75-100	20-85	5-35	0-20	NP-2
	9-35	Sand, fine sand, channery loamy sand, flaggy sand	SM, SP	A-1-b, A-3	0-3	0-9	55-100	50-100	20-85	2-35	0-20	NP-2
	35-52	Sand, fine sand, channery sand, flaggy sand	SP-SM, SP	A-1-b, A-3	0-5	0-9	55-100	50-100	20-85	1-10	0-17	NP
	52-80	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
1224F:												
Boone-----------	0-1	Moderately decomposed plant material	---	A-8	0	0	---	---	---	---	---	---
	1-3	Sand	SM, SP-SM	A-2-4, A-3	0	0-9	80-100	75-100	55-90	5-15	0-30	NP
	3-21	Sand, fine sand, loamy sand, channery sand, loamy fine sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-9	55-100	50-100	20-85	2-15	0-17	NP
	21-35	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	20-85	1-10	0-17	NP
	35-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Elevasil--------	0-1	Moderately decomposed plant material	---	A-8	0	0	---	---	---	---	---	---
	1-3	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	80-100	75-100	60-90	20-45	18-25	3-7
	3-27	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4	0	0	80-100	75-100	60-90	25-60	21-28	4-9
	27-31	Loamy sand, loamy fine sand, channery sand, fine sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0-9	55-100	50-100	30-90	2-35	0-22	NP-6
	31-39	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	30-90	1-10	0-20	NP-4
	39-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
1233F:												
Boone-----------	0-1	Moderately decomposed plant material	---	A-8	0	0	---	---	---	---	---	---
	1-3	Sand	SM, SP-SM	A-2-4, A-3	0	0-9	80-100	75-100	55-90	5-15	0-30	NP
	3-21	Sand, fine sand, loamy sand, channery sand, loamy fine sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0-9	55-100	50-100	20-85	2-15	0-17	NP
	21-35	Sand, fine sand, channery sand	SP, SP-SM	A-1-b, A-3	0	0-9	55-100	50-100	20-85	1-10	0-17	NP
	35-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Tarr------------	0-2	Moderately decomposed plant material	---	A-8	0	0	---	---	---	---	---	---
	2-6	Sand	SM, SP-SM	A-2-4, A-3	0	0	80-100	75-100	55-90	5-15	0-30	NP-2
	6-34	Sand, fine sand	SP, SP-SM	A-3	0	0	80-100	75-100	55-90	1-10	0-20	NP-3
	34-62	Sand, fine sand	SP, SP-SM	A-3	0	0	80-100	75-100	55-90	1-10	0-14	NP
1275F:												
Hayriver--------	0-1	Moderately decomposed plant material	---	A-8	0	0	---	---	---	---	---	---
	1-4	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	55-90	30-55	0-25	NP-7
	4-13	Fine sandy loam, sandy loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0-3	80-100	75-100	50-90	25-60	0-25	NP-6
	13-30	Fine sandy loam, sandy loam, channery sandy loam, very fine sandy loam	CL, ML, SC, SM	A-4, A-2	0	0-9	75-100	50-100	35-85	20-60	0-25	NP-9
	30-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 24.--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	
1275F:												
Twinmound-------	0-1	Slightly decomposed plant material	---	A-8	---	---	---	---	---	---	---	---
	1-3	Fine sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-100	20-70	5-25	0-30	NP
	3-17	Fine sand, channery sand, sand	SP-SM, SP	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	17-26	Channery fine sand, fine sand, sand	SP, SP-SM	A-1, A-2, A-3	0	0-9	75-100	50-100	15-85	1-25	0-17	NP
	26-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
1648A:												
Northbend-------	0-7	Silt loam	ML, CL-ML	A-4	0	0	95-100	90-100	70-100	65-85	0-25	NP-7
	7-34	Silt loam, loam, sandy loam	CL, ML, SC, SM	A-4	0	0	95-100	90-100	55-95	30-80	0-28	NP-9
	34-36	Loamy fine sand, loamy sand	SM	A-1	0	0	95-100	90-100	35-95	15-50	15-21	1-4
	36-60	Sand, fine sand	SM, SP-SM	A-1, A-3	0	0	95-100	90-100	25-75	5-35	0-20	NP-2
Ettrick, flood plain, undrained------	0-16	Silt loam	CL	A-6, A-7	0	0	100	100	80-100	70-90	30-50	10-25
	16-35	Silt loam, silty clay loam	CH, CL	A-7	0	0	100	100	80-100	70-90	40-55	15-30
	35-60	Stratified fine sand to silt loam	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6, A-7	0	0	100	100	60-100	30-100	20-45	4-25
1658A:												
Algansee--------	0-4	Fine sandy loam	SC-SM, SM	A-4	0	0	100	100	75-90	40-55	25-40	2-9
	4-31	Loamy fine sand, fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0	85-100	75-100	25-95	5-35	0-25	NP-10
	31-60	Stratified gravelly coarse sand to loamy fine sand	GM, SM	A-1-b, A-2-4, A-3	0	0	60-100	50-100	15-95	5-35	0-25	NP-6

Table 24.--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	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
1658A:												
Kalmarville, undrained------	0-6	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	90-100	70-100	65-90	25-50	6-15
	6-37	Stratified sandy loam to silt loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	90-100	65-95	35-75	20-40	2-14
	37-42	Stratified sandy loam to silt loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	60-90	30-60	16-33	2-13
	42-60	Stratified coarse sand to fine sand	SM, SP-SM	A-1, A-2-4, A-3	0	0	90-100	85-100	25-85	5-35	0-20	NP-2
2002. Udorthents, earthen dams												
2003A. Riverwash												
2013. Pits, gravel												
2014. Pits, quarry, hard bedrock												
2016. Pits, quarry, soft bedrock												
2030: Udorthents, cut or fill.												
Udipsamments, cut or fill.												
2050. Landfill												
M-W. Miscellaneous water												

Table 24.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
W. Water												

Table 25.--Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
11A:												
Markey, flood plain, undrained------------	0-27	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	2	2	134
	27-60	0-6	1.55-1.80	6.00-60	0.03-0.11	0.0-2.9	0.2-0.8	.15	.15			
20A:												
Palms, undrained------	0-40	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	2	2	134
	40-60	10-30	1.45-1.75	0.20-2.00	0.12-0.22	3.0-5.9	1.0-4.0	.28	.28			
Houghton, undrained---	0-22	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	3	2	134
	22-28	0-0	0.15-0.30	0.60-6.00	0.45-0.55	---	60-85	.02	.02			
	28-60	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02			
40A:												
Markey, undrained-----	0-27	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	2	2	134
	27-60	0-6	1.70-1.80	6.00-60	0.02-0.07	0.0-2.9	0.2-0.8	.15	.15			
Seelyeville, undrained	0-12	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	3	2	134
	12-72	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02			
45A:												
Seelyeville, undrained	0-12	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	3	2	134
	12-72	---	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02			
Cathro, undrained-----	0-16	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	2	2	134
	16-30	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02			
	30-60	7-30	1.45-1.75	0.20-2.00	0.11-0.22	0.0-2.9	1.0-4.0	.28	.28			
101B:												
Menahga, valley train	0-9	2-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-1.0	.02	.02	5	1	220
	9-33	1-7	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	---	---			
	33-80	0-5	1.60-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
101C:												
Menahga, valley train	0-9	2-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-1.0	.02	.02	5	1	220
	9-33	1-7	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	---	---			
	33-80	0-5	1.60-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
101E:												
Menahga, valley train	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	5	1	220
	1-5	2-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	2.0-5.0	.02	.02			
	5-33	1-7	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.1-0.5	---	---			
	33-80	0-5	1.60-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
115B2:												
Seaton----------------	0-8	12-22	1.25-1.40	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	8-13	12-22	1.25-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	13-55	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	55-80	10-20	1.45-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
115C2:												
Seaton----------------	0-8	12-22	1.25-1.40	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	8-13	12-22	1.25-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	13-55	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	55-80	10-20	1.45-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
115D2:												
Seaton	0-8	12-22	1.25-1.40	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	8-13	12-22	1.25-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	13-55	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	55-80	10-20	1.45-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
115E2:												
Seaton	0-8	12-22	1.25-1.40	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	8-13	12-22	1.25-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	13-55	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	55-80	10-20	1.45-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
116C2:												
Churchtown	0-9	12-22	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-26	18-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.5-1.0	---	---			
	26-63	18-30	1.40-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	63-80	10-20	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
116D2:												
Churchtown	0-9	12-22	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-26	18-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.5-1.0	---	---			
	26-63	18-30	1.40-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	63-80	10-20	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
116E2:												
Churchtown	0-9	12-22	1.30-1.40	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-26	18-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.5-1.0	---	---			
	26-63	18-30	1.40-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	63-80	10-20	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
125B2:												
Pepin	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	4	5	56
	9-48	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	48-58	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	58-66	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	66-80	---	---	0.06-0.60	---	---	---	---	---			
125C2:												
Pepin	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	4	5	56
	9-48	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	48-58	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	58-66	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	66-80	---	---	0.06-0.60	---	---	---	---	---			
125D2:												
Pepin	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	4	5	56
	9-48	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	48-58	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	58-66	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	66-80	---	---	0.06-0.60	---	---	---	---	---			
125E2:												
Pepin	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	4	5	56
	9-48	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	48-58	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	58-66	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	66-80	---	---	0.06-0.60	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
135C2:												
Wickware	0-10	10-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	10-17	15-25	1.30-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.5-1.0	---	---			
	17-36	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	36-71	10-25	1.45-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	71-80	5-15	1.45-1.55	0.60-6.00	0.17-0.19	0.0-2.9	0.0-0.5	---	---			
135D2:												
Wickware	0-10	10-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	10-17	15-25	1.30-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.5-1.0	---	---			
	17-36	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	36-71	10-25	1.45-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	71-80	5-15	1.45-1.55	0.60-6.00	0.17-0.19	0.0-2.9	0.0-0.5	---	---			
135E2:												
Wickware	0-10	10-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	10-17	15-25	1.30-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.5-1.0	---	---			
	17-36	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	36-71	10-25	1.45-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	71-80	5-15	1.45-1.55	0.60-6.00	0.17-0.19	0.0-2.9	0.0-0.5	---	---			
136B:												
Doritty	0-9	10-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	9-12	10-20	1.30-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	12-18	15-25	1.30-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-1.0	---	---			
	18-38	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	38-45	10-25	1.45-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	45-60	1-20	1.50-1.65	0.60-6.00	0.10-0.20	0.0-2.9	0.0-0.5	---	---			
136C2:												
Doritty	0-9	10-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	9-12	10-20	1.30-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	12-18	15-25	1.30-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-1.0	---	---			
	18-38	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	38-45	10-25	1.45-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	45-60	1-20	1.50-1.65	0.60-6.00	0.10-0.20	0.0-2.9	0.0-0.5	---	---			
144B2:												
NewGlarus	0-9	12-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	3	5	56
	9-13	10-27	1.35-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	13-23	18-35	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	23-35	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	35-45	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	45-60	---	---	0.06-0.60	---	---	---	---	---			
144C2:												
NewGlarus	0-9	12-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	3	5	56
	9-13	10-27	1.35-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	13-23	18-35	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	23-35	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	35-45	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	45-60	---	---	0.06-0.60	---	---	---	---	---			
144D2:												
NewGlarus	0-9	12-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	3	5	56
	9-13	10-27	1.35-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	13-23	18-35	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	23-35	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	35-45	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	45-60	---	---	0.06-0.60	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
144E2:												
NewGlarus-------------	0-9	12-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	3	5	56
	9-13	10-27	1.35-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	13-23	18-35	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	23-35	35-65	1.25-1.55	0.06-0.20	0.05-0.20	6.0-8.9	0.0-0.5	---	---			
	35-45	12-27	1.35-1.55	0.60-2.00	0.06-0.16	0.0-2.9	0.0-0.5	---	---			
	45-60	---	---	0.06-0.60	---	---	---	---	---			
161E:												
Fivepoints------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	2	6	48
	1-4	12-27	1.30-1.50	0.20-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37			
	4-10	18-35	1.40-1.55	0.20-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	10-19	35-75	1.25-1.55	0.01-0.20	0.04-0.20	6.0-8.9	0.0-0.5	---	---			
	19-35	8-27	1.40-1.50	0.60-6.00	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	35-80	---	---	0.06-0.60	---	---	---	---	---			
208A:												
Siouxcreek------------	0-8	8-20	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	2.0-3.0	.37	.37	3	5	56
	8-14	6-15	1.40-1.65	0.60-2.00	0.17-0.22	0.0-2.9	0.0-1.0	---	---			
	14-22	14-24	1.40-1.65	0.60-2.00	0.17-0.22	0.0-2.9	0.0-1.0	---	---			
	22-32	6-18	1.50-1.70	2.00-6.00	0.11-0.16	0.0-2.9	0.0-0.5	---	---			
	32-38	2-7	1.55-1.70	6.00-20	---	0.0-2.9	0.0-0.5	---	---			
	38-60	---	---	0.06-2.00	---	---	---	---	---			
213B2:												
Hixton----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.08-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.60-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
213C2:												
Hixton----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.08-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.60-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
224B:												
Elevasil--------------	0-9	8-13	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.50-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
224C2:												
Elevasil--------------	0-9	8-13	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.50-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
224D2:												
Elevasil--------------	0-9	8-13	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.50-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
224E2:												
Elevasil--------------	0-9	8-13	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.50-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
233C:												
Boone-----------------	0-8	2-3	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-1.0	.02	.02	3	1	220
	8-21	0-3	1.60-1.70	6.00-20	0.05-0.11	0.0-2.9	0.0-0.5	---	---			
	21-35	0-3	1.60-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	35-60	---	---	0.20-2.00	---	---	---	---	---			
243B2:												
Hixton, thin solum----	0-8	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-15	15-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	15-21	5-20	1.45-1.65	0.60-6.00	0.08-0.17	0.0-2.9	0.0-0.5	---	---			
	21-60	---	---	0.06-0.60	---	---	---	---	---			
243C2:												
Hixton, thin solum----	0-8	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-15	15-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	15-21	5-20	1.45-1.65	0.60-6.00	0.08-0.17	0.0-2.9	0.0-0.5	---	---			
	21-60	---	---	0.06-0.60	---	---	---	---	---			
244B:												
Elkmound--------------	0-8	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	2	5	56
	8-12	5-20	1.45-1.65	0.60-6.00	0.08-0.17	0.0-2.9	0.0-0.5	---	---			
	12-60	---	---	0.06-0.60	---	---	---	---	---			
244C2:												
Elkmound--------------	0-8	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	2	5	56
	8-12	5-20	1.45-1.65	0.60-6.00	0.08-0.17	0.0-2.9	0.0-0.5	---	---			
	12-60	---	---	0.06-0.60	---	---	---	---	---			
244D2:												
Elkmound--------------	0-8	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.32	.32	2	5	56
	8-12	5-20	1.45-1.65	0.60-6.00	0.08-0.17	0.0-2.9	0.0-0.5	---	---			
	12-60	---	---	0.06-0.60	---	---	---	---	---			
254B2:												
Norden----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-37	10-26	1.40-1.60	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
254C2:												
Norden----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-37	10-26	1.40-1.60	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
254D2:												
Norden----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-37	10-26	1.40-1.60	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
254E2:												
Norden----------------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-20	14-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-37	10-26	1.40-1.60	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
254F:												
Norden	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	5	56
	1-3	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	3.0-7.0	.37	.37			
	3-20	14-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-37	10-26	1.40-1.60	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
255B2:												
Urne	0-9	10-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-28	6-18	1.45-1.65	0.60-6.00	0.09-0.22	0.0-2.9	0.0-0.5	---	---			
	28-36	10-26	1.45-1.65	0.60-5.95	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.06-2.00	---	---	---	---	---			
255C2:												
Urne	0-9	10-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-28	6-18	1.45-1.65	0.60-6.00	0.09-0.22	0.0-2.9	0.0-0.5	---	---			
	28-36	10-26	1.45-1.65	0.60-5.95	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.06-2.00	---	---	---	---	---			
255D2:												
Urne	0-9	10-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-28	6-18	1.45-1.65	0.60-6.00	0.09-0.22	0.0-2.9	0.0-0.5	---	---			
	28-36	10-26	1.45-1.65	0.60-5.95	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.06-2.00	---	---	---	---	---			
255E2:												
Urne	0-9	10-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-28	6-18	1.45-1.65	0.60-6.00	0.09-0.22	0.0-2.9	0.0-0.5	---	---			
	28-36	10-26	1.45-1.65	0.60-5.95	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.06-2.00	---	---	---	---	---			
255F:												
Urne	0-2	10-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	3.0-7.0	.32	.32	3	3	86
	2-28	6-18	1.45-1.65	0.60-6.00	0.09-0.22	0.0-2.9	0.0-0.5	---	---			
	28-36	10-26	1.45-1.65	0.60-5.95	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.06-2.00	---	---	---	---	---			
265B:												
Garne	0-18	1-8	1.45-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	3	2	134
	18-23	1-8	1.50-1.70	6.00-20	0.07-0.12	0.0-2.9	1.0-2.0	---	---			
	23-27	1-8	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.0-1.0	---	---			
	27-34	10-26	1.40-1.70	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	34-60	---	---	0.06-2.00	---	---	---	---	---			
265C:												
Garne	0-18	1-8	1.45-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	3	2	134
	18-23	1-8	1.50-1.70	6.00-20	0.07-0.12	0.0-2.9	1.0-2.0	---	---			
	23-27	1-8	1.50-1.70	6.00-20	0.06-0.11	0.0-2.9	0.0-1.0	---	---			
	27-34	10-26	1.40-1.70	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	34-60	---	---	0.06-2.00	---	---	---	---	---			
266B:												
Hiles	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	3	5	56
	9-19	20-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.5-1.0	---	---			
	19-29	18-35	1.55-1.70	0.20-2.00	0.08-0.18	3.0-5.9	0.0-0.5	---	---			
	29-60	---	---	0.00-0.60	---	---	---	---	---			
268A:												
Kert	0-9	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	3	5	56
	9-22	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.5-1.0	---	---			
	22-34	18-35	1.55-1.70	0.20-2.00	0.08-0.18	3.0-5.9	0.0-0.5	---	---			
	34-60	---	---	0.00-0.60	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
269A:												
Veedum, undrained-----	0-5	0-0	0.15-0.40	0.20-6.00	0.35-0.45	---	30-80	.02	.02	3	5	56
	5-7	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	4.0-10	.37	.37			
	7-9	18-27	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	9-20	20-27	1.40-1.55	0.60-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	20-26	18-35	1.55-1.70	0.20-2.00	0.08-0.19	3.0-5.9	0.0-0.5	---	---			
	26-60	---	---	0.00-0.60	---	---	---	---	---			
273B2:												
Dobie-----------------	0-8	10-17	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-26	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	26-37	6-17	1.35-1.75	0.60-6.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
Hixton, frigid--------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-13	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	13-20	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
273C2:												
Dobie-----------------	0-8	10-17	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-26	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	26-37	6-17	1.35-1.75	0.60-6.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
Hixton, frigid--------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-13	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	13-20	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
273D2:												
Dobie-----------------	0-8	10-17	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-26	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	26-37	6-17	1.35-1.75	0.60-6.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
Hixton, frigid--------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-13	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	13-20	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
273E2:												
Dobie-----------------	0-8	10-17	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-26	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	26-37	6-17	1.35-1.75	0.60-6.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.06-2.00	---	---	---	---	---			
Hixton, frigid--------	0-8	12-16	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	3	5	56
	8-13	15-25	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	13-20	14-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	20-32	10-17	1.55-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	32-37	2-6	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
275B2:												
Hayriver--------------	0-8	7-15	1.35-1.65	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	8-13	5-12	1.40-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	13-30	6-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	30-60	---	---	0.06-2.00	---	---	---	---	---			
Elevasil, frigid------	0-9	8-13	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.55-1.70	2.00-20	0.04-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
275C2:												
Hayriver--------------	0-8	7-15	1.35-1.65	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	8-13	5-12	1.40-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	13-30	6-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	30-60	---	---	0.06-2.00	---	---	---	---	---			
Elevasil, frigid------	0-9	8-13	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.55-1.70	2.00-20	0.04-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
275D2:												
Hayriver--------------	0-8	7-15	1.35-1.65	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	8-13	5-12	1.40-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	13-30	6-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	30-60	---	---	0.06-2.00	---	---	---	---	---			
Elevasil, frigid------	0-9	8-13	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	9-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.55-1.70	2.00-20	0.04-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
276B:												
Humbird, loamy subsoil	0-9	6-13	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-3.0	.28	.28	3	3	86
	9-15	8-17	1.45-1.65	0.60-6.00	0.12-0.17	0.0-2.9	0.0-0.5	---	---			
	15-27	18-35	1.50-1.75	0.20-2.00	0.07-0.18	3.0-5.9	0.0-0.5	---	---			
	27-60	---	---	0.00-0.60	---	---	---	---	---			
278A:												
Merrillan, loamy subsoil--------------	0-9	6-13	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	3	3	86
	9-29	8-17	1.45-1.65	0.60-6.00	0.12-0.17	0.0-2.9	0.5-1.0	---	---			
	29-34	18-35	1.55-1.65	0.20-2.00	0.07-0.18	3.0-5.9	0.0-0.5	---	---			
	34-60	---	---	0.00-0.60	---	---	---	---	---			
282C:												
Twinmound-------------	0-8	2-4	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.05	.05	3	1	250
	8-17	0-3	1.55-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	17-26	0-3	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	26-60	---	---	0.20-2.00	---	---	---	---	---			
282F:												
Twinmound-------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	1	250
	1-3	2-4	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	3.0-7.0	.05	.05			
	3-17	0-3	1.55-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	17-26	0-3	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	26-60	---	---	0.20-2.00	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility	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					
313D2:												
Plumcreek	0-9	10-25	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	5	5	56
	9-28	18-27	1.40-1.55	0.60-2.00	0.12-0.22	3.0-5.9	0.0-0.5	---	---			
	28-36	8-28	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
	36-60	8-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
313F:												
Plumcreek	0-4	10-25	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	3.0-7.0	.43	.43	5	5	56
	4-7	10-20	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.0-1.0	---	---			
	7-28	18-27	1.45-1.55	0.60-2.00	0.12-0.22	3.0-5.9	0.0-0.5	---	---			
	28-36	8-28	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
	36-60	8-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
316B2:												
Ella	0-8	10-25	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	8-55	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	55-72	10-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
	72-80	10-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
316C2:												
Ella	0-8	10-25	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	8-55	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	55-72	10-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
	72-80	10-30	1.55-1.70	0.60-2.00	0.10-0.18	3.0-5.9	0.0-0.5	---	---			
318A:												
Bearpen	0-18	10-25	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-4.0	.32	.32	5	5	56
	18-41	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	41-50	10-30	1.55-1.70	0.60-2.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	50-60	10-30	1.55-1.70	0.60-2.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
349A:												
Rib, valley train, undrained	0-8	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	4.0-10	.32	.32	4	5	56
	8-32	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.5-2.0	---	---			
	32-36	5-25	1.45-1.75	0.60-2.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	36-60	1-4	1.70-1.80	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
378A:												
Poskin, valley train	0-9	13-17	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	4	5	56
	9-12	10-15	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	12-19	15-22	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	19-36	18-27	1.45-1.65	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	36-39	5-15	1.45-1.65	0.60-6.00	0.07-0.19	0.0-2.9	0.0-0.5	---	---			
	39-60	1-4	1.70-1.80	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
403A:												
Dakota	0-10	12-22	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-5.0	.32	.32	4	5	56
	10-13	12-22	1.40-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-4.0	---	---			
	13-35	18-30	1.40-1.55	0.20-2.00	0.12-0.22	3.0-5.9	0.5-1.0	---	---			
	35-38	4-11	1.55-1.70	2.00-60	0.03-0.11	0.0-2.9	0.0-0.5	---	---			
	38-60	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
413A:												
Rasset	0-10	6-15	1.35-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-4.0	.20	.20	4	3	86
	10-18	6-15	1.35-1.55	0.60-6.00	0.13-0.18	0.0-2.9	2.0-4.0	---	---			
	18-30	10-22	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	1.0-2.0	---	---			
	30-50	2-10	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	50-60	1-5	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
413B:												
Rasset----------------	0-10	6-15	1.35-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-4.0	.20	.20	4	3	86
	10-18	6-15	1.35-1.55	0.60-6.00	0.13-0.18	0.0-2.9	2.0-4.0	---	---			
	18-30	10-22	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	1.0-2.0	---	---			
	30-50	2-10	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	50-60	1-5	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
416A:												
Menomin---------------	0-9	8-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.32	.32	4	5	56
	9-32	15-25	1.45-1.65	0.60-2.00	0.12-0.22	3.0-5.9	0.0-1.0	---	---			
	32-55	1-4	1.55-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
	55-72	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
423A:												
Meridian--------------	0-9	8-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.32	.32	4	5	56
	9-28	18-30	1.40-1.65	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	28-32	14-22	1.55-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	32-41	1-4	1.55-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
	41-72	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
423B2:												
Meridian--------------	0-9	8-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.32	.32	4	5	56
	9-28	18-30	1.40-1.65	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	28-32	14-22	1.55-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	32-41	1-4	1.55-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
	41-72	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
423C2:												
Meridian--------------	0-9	8-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.32	.32	4	5	56
	9-28	18-30	1.40-1.65	0.60-2.00	0.18-0.22	3.0-5.9	0.0-1.0	---	---			
	28-32	14-22	1.55-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	32-41	1-4	1.55-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
	41-72	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
428A:												
Shiffer---------------	0-7	12-22	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.24	.24	4	5	56
	7-24	18-27	1.45-1.65	0.60-2.00	0.12-0.19	3.0-5.9	0.5-1.0	---	---			
	24-32	6-15	1.55-1.65	0.60-6.00	0.08-0.13	0.0-2.9	0.0-0.5	---	---			
	32-60	2-8	1.60-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
429A:												
Lows, undrained-------	0-6	12-22	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	4.0-10	.24	.24	4	5	56
	6-13	10-22	1.35-1.55	0.60-2.00	0.12-0.20	0.0-2.9	0.0-1.0	---	---			
	13-28	18-27	1.45-1.65	0.60-2.00	0.16-0.22	3.0-5.9	0.0-0.5	---	---			
	28-60	2-8	1.60-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
432A:												
Kevilar---------------	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-29	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	29-50	1-6	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	50-80	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
432B:												
Kevilar---------------	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-29	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	29-50	1-6	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	50-80	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
432C2:												
Kevilar---------------	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	4	3	86
	9-29	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	29-50	1-6	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	50-80	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
432D2:												
Kevilar	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	4	3	86
	9-29	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	29-50	1-6	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	50-80	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
433A:												
Forkhorn	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-25	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	25-32	3-10	1.50-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
	32-72	1-8	1.65-1.75	6.00-60	0.01-0.07	0.0-2.9	0.0-0.5	---	---			
433B:												
Forkhorn	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-25	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	25-32	3-10	1.50-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
	32-72	1-8	1.65-1.75	6.00-60	0.01-0.07	0.0-2.9	0.0-0.5	---	---			
433C2:												
Forkhorn	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-25	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	25-32	3-10	1.50-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
	32-72	1-8	1.65-1.75	6.00-60	0.01-0.07	0.0-2.9	0.0-0.5	---	---			
433D2:												
Forkhorn	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-25	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	25-32	3-10	1.50-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
	32-72	1-8	1.65-1.75	6.00-60	0.01-0.07	0.0-2.9	0.0-0.5	---	---			
434B:												
Bilson	0-8	5-15	1.45-1.55	0.60-6.00	0.14-0.16	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	8-32	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	32-38	1-8	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	38-60	1-8	1.55-1.70	0.60-6.00	0.05-0.13	0.0-2.9	0.0-0.5	---	---			
436A:												
Rusktown	0-9	5-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	9-25	6-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	25-38	3-10	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	38-72	1-8	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
438A:												
Hoopeston	0-13	8-18	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	13-22	8-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	22-37	2-10	1.55-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	37-72	2-8	1.60-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
453A:												
Burkhardt	0-10	5-13	1.35-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	3	3	86
	10-17	8-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	17-19	1-6	1.50-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	19-60	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
453B:												
Burkhardt	0-10	5-13	1.35-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.20	.20	3	3	86
	10-17	8-18	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	17-19	1-6	1.50-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	19-60	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility	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					
454B:												
Chetek, kame terrace--	0-10	4-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	10-16	7-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	16-20	3-10	1.60-1.70	2.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	20-60	1-3	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
454C2:												
Chetek, kame terrace--	0-10	4-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	10-16	7-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	16-20	3-10	1.60-1.70	2.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	20-60	1-3	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
454D2:												
Chetek, kame terrace--	0-10	4-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	10-16	7-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	16-20	3-10	1.60-1.70	2.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	20-60	1-3	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
454E:												
Chetek, kame terrace--	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	3	86
	1-4	4-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	4-11	3-10	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	11-16	7-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	16-20	3-10	1.60-1.70	2.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	20-60	1-3	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
468A:												
Oesterle, valley train	0-8	8-15	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	4	3	86
	8-11	8-15	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.5-1.0	---	---			
	11-25	7-17	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	25-31	1-6	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	31-60	1-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
501A:												
Finchford-------------	0-15	5-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	5	2	134
	15-19	5-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-2.0	---	---			
	19-26	2-8	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-1.0	---	---			
	26-80	2-5	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
501B:												
Finchford-------------	0-15	5-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	5	2	134
	15-19	5-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-2.0	---	---			
	19-26	2-8	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-1.0	---	---			
	26-80	2-5	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
502B2:												
Chelsea---------------	0-9	3-8	1.50-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-1.0	.05	.05	5	1	250
	9-30	5-10	1.50-1.65	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	30-80	5-10	1.55-1.70	2.00-20	0.06-0.17	0.0-2.9	0.0-0.5	---	---			
502C2:												
Chelsea---------------	0-9	3-8	1.50-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-1.0	.05	.05	5	1	250
	9-30	5-10	1.50-1.65	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	30-80	5-10	1.55-1.70	2.00-20	0.06-0.17	0.0-2.9	0.0-0.5	---	---			
506A:												
Komro-----------------	0-14	3-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	5	2	134
	14-18	2-8	1.50-1.55	6.00-60	0.04-0.12	0.0-2.9	0.5-2.0	---	---			
	18-38	2-8	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	38-72	1-5	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
508A:												
Farrington	0-14	3-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.05	.05	5	2	134
	14-18	2-8	1.50-1.65	6.00-60	0.04-0.12	0.0-2.9	0.5-2.0	---	---			
	18-41	2-8	1.55-1.65	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	41-72	1-5	1.70-1.80	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
510B:												
Boplain	0-9	1-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	3	1	220
	9-32	1-10	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	32-37	0-7	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
510C:												
Boplain	0-9	1-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	3	1	220
	9-32	1-10	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	32-37	0-7	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
511A:												
Plainfield	0-9	2-5	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	9-32	1-7	1.50-1.65	6.00-20	0.03-0.11	0.0-2.9	0.1-0.5	---	---			
	32-80	0-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
511B:												
Plainfield	0-9	2-5	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	9-32	1-7	1.50-1.65	6.00-20	0.03-0.11	0.0-2.9	0.1-0.5	---	---			
	32-80	0-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
511C:												
Plainfield	0-9	2-5	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	9-32	1-7	1.50-1.65	6.00-20	0.03-0.11	0.0-2.9	0.1-0.5	---	---			
	32-80	0-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
511F:												
Plainfield	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	5	1	220
	1-4	2-5	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	2.0-5.0	.02	.02			
	4-32	1-7	1.50-1.65	6.00-20	0.03-0.11	0.0-2.9	0.1-0.5	---	---			
	32-80	0-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			
512B:												
Drammen	0-9	1-8	1.45-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-44	1-8	1.50-1.65	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	44-65	1-10	1.55-1.70	2.00-6.00	0.09-0.12	0.0-2.9	0.0-0.5	---	---			
	65-72	0-5	1.60-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
512C:												
Drammen	0-9	1-8	1.45-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-44	1-8	1.50-1.65	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	44-65	1-10	1.55-1.70	2.00-6.00	0.09-0.12	0.0-2.9	0.0-0.5	---	---			
	65-72	0-5	1.60-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
512D:												
Drammen	0-9	1-8	1.45-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-44	1-8	1.50-1.65	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	44-65	1-10	1.55-1.70	2.00-6.00	0.09-0.12	0.0-2.9	0.0-0.5	---	---			
	65-72	0-5	1.60-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
516A:												
Aldo	0-7	2-5	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	7-42	2-7	1.55-1.70	6.00-60	0.03-0.11	0.0-2.9	0.5-1.0	---	---			
	42-80	0-4	1.65-1.75	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
546A:												
Prissel---------------	0-9	1-6	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-48	1-6	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	48-56	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	56-72	1-6	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
546B:												
Prissel---------------	0-9	1-6	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-48	1-6	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	48-56	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	56-72	1-6	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
546C:												
Prissel---------------	0-9	1-6	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-48	1-6	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	48-56	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	56-72	1-6	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
546F:												
Prissel---------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	5	2	134
	1-4	1-6	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	2.0-5.0	.10	.10			
	4-48	1-6	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	48-56	8-18	1.55-1.70	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	56-72	1-6	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
555A:												
Fordum, frequently flooded--------------	0-6	10-23	1.35-1.45	0.60-2.00	0.17-0.24	0.0-2.9	4.0-12	.32	.32	4	5	56
	6-18	8-17	1.40-1.50	0.60-6.00	0.10-0.22	0.0-2.9	1.0-12	.37	.37			
	18-30	8-17	1.40-1.50	0.60-6.00	0.10-0.22	0.0-2.9	1.0-12	.37	.37			
	30-60	2-5	1.55-1.70	6.00-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15			
561B:												
Tarr------------------	0-9	3-5	1.50-1.65	6.00-20	0.08-0.10	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	9-34	0-6	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	34-62	0-2	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
566A:												
Tint------------------	0-9	4-8	1.50-1.65	6.00-20	0.06-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	9-34	0-5	1.55-1.70	6.00-20	0.05-0.08	0.0-2.9	0.0-0.5	---	---			
	34-60	0-5	1.60-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
573B:												
Plainbo, sand sheet---	0-8	1-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	3	1	220
	8-32	1-10	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	32-37	1-8	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
573C:												
Plainbo, sand sheet---	0-8	1-6	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	0.5-2.0	.02	.02	3	1	220
	8-32	1-10	1.55-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	---	---			
	32-37	1-8	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	37-60	---	---	0.20-2.00	---	---	---	---	---			
588A:												
Meehan, valley train--	0-8	4-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	8-28	4-9	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	28-60	1-4	1.60-1.70	6.00-60	0.02-0.07	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
589A:												
Newson, undrained-----	0-3	2-10	1.35-1.65	6.00-20	0.23-0.29	0.0-2.9	10-20	.05	.05	5	2	134
	3-8	2-10	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	2.0-8.0	---	---			
	8-22	2-9	1.55-1.70	6.00-60	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	22-60	2-9	1.60-1.70	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
601C:												
Beavercreek-----------	0-5	5-18	1.35-1.55	2.00-6.00	0.12-0.18	0.0-2.9	1.0-2.0	.24	.28	5	4	86
	5-12	5-18	1.45-1.65	2.00-6.00	0.10-0.18	0.0-2.9	0.5-1.0	---	---			
	12-60	5-18	1.45-1.65	2.00-6.00	0.04-0.15	0.0-2.9	0.0-0.5	---	---			
616B:												
Chaseburg-------------	0-9	10-18	1.20-1.55	0.60-2.00	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	9-60	10-18	1.20-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-2.0	---	---			
619A:												
Vancecreek, undrained	0-16	15-25	1.25-1.35	0.60-2.00	0.22-0.24	0.0-2.9	4.0-10	.32	.32	5	6	48
	16-49	18-27	1.30-1.45	0.60-2.00	0.20-0.22	0.0-2.9	0.5-2.0	---	---			
	49-60	8-27	1.55-1.65	0.60-2.00	0.18-0.22	0.0-2.9	0.0-1.0	---	---			
626A:												
Arenzville------------	0-10	8-18	1.20-1.55	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	10-25	8-18	1.20-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	25-40	8-30	1.25-1.45	0.60-2.00	0.18-0.22	0.0-2.9	2.0-7.0	---	---			
	40-60	8-18	1.20-1.40	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
628A:												
Orion-----------------	0-8	8-18	1.20-1.55	0.60-2.00	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	5	5	56
	8-32	8-18	1.20-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	---	---			
	32-40	8-30	1.25-1.45	0.60-2.00	0.18-0.22	0.0-2.9	3.0-8.0	---	---			
	40-60	8-18	1.20-1.40	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	---	---			
629A:												
Ettrick, undrained----	0-16	15-27	1.25-1.35	0.60-2.00	0.22-0.29	0.0-2.9	4.0-12	.32	.32	5	6	48
	16-35	20-35	1.30-1.45	0.20-0.60	0.18-0.29	3.0-5.9	0.5-2.0	---	---			
	35-60	8-27	1.30-1.50	0.60-6.00	0.20-0.25	0.0-2.9	0.0-1.0	---	---			
636A:												
Quarderer-------------	0-13	10-17	1.20-1.55	0.60-2.00	0.22-0.24	0.0-2.9	3.0-8.0	.32	.32	5	5	56
	13-22	10-17	1.20-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	---	---			
	22-29	10-17	1.25-1.45	0.60-2.00	0.22-0.24	0.0-2.9	3.0-5.0	---	---			
	29-55	10-20	1.30-1.45	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	55-72	10-15	1.30-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
646A:												
Dunnbot---------------	0-9	8-18	1.35-1.65	0.60-6.00	0.16-0.18	0.0-2.9	1.0-4.0	.24	.24	4	3	86
	9-36	8-18	1.45-1.65	0.60-6.00	0.13-0.22	0.0-2.9	1.0-4.0	---	---			
	36-45	8-18	1.55-1.70	0.60-6.00	0.12-0.20	0.0-2.9	0.5-1.0	---	---			
	45-72	0-10	1.60-1.70	2.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
656A:												
Scotah----------------	0-4	2-15	1.50-1.65	2.00-20	0.10-0.12	0.0-2.9	0.5-3.0	.10	.10	5	2	134
	4-22	1-10	1.55-1.70	2.00-20	0.06-0.11	0.0-2.9	0.5-1.0	---	---			
	22-60	1-8	1.55-1.70	2.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
766A:												
Moppet, occasionally flooded--------------	0-4	10-15	1.40-1.70	0.60-2.00	0.13-0.22	0.0-2.9	2.0-3.0	.28	.28	4	3	86
	4-10	8-17	1.45-1.70	0.60-2.00	0.15-0.22	0.0-2.9	0.5-1.0	.24	.24			
	10-39	8-17	1.45-1.70	0.60-2.00	0.15-0.22	0.0-2.9	0.5-1.0	.24	.24			
	39-60	2-10	1.60-1.75	6.00-20	0.03-0.09	0.0-2.9	0.5-1.0	.10	.15			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
804B2:												
Arland, dissected-----	0-8	5-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	8-10	5-11	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	10-15	8-15	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	15-23	10-18	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	23-36	10-20	1.45-1.65	0.60-2.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.20-2.00	---	---	---	---	---			
804C2:												
Arland, dissected-----	0-8	5-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	1.0-2.0	.32	.32	3	3	86
	8-10	5-11	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	10-15	8-15	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	15-23	10-18	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	23-36	10-20	1.45-1.65	0.60-2.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.20-2.00	---	---	---	---	---			
804D:												
Arland, dissected-----	0-1	0-0	0.15-0.30	6.00-20	0.45-0.55	---	65-85	.02	.02	3	3	86
	1-4	5-18	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	3.0-7.0	.32	.32			
	4-10	5-11	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	10-15	8-15	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	15-23	10-18	1.45-1.65	0.60-6.00	0.11-0.19	0.0-2.9	0.0-0.5	---	---			
	23-36	10-20	1.45-1.65	0.60-2.00	0.11-0.18	0.0-2.9	0.0-0.5	---	---			
	36-60	---	---	0.20-2.00	---	---	---	---	---			
814D2:												
Renova, dissected-----	0-8	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	8-10	10-20	1.35-1.45	0.60-2.00	0.17-0.22	0.0-2.9	0.0-1.0	---	---			
	10-19	24-33	1.40-1.55	0.20-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	19-52	18-32	1.55-1.70	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
	52-60	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
816B2:												
Vlasaty, dissected----	0-7	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-3.0	.49	.49	5	5	56
	7-9	10-20	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	9-16	24-33	1.40-1.55	0.20-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	16-42	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
	42-60	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
816C2:												
Vlasaty, dissected----	0-7	10-20	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	1.0-3.0	.49	.49	5	5	56
	7-9	10-20	1.30-1.50	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	9-16	24-33	1.40-1.55	0.20-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	16-42	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
	42-60	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
826B2:												
Hersey----------------	0-8	10-20	1.35-1.45	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.43	.43	5	5	56
	8-58	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-1.0	---	---			
	58-115	18-32	1.60-1.80	0.20-2.00	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
826C2:												
Hersey----------------	0-8	10-20	1.35-1.45	0.60-2.00	0.22-0.24	0.0-2.9	2.0-3.0	.43	.43	5	5	56
	8-58	18-27	1.40-1.55	0.60-2.00	0.20-0.22	3.0-5.9	0.0-1.0	---	---			
	58-115	18-32	1.60-1.80	0.20-2.00	0.13-0.19	3.0-5.9	0.0-0.5	---	---			
828B:												
Vasa------------------	0-9	12-22	1.35-1.45	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	5	5	56
	9-13	18-30	1.40-1.50	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	13-60	18-30	1.40-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.0-0.5	---	---			
	60-70	18-32	1.60-1.80	0.20-0.60	0.13-0.19	3.0-5.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
836B2:												
Spencer, dissected----	0-9	9-17	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.49	.49	5	5	56
	9-22	9-17	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	22-42	18-25	1.50-1.65	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	42-48	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	48-72	8-15	1.70-1.95	0.06-0.60	0.05-0.17	0.0-2.9	0.0-0.5	---	---			
836C2:												
Spencer, dissected----	0-9	9-17	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.49	.49	5	5	56
	9-22	9-17	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	22-42	18-25	1.50-1.65	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	42-48	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	48-72	8-15	1.70-1.95	0.06-0.60	0.05-0.17	0.0-2.9	0.0-0.5	---	---			
838B:												
Almena, dissected-----	0-9	14-23	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	5	5	56
	9-13	10-23	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	13-21	15-25	1.50-1.65	0.60-2.00	0.20-0.22	3.0-5.9	0.0-1.0	---	---			
	21-42	18-27	1.50-1.65	0.60-2.00	0.20-0.22	3.0-5.9	0.0-0.5	---	---			
	42-60	8-15	1.70-1.95	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
870B2:												
Santiago, dissected---	0-10	10-20	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	10-15	8-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	15-23	10-24	1.50-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	23-87	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	87-102	8-15	1.80-2.00	0.00-0.06	0.02-0.04	0.0-2.9	0.0-0.5	---	---			
870C2:												
Santiago, dissected---	0-10	10-20	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	10-15	8-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	---	---			
	15-23	10-24	1.50-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	---	---			
	23-87	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	87-102	8-15	1.80-2.00	0.00-0.06	0.02-0.04	0.0-2.9	0.0-0.5	---	---			
875B:												
Amery, dissected------	0-9	5-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	9-22	5-15	1.45-1.65	0.60-6.00	0.10-0.17	0.0-2.9	0.0-1.0	---	---			
	22-34	5-15	1.45-1.65	0.20-2.00	0.08-0.15	0.0-2.9	0.0-1.0	---	---			
	34-41	6-15	1.65-1.75	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	41-71	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	71-80	8-15	1.80-2.00	0.00-0.06	0.02-0.04	0.0-2.9	0.0-0.5	---	---			
875C2:												
Amery, dissected------	0-9	5-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	9-22	5-15	1.45-1.65	0.60-6.00	0.10-0.17	0.0-2.9	0.0-1.0	---	---			
	22-34	5-15	1.45-1.65	0.20-2.00	0.08-0.15	0.0-2.9	0.0-1.0	---	---			
	34-41	6-15	1.65-1.75	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	41-71	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	71-80	8-15	1.80-2.00	0.00-0.06	0.02-0.04	0.0-2.9	0.0-0.5	---	---			
875D:												
Amery, dissected------	0-3	5-12	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	3-22	5-15	1.45-1.65	0.60-6.00	0.10-0.17	0.0-2.9	0.0-1.0	---	---			
	22-34	5-15	1.45-1.65	0.20-2.00	0.08-0.15	0.0-2.9	0.0-1.0	---	---			
	34-41	6-15	1.65-1.75	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	41-71	10-20	1.65-1.90	0.06-0.60	0.07-0.17	0.0-2.9	0.0-0.5	---	---			
	71-80	8-15	1.80-2.00	0.00-0.06	0.02-0.04	0.0-2.9	0.0-0.5	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
1125F:												
Dorerton--------------	0-3	10-18	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	3.0-7.0	.32	.32	3	5	56
	3-15	5-15	1.35-1.55	0.60-6.00	0.12-0.22	0.0-2.9	0.5-1.0	---	---			
	15-18	18-35	1.40-1.55	0.20-2.00	0.15-0.22	3.0-5.9	0.5-1.0	---	---			
	18-30	20-35	1.25-1.55	0.20-2.00	0.02-0.12	3.0-5.9	0.0-0.5	---	---			
	30-60	2-25	1.60-1.70	0.60-20	0.01-0.09	0.0-2.9	0.0-0.5	---	---			
Elbaville-------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	4	5	56
	1-5	10-27	1.30-1.50	0.60-2.00	0.22-0.24	0.0-2.9	3.0-7.0	.37	.37			
	5-11	10-20	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	---	---			
	11-21	18-35	1.50-1.65	0.20-2.00	0.17-0.22	3.0-5.9	0.0-0.5	---	---			
	21-26	35-50	1.25-1.35	0.06-0.20	0.10-0.20	3.0-5.9	0.0-0.5	---	---			
	26-37	20-50	1.35-1.50	0.60-2.00	0.02-0.13	3.0-5.9	0.0-0.5	---	---			
	37-60	5-18	1.40-1.65	0.60-20	0.01-0.09	0.0-2.9	0.0-0.5	---	---			
1145F:												
Gaphill---------------	0-2	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	4	3	86
	2-5	8-15	1.45-1.55	0.60-6.00	0.10-0.15	0.0-2.9	4.0-8.0	.24	.24			
	5-11	5-12	1.45-1.65	0.60-6.00	0.09-0.19	0.0-2.9	0.0-1.0	---	---			
	11-32	8-17	1.45-1.65	0.60-6.00	0.09-0.19	0.0-2.9	0.0-0.5	---	---			
	32-50	2-8	1.60-1.70	6.00-20	0.03-0.10	0.0-2.9	0.0-0.5	---	---			
	50-56	1-6	1.60-1.70	6.00-20	0.03-0.06	0.0-2.9	0.0-0.5	---	---			
	56-80	---	---	0.20-2.00	---	---	---	---	---			
Rockbluff-------------	0-2	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	4	2	134
	2-4	2-6	1.50-1.65	6.00-20	0.10-0.12	0.0-2.9	4.0-8.0	.10	.10			
	4-9	1-5	1.55-1.70	6.00-20	0.07-0.12	0.0-2.9	0.0-1.0	---	---			
	9-35	1-5	1.55-1.70	6.00-20	0.02-0.11	0.0-2.9	0.0-0.5	---	---			
	35-52	0-3	1.60-1.70	6.00-20	0.02-0.08	0.0-2.9	0.0-0.5	---	---			
	52-80	---	---	0.20-2.00	---	---	---	---	---			
1224F:												
Boone-----------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	1	220
	1-3	2-3	1.55-1.65	6.00-20	0.07-0.09	0.0-2.9	3.0-7.0	.02	.02			
	3-21	0-3	1.55-1.70	6.00-20	0.05-0.11	0.0-2.9	0.0-0.5	---	---			
	21-35	0-3	1.60-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	35-60	---	---	0.20-2.00	---	---	---	---	---			
Elevasil--------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	3	86
	1-3	8-13	1.45-1.55	0.60-6.00	0.13-0.15	0.0-2.9	3.0-7.0	.24	.24			
	3-27	10-17	1.45-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-0.5	---	---			
	27-31	2-10	1.55-1.70	2.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-39	1-8	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	39-60	---	---	0.20-2.00	---	---	---	---	---			
1233F:												
Boone-----------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	1	220
	1-3	2-3	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	3.0-7.0	.02	.02			
	3-21	0-3	1.55-1.70	6.00-20	0.05-0.11	0.0-2.9	0.0-0.5	---	---			
	21-35	0-3	1.60-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	35-60	---	---	0.20-2.00	---	---	---	---	---			
Tarr------------------	0-2	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	5	1	220
	2-6	3-5	1.50-1.65	6.00-20	0.08-0.10	0.0-2.9	2.0-5.0	.02	.02			
	6-34	0-6	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
	34-62	0-2	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
1275F:												
Hayriver--------------	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	3	86
	1-4	7-15	1.35-1.55	0.60-6.00	0.16-0.18	0.0-2.9	3.0-7.0	.32	.32			
	4-13	5-12	1.40-1.65	0.60-6.00	0.12-0.19	0.0-2.9	0.0-1.0	---	---			
	13-30	6-17	1.45-1.65	0.60-6.00	0.08-0.19	0.0-2.9	0.0-0.5	---	---			
	30-60	---	---	0.06-2.00	---	---	---	---	---			

Table 25.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility	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					
1275F:												
Twinmound	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65	---	65-85	.02	.02	3	1	250
	1-3	2-4	1.50-1.65	6.00-20	0.07-0.09	0.0-2.9	3.0-7.0	.05	.05			
	3-17	0-3	1.55-1.70	6.00-20	0.04-0.07	0.0-2.9	0.0-0.5	---	---			
	17-26	0-3	1.55-1.70	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
	26-60	---	---	0.20-2.00	---	---	---	---	---			
1648A:												
Northbend	0-7	10-14	1.30-1.50	0.60-2.00	0.20-0.24	0.0-2.9	4.0-12	.37	.37	4	5	56
	7-34	5-17	1.40-1.55	0.60-2.00	0.15-0.22	0.0-2.9	0.0-1.0	---	---			
	34-36	4-8	1.55-1.70	6.00-20	0.08-0.10	0.0-2.9	0.0-0.5	---	---			
	36-60	2-5	1.60-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	---	---			
Ettrick, flood plain, undrained	0-16	15-27	1.30-1.50	0.60-2.00	0.22-0.29	0.0-2.9	4.0-12	.32	.32	5	6	48
	16-35	20-35	1.40-1.55	0.20-0.60	0.18-0.29	3.0-5.9	0.5-2.0	---	---			
	35-60	8-27	1.55-1.70	0.60-6.00	0.20-0.25	0.0-2.9	0.0-1.0	---	---			
1658A:												
Algansee	0-4	5-15	1.35-1.55	2.00-6.00	0.16-0.18	0.0-2.9	3.0-7.0	.24	.24	5	3	86
	4-31	0-15	1.55-1.70	6.00-20	0.06-0.11	0.0-2.9	0.0-0.5	---	---			
	31-60	0-10	1.65-1.75	6.00-60	0.02-0.10	0.0-2.9	0.0-0.5	---	---			
Kalmarville, undrained	0-6	10-23	1.30-1.55	0.60-2.00	0.22-0.24	0.0-2.9	3.0-7.0	.32	.32	4	5	56
	6-37	5-20	1.30-1.55	0.60-6.00	0.13-0.22	0.0-2.9	1.0-5.0	---	---			
	37-42	5-20	1.55-1.70	0.60-6.00	0.13-0.18	0.0-2.9	0.0-1.0	---	---			
	42-60	2-5	1.65-1.75	6.00-60	0.03-0.07	0.0-2.9	0.0-0.5	---	---			
2002.												
Udorthents, earthen dams												
2003A.												
Riverwash												
2013.												
Pits, gravel												
2014.												
Pits, quarry, hard bedrock												
2016.												
Pits, quarry, soft bedrock												
2030:												
Udorthents, cut or fill.												
Udipsamments, cut or fill.												
2050.												
Landfill												
M-W.												
Miscellaneous water												
W.												
Water												

Table 26.--Chemical Properties of the Soils

(See text for definitions of terms used in this table. 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	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
11A:					
Markey, flood plain, undrained-----------	0-27	110-230	---	5.1-7.3	0
	27-60	1.0-7.0	---	4.5-7.3	0
20A:					
Palms, undrained-----	0-40	110-230	---	5.1-7.3	0
	40-60	10-50	---	6.1-8.4	0-20
Houghton, undrained--	0-22	110-230	---	5.1-7.3	0
	22-28	110-230	---	5.1-7.3	0
	28-60	110-230	---	5.1-7.3	0
40A:					
Markey, undrained----	0-27	110-230	---	5.1-7.3	0
	27-60	1.0-7.0	---	4.5-7.3	0
Seelyeville, undrained-----------	0-12	110-230	---	5.1-7.3	0
	12-72	110-230	---	4.5-7.3	0
45A:					
Seelyeville, undrained-----------	0-12	110-230	---	5.1-7.3	0
	12-72	110-230	---	4.5-7.3	0
Cathro, undrained----	0-16	110-230	---	4.5-7.8	0
	16-30	110-230	---	4.5-7.8	0
	30-60	8.0-50	---	5.6-8.4	0
101B:					
Menahga, valley train	0-9	1.0-8.0	---	5.1-7.3	0
	9-33	0.0-7.0	---	5.1-6.5	0
	33-80	0.0-1.0	---	5.1-6.5	0
101C:					
Menahga, valley train	0-9	1.0-8.0	---	5.1-7.3	0
	9-33	0.0-7.0	---	5.1-6.5	0
	33-80	0.0-1.0	---	5.1-6.5	0
101E:					
Menahga, valley train	0-1	---	80-120	3.5-6.0	---
	1-5	5.0-15	---	5.1-6.5	0
	5-33	0.0-7.0	---	5.1-6.5	0
	33-80	0.0-1.0	---	5.1-6.5	0
115B2:					
Seaton---------------	0-8	10-18	---	5.6-7.3	0
	8-13	9.0-17	---	5.6-7.3	0
	13-55	10-25	---	5.1-7.3	0
	55-80	10-15	---	5.1-8.4	0-15
115C2:					
Seaton---------------	0-8	10-18	---	5.6-7.3	0
	8-13	9.0-17	---	5.6-7.3	0
	13-55	10-25	---	5.1-7.3	0
	55-80	10-15	---	5.1-8.4	0-15

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
115D2:					
Seaton	0-8	10-18	---	5.6-7.3	0
	8-13	9.0-17	---	5.6-7.3	0
	13-55	10-25	---	5.1-7.3	0
	55-80	10-15	---	5.1-8.4	0-15
115E2:					
Seaton	0-8	10-18	---	5.6-7.3	0
	8-13	9.0-17	---	5.6-7.3	0
	13-55	10-25	---	5.1-7.3	0
	55-80	10-15	---	5.1-8.4	0-15
116C2:					
Churchtown	0-9	15-25	---	5.1-7.3	0
	9-26	15-25	---	5.1-7.3	0
	26-63	15-25	---	5.1-7.3	0
	63-80	10-15	---	5.6-8.4	0-15
116D2:					
Churchtown	0-9	15-25	---	5.1-7.3	0
	9-26	15-25	---	5.1-7.3	0
	26-63	15-25	---	5.1-7.3	0
	63-80	10-15	---	5.6-8.4	0-15
116E2:					
Churchtown	0-9	15-25	---	5.1-7.3	0
	9-26	15-25	---	5.1-7.3	0
	26-63	15-25	---	5.1-7.3	0
	63-80	10-15	---	5.6-8.4	0-15
125B2:					
Pepin	0-9	7.0-14	---	5.1-7.3	0
	9-48	9.0-22	---	5.1-6.5	0
	48-58	22-48	---	4.5-6.5	0
	58-66	6.0-14	---	5.6-7.8	0-15
	66-80	---	---	---	---
125C2:					
Pepin	0-9	7.0-14	---	5.1-7.3	0
	9-48	9.0-22	---	5.1-6.5	0
	48-58	22-48	---	4.5-6.5	0
	58-66	6.0-14	---	5.6-7.8	0-15
	66-80	---	---	---	---
125D2:					
Pepin	0-9	7.0-14	---	5.1-7.3	0
	9-48	9.0-22	---	5.1-6.5	0
	48-58	22-48	---	4.5-6.5	0
	58-66	6.0-14	---	5.6-7.8	0-15
	66-80	---	---	---	---
125E2:					
Pepin	0-9	7.0-14	---	5.1-7.3	0
	9-48	9.0-22	---	5.1-6.5	0
	48-58	22-48	---	4.5-6.5	0
	58-66	6.0-14	---	5.6-7.8	0-15
	66-80	---	---	---	---

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
135C2:					
Wickware	0-10	9.0-19	---	4.5-7.3	0
	10-17	12-20	---	4.5-6.5	0
	17-36	13-20	---	4.5-6.5	0
	36-71	7.0-19	---	4.5-6.5	0
	71-80	3.0-9.0	---	4.5-6.5	0
135D2:					
Wickware	0-10	9.0-19	---	4.5-7.3	0
	10-17	12-20	---	4.5-6.5	0
	17-36	13-20	---	4.5-6.5	0
	36-71	7.0-19	---	4.5-6.5	0
	71-80	3.0-9.0	---	4.5-6.5	0
135E2:					
Wickware	0-10	9.0-19	---	4.5-7.3	0
	10-17	12-20	---	4.5-6.5	0
	17-36	13-20	---	4.5-6.5	0
	36-71	7.0-19	---	4.5-6.5	0
	71-80	3.0-9.0	---	4.5-6.5	0
136B:					
Doritty	0-9	11-21	---	4.5-7.3	0
	9-12	7.0-16	---	4.5-7.3	0
	12-18	11-20	---	4.5-6.5	0
	18-38	13-20	---	4.5-6.5	0
	38-45	7.0-19	---	4.5-6.5	0
	45-60	1.0-15	---	4.5-6.5	0
136C2:					
Doritty	0-9	11-21	---	4.5-7.3	0
	9-12	7.0-16	---	4.5-7.3	0
	12-18	11-20	---	4.5-6.5	0
	18-38	13-20	---	4.5-6.5	0
	38-45	7.0-19	---	4.5-6.5	0
	45-60	1.0-15	---	4.5-6.5	0
144B2:					
NewGlarus	0-9	10-19	---	5.1-7.3	0
	9-13	7.0-16	---	5.1-7.3	0
	13-23	13-26	---	5.1-7.3	0
	23-35	25-48	---	4.5-6.5	0
	35-45	8.0-20	---	5.6-7.8	0-15
	45-60	---	---	---	---
144C2:					
NewGlarus	0-9	10-19	---	5.1-7.3	0
	9-13	7.0-16	---	5.1-7.3	0
	13-23	13-26	---	5.1-7.3	0
	23-35	25-48	---	4.5-6.5	0
	35-45	8.0-20	---	5.6-7.8	0-15
	45-60	---	---	---	---
144D2:					
NewGlarus	0-9	10-19	---	5.1-7.3	0
	9-13	7.0-16	---	5.1-7.3	0
	13-23	13-26	---	5.1-7.3	0
	23-35	25-48	---	4.5-6.5	0
	35-45	8.0-20	---	5.6-7.8	0-15
	45-60	---	---	---	---

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
144E2:					
NewGlarus	0-9	10-19	---	5.1-7.3	0
	9-13	7.0-16	---	5.1-7.3	0
	13-23	13-26	---	5.1-7.3	0
	23-35	25-48	---	4.5-6.5	0
	35-45	8.0-20	---	5.6-7.8	0-15
	45-60	---	---	---	---
161E:					
Fivepoints	0-1	---	80-120	3.5-6.0	---
	1-4	10-25	---	5.1-7.3	0
	4-10	15-30	---	5.1-7.3	0
	10-19	30-50	---	4.5-6.5	0
	19-35	5.0-20	---	6.5-7.8	0-10
	35-80	---	---	---	---
208A:					
Siouxcreek	0-8	8.0-16	---	4.5-7.3	0
	8-14	---	3.0-10	4.5-6.0	0
	14-22	---	7.0-14	4.5-6.0	0
	22-32	---	3.0-10	4.5-6.0	0
	32-38	---	1.0-5.0	4.5-6.0	0
	38-60	---	---	---	---
213B2:					
Hixton	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-6.5	0
	20-32	5.0-10	---	5.1-6.5	0
	32-37	0.0-6.0	---	4.5-6.5	0
	37-60	---	---	---	---
213C2:					
Hixton	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-6.5	0
	20-32	5.0-10	---	5.1-6.5	0
	32-37	0.0-6.0	---	4.5-6.5	0
	37-60	---	---	---	---
224B:					
Elevasil	0-9	6.0-17	---	4.5-7.3	0
	9-27	2.0-15	---	4.5-6.5	0
	27-31	1.0-9.0	---	4.5-6.5	0
	31-39	0.0-7.0	---	4.5-6.5	0
	39-60	---	---	---	0
224C2:					
Elevasil	0-9	6.0-17	---	4.5-7.3	0
	9-27	2.0-15	---	4.5-6.5	0
	27-31	1.0-9.0	---	4.5-6.5	0
	31-39	0.0-7.0	---	4.5-6.5	0
	39-60	---	---	---	0
224D2:					
Elevasil	0-9	6.0-17	---	4.5-7.3	0
	9-27	2.0-15	---	4.5-6.5	0
	27-31	1.0-9.0	---	4.5-6.5	0
	31-39	0.0-7.0	---	4.5-6.5	0
	39-60	---	---	---	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
224E2:					
Elevasil	0-9	6.0-17	---	4.5-7.3	0
	9-27	2.0-15	---	4.5-6.5	0
	27-31	1.0-9.0	---	4.5-6.5	0
	31-39	0.0-7.0	---	4.5-6.5	0
	39-60	---	---	---	0
233C:					
Boone	0-8	2.0-6.0	---	4.5-7.3	0
	8-21	0.0-3.0	---	4.5-6.5	0
	21-35	0.0-3.0	---	4.5-6.5	0
	35-60	---	---	---	0
243B2:					
Hixton, thin solum	0-8	7.0-18	---	5.6-7.3	0
	8-15	11-20	---	4.5-6.5	0
	15-21	---	4.0-15	4.5-6.0	0
	21-60	---	---	---	0
243C2:					
Hixton, thin solum	0-8	7.0-18	---	5.6-7.3	0
	8-15	11-20	---	4.5-6.5	0
	15-21	---	4.0-15	4.5-6.0	0
	21-60	---	---	---	0
244B:					
Elkmound	0-8	6.0-11	---	4.5-6.5	0
	8-12	---	4.0-15	4.5-6.0	0
	12-60	---	---	---	0
244C2:					
Elkmound	0-8	6.0-11	---	4.5-6.5	0
	8-12	---	4.0-15	4.5-6.0	0
	12-60	---	---	---	0
244D2:					
Elkmound	0-8	6.0-11	---	4.5-6.5	0
	8-12	---	4.0-15	4.5-6.0	0
	12-60	---	---	---	0
254B2:					
Norden	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-7.3	0
	20-37	---	2.0-15	4.5-6.0	0
	37-60	---	---	---	---
254C2:					
Norden	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-7.3	0
	20-37	---	2.0-15	4.5-6.0	0
	37-60	---	---	---	---
254D2:					
Norden	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-7.3	0
	20-37	---	2.0-15	4.5-6.0	0
	37-60	---	---	---	---

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
254E2:					
Norden	0-8	10-15	---	5.1-7.3	0
	8-20	10-20	---	5.1-7.3	0
	20-37	---	2.0-15	4.5-6.0	0
	37-60	---	---	---	---
254F:					
Norden	0-1	---	80-120	3.5-6.0	---
	1-3	15-25	---	5.1-6.5	0
	3-20	10-20	---	5.1-7.3	0
	20-37	---	2.0-15	4.5-6.0	0
	37-60	---	---	---	---
255B2:					
Urne	0-9	6.0-20	---	5.1-7.3	0
	9-28	2.0-15	---	5.1-7.3	0
	28-36	---	2.0-15	4.5-6.0	0
	36-60	---	---	---	---
255C2:					
Urne	0-9	6.0-20	---	5.1-7.3	0
	9-28	2.0-15	---	5.1-7.3	0
	28-36	---	2.0-15	4.5-6.0	0
	36-60	---	---	---	---
255D2:					
Urne	0-9	6.0-20	---	5.1-7.3	0
	9-28	2.0-15	---	5.1-7.3	0
	28-36	---	2.0-15	4.5-6.0	0
	36-60	---	---	---	---
255E2:					
Urne	0-9	6.0-20	---	5.1-7.3	0
	9-28	2.0-15	---	5.1-7.3	0
	28-36	---	2.0-15	4.5-6.0	0
	36-60	---	---	---	---
255F:					
Urne	0-2	6.0-20	---	5.1-7.3	0
	2-28	2.0-15	---	5.1-7.3	0
	28-36	---	2.0-15	4.5-6.0	0
	36-60	---	---	---	---
265B:					
Garne	0-18	3.0-10	---	5.1-7.3	0
	18-23	3.0-8.0	---	5.1-7.3	0
	23-27	1.0-6.0	---	5.1-7.3	0
	27-34	---	7.0-19	4.5-6.0	0
	34-60	---	---	---	0
265C:					
Garne	0-18	3.0-10	---	5.1-7.3	0
	18-23	3.0-8.0	---	5.1-7.3	0
	23-27	1.0-6.0	---	5.1-7.3	0
	27-34	---	7.0-19	4.5-6.0	0
	34-60	---	---	---	0
266B:					
Hiles	0-9	11-20	---	4.5-7.3	0
	9-19	---	15-21	4.5-6.0	0
	19-29	---	13-26	3.5-5.5	0
	29-60	---	---	---	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
268A:					
Kert	0-9	11-22	---	4.5-7.3	0
	9-22	---	14-21	4.5-6.0	0
	22-34	---	13-26	3.5-5.5	0
	34-60	---	---	---	0
269A:					
Veedum, undrained	0-5	110-180	---	5.1-7.3	0
	5-7	---	15-34	3.5-6.0	0
	7-9	---	13-20	3.5-6.0	0
	9-20	---	14-20	3.5-6.0	0
	20-26	---	13-26	3.5-6.0	0
	26-60	---	---	---	0
273B2:					
Dobie	0-8	9.0-16	---	5.1-7.3	0
	8-26	11-19	---	5.1-6.5	0
	26-37	---	4.0-13	4.5-6.0	0
	37-60	---	---	---	---
Hixton, frigid	0-8	10-15	---	5.1-7.3	0
	8-13	11-19	---	5.1-6.5	0
	13-20	10-20	---	5.1-6.5	0
	20-32	7.0-13	---	5.1-6.5	0
	32-37	---	1.0-5.0	4.5-6.0	0
	37-60	---	---	---	0
273C2:					
Dobie	0-8	9.0-16	---	5.1-7.3	0
	8-26	11-19	---	5.1-6.5	0
	26-37	---	4.0-13	4.5-6.0	0
	37-60	---	---	---	---
Hixton, frigid	0-8	10-15	---	5.1-7.3	0
	8-13	11-19	---	5.1-6.5	0
	13-20	10-20	---	5.1-6.5	0
	20-32	7.0-13	---	5.1-6.5	0
	32-37	---	1.0-5.0	4.5-6.0	0
	37-60	---	---	---	0
273D2:					
Dobie	0-8	9.0-16	---	5.1-7.3	0
	8-26	11-19	---	5.1-6.5	0
	26-37	---	4.0-13	4.5-6.0	0
	37-60	---	---	---	---
Hixton, frigid	0-8	10-15	---	5.1-7.3	0
	8-13	11-19	---	5.1-6.5	0
	13-20	10-20	---	5.1-6.5	0
	20-32	7.0-13	---	5.1-6.5	0
	32-37	---	1.0-5.0	4.5-6.0	0
	37-60	---	---	---	0
273E2:					
Dobie	0-8	9.0-16	---	5.1-7.3	0
	8-26	11-19	---	5.1-6.5	0
	26-37	---	4.0-13	4.5-6.0	0
	37-60	---	---	---	---

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
273E2:					
Hixton, frigid	0-8	10-15	---	5.1-7.3	0
	8-13	11-19	---	5.1-6.5	0
	13-20	10-20	---	5.1-6.5	0
	20-32	7.0-13	---	5.1-6.5	0
	32-37	---	1.0-5.0	4.5-6.0	0
	37-60	---	---	---	0
275B2:					
Hayriver	0-8	6.0-12	---	4.5-7.3	0
	8-13	3.0-8.0	---	4.5-7.3	0
	13-30	---	3.0-10	4.5-6.0	0
	30-60	---	---	---	---
Elevasil, frigid	0-9	6.0-11	---	4.5-7.3	0
	9-27	5.0-10	---	4.5-6.5	0
	27-31	---	1.0-6.0	4.5-6.0	0
	31-39	---	1.0-5.0	4.5-6.0	0
	39-60	---	---	---	0
275C2:					
Hayriver	0-8	6.0-12	---	4.5-7.3	0
	8-13	3.0-8.0	---	4.5-7.3	0
	13-30	---	3.0-10	4.5-6.0	0
	30-60	---	---	---	---
Elevasil, frigid	0-9	6.0-11	---	4.5-7.3	0
	9-27	5.0-10	---	4.5-6.5	0
	27-31	---	1.0-6.0	4.5-6.0	0
	31-39	---	1.0-5.0	4.5-6.0	0
	39-60	---	---	---	0
275D2:					
Hayriver	0-8	6.0-12	---	4.5-7.3	0
	8-13	3.0-8.0	---	4.5-7.3	0
	13-30	---	3.0-10	4.5-6.0	0
	30-60	---	---	---	---
Elevasil, frigid	0-9	6.0-11	---	4.5-7.3	0
	9-27	5.0-10	---	4.5-6.5	0
	27-31	---	1.0-6.0	4.5-6.0	0
	31-39	---	1.0-5.0	4.5-6.0	0
	39-60	---	---	---	0
276B:					
Humbird, loamy subsoil	0-9	5.0-13	---	4.5-7.3	0
	9-15	---	4.0-10	4.5-6.0	0
	15-27	---	9.0-19	3.5-5.5	0
	27-60	---	---	---	0
278A:					
Merrillan, loamy subsoil	0-9	5.0-13	---	4.5-7.3	0
	9-29	---	5.0-11	4.5-6.0	0
	29-34	---	9.0-19	3.5-5.5	0
	34-60	---	---	---	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
282C:					
Twinmound------------	0-8	1.0-5.0	---	3.6-7.3	0
	8-17	0.0-6.0	---	3.6-7.3	0
	17-26	0.0-6.0	---	3.6-7.3	0
	26-60	---	---	---	0
282F:					
Twinmound------------	0-1	---	80-120	3.5-6.0	---
	1-3	1.0-5.0	---	3.6-7.3	0
	3-17	0.0-6.0	---	3.6-7.3	0
	17-26	0.0-6.0	---	3.6-7.3	0
	26-60	---	---	---	0
313D2:					
Plumcreek------------	0-9	10-35	---	5.1-7.3	0
	9-28	4.0-25	---	5.1-7.3	0
	28-36	2.0-20	---	5.1-7.3	0
	36-60	2.0-20	---	5.1-8.4	0-20
313F:					
Plumcreek------------	0-4	10-35	---	5.1-7.3	0
	4-7	2.0-20	---	5.1-7.3	0
	7-28	4.0-25	---	5.1-7.3	0
	28-36	2.0-20	---	5.1-7.3	0
	36-60	2.0-20	---	5.1-8.4	0-20
316B2:					
Ella-----------------	0-8	6.0-25	---	5.1-7.3	0
	8-55	4.0-25	---	5.1-7.3	0
	55-72	2.0-15	---	5.1-7.3	0
	72-80	2.0-15	---	5.1-8.4	0-15
316C2:					
Ella-----------------	0-8	6.0-25	---	5.1-7.3	0
	8-55	4.0-25	---	5.1-7.3	0
	55-72	2.0-15	---	5.1-7.3	0
	72-80	2.0-15	---	5.1-8.4	0-15
318A:					
Bearpen--------------	0-18	8.0-30	---	5.1-7.3	0
	18-41	10-25	---	5.1-7.3	0
	41-50	5.0-20	---	5.1-7.3	0
	50-60	5.0-15	---	5.1-8.4	0-15
349A:					
Rib, valley train, undrained-----------	0-8	8.0-35	---	4.5-7.3	0
	8-32	4.0-25	---	4.5-7.3	0
	32-36	1.0-20	---	4.5-7.3	0
	36-60	0.0-6.0	---	5.6-7.3	0
378A:					
Poskin, valley train	0-9	6.0-20	---	4.5-7.3	0
	9-12	2.0-15	---	4.5-6.5	0
	12-19	3.0-20	---	4.5-6.5	0
	19-36	4.0-20	---	4.5-6.5	0
	36-39	0.0-15	---	4.5-6.5	0
	39-60	0.0-3.0	---	4.5-6.5	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
403A:					
Dakota	0-10	10-25	---	5.1-7.3	0
	10-13	10-25	---	5.1-7.3	0
	13-35	10-25	---	5.1-7.3	0
	35-38	1.0-10	---	5.1-6.5	0
	38-60	0.0-4.0	---	5.1-6.5	0
413A:					
Rasset	0-10	8.0-15	---	5.1-7.3	0
	10-18	8.0-15	---	5.1-7.3	0
	18-30	7.0-13	---	5.1-7.3	0
	30-50	2.0-7.0	---	5.1-6.5	0
	50-60	1.0-3.0	---	5.1-6.5	0
413B:					
Rasset	0-10	8.0-15	---	5.1-7.3	0
	10-18	8.0-15	---	5.1-7.3	0
	18-30	7.0-13	---	5.1-7.3	0
	30-50	2.0-7.0	---	5.1-6.5	0
	50-60	1.0-3.0	---	5.1-6.5	0
416A:					
Menomin	0-9	6.0-20	---	5.1-7.3	0
	9-32	5.0-20	---	5.1-7.3	0
	32-55	1.0-6.0	---	5.1-6.5	0
	55-72	1.0-6.0	---	5.1-6.5	0
423A:					
Meridian	0-9	6.0-20	---	5.1-7.3	0
	9-28	5.0-20	---	5.1-7.3	0
	28-32	5.0-20	---	5.1-6.5	0
	32-41	1.0-6.0	---	5.1-6.5	0
	41-72	1.0-6.0	---	5.1-6.5	0
423B2:					
Meridian	0-9	6.0-20	---	5.1-7.3	0
	9-28	5.0-20	---	5.1-7.3	0
	28-32	5.0-20	---	5.1-6.5	0
	32-41	1.0-6.0	---	5.1-6.5	0
	41-72	1.0-6.0	---	5.1-6.5	0
423C2:					
Meridian	0-9	6.0-20	---	5.1-7.3	0
	9-28	5.0-20	---	5.1-7.3	0
	28-32	5.0-20	---	5.1-6.5	0
	32-41	1.0-6.0	---	5.1-6.5	0
	41-72	1.0-6.0	---	5.1-6.5	0
428A:					
Shiffer	0-7	6.0-25	---	6.1-7.3	0
	7-24	4.0-25	---	4.5-6.5	0
	24-32	1.0-15	---	4.5-6.5	0
	32-60	0.0-7.0	---	4.5-6.5	0
429A:					
Lows, undrained	0-6	10-25	---	5.1-6.5	0
	6-13	5.0-12	---	5.1-6.5	0
	13-28	9.0-15	---	5.1-6.5	0
	28-60	1.0-6.0	---	5.1-6.5	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
432A:					
Kevilar	0-9	5.0-20	---	5.1-7.3	0
	9-29	2.0-15	---	5.1-7.3	0
	29-50	0.0-7.0	---	5.1-7.3	0
	50-80	2.0-15	---	5.1-7.3	0
432B:					
Kevilar	0-9	5.0-20	---	5.1-7.3	0
	9-29	2.0-15	---	5.1-7.3	0
	29-50	0.0-7.0	---	5.1-7.3	0
	50-80	2.0-15	---	5.1-7.3	0
432C2:					
Kevilar	0-9	5.0-20	---	5.1-7.3	0
	9-29	2.0-15	---	5.1-7.3	0
	29-50	0.0-7.0	---	5.1-7.3	0
	50-80	2.0-15	---	5.1-7.3	0
432D2:					
Kevilar	0-9	5.0-20	---	5.1-7.3	0
	9-29	2.0-15	---	5.1-7.3	0
	29-50	0.0-7.0	---	5.1-7.3	0
	50-80	2.0-15	---	5.1-7.3	0
433A:					
Forkhorn	0-9	5.0-20	---	5.1-7.3	0
	9-25	2.0-15	---	5.1-7.3	0
	25-32	0.0-7.0	---	5.1-6.5	0
	32-72	0.0-7.0	---	5.1-6.5	0
433B:					
Forkhorn	0-9	5.0-20	---	5.1-7.3	0
	9-25	2.0-15	---	5.1-7.3	0
	25-32	0.0-7.0	---	5.1-6.5	0
	32-72	0.0-7.0	---	5.1-6.5	0
433C2:					
Forkhorn	0-9	5.0-20	---	5.1-7.3	0
	9-25	2.0-15	---	5.1-7.3	0
	25-32	0.0-7.0	---	5.1-6.5	0
	32-72	0.0-7.0	---	5.1-6.5	0
433D2:					
Forkhorn	0-9	5.0-20	---	5.1-7.3	0
	9-25	2.0-15	---	5.1-7.3	0
	25-32	0.0-7.0	---	5.1-6.5	0
	32-72	0.0-7.0	---	5.1-6.5	0
434B:					
Bilson	0-8	5.0-15	---	5.1-7.3	0
	8-32	4.0-13	---	5.1-6.5	0
	32-38	1.0-7.0	---	4.5-6.5	0
	38-60	1.0-7.0	---	4.5-6.5	0
436A:					
Rusktown	0-9	5.0-20	---	5.1-7.3	0
	9-25	2.0-15	---	5.1-7.3	0
	25-38	1.0-9.0	---	5.1-6.5	0
	38-72	0.0-7.0	---	5.1-6.5	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
438A:					
Hoopeston	0-13	9.0-17	---	5.1-6.5	0
	13-22	7.0-13	---	5.1-7.8	0-5
	22-37	1.0-7.0	---	5.1-7.8	0-20
	37-72	1.0-7.0	---	5.1-7.8	0-20
453A:					
Burkhardt	0-10	5.0-15	---	5.1-6.5	0
	10-17	4.0-15	---	5.1-6.5	0
	17-19	0.0-6.0	---	5.6-6.5	0
	19-60	0.0-6.0	---	5.6-6.5	0
453B:					
Burkhardt	0-10	5.0-15	---	5.1-6.5	0
	10-17	4.0-15	---	5.1-6.5	0
	17-19	0.0-6.0	---	5.6-6.5	0
	19-60	0.0-6.0	---	5.6-6.5	0
454B:					
Chetek, kame terrace	0-10	3.0-16	---	5.1-7.3	0
	10-16	1.0-15	---	5.1-7.3	0
	16-20	1.0-9.0	---	5.1-7.3	0
	20-60	1.0-3.0	---	5.1-7.3	0
454C2:					
Chetek, kame terrace	0-10	3.0-16	---	5.1-7.3	0
	10-16	1.0-15	---	5.1-7.3	0
	16-20	1.0-9.0	---	5.1-7.3	0
	20-60	1.0-3.0	---	5.1-7.3	0
454D2:					
Chetek, kame terrace	0-10	3.0-16	---	5.1-7.3	0
	10-16	1.0-15	---	5.1-7.3	0
	16-20	1.0-9.0	---	5.1-7.3	0
	20-60	1.0-3.0	---	5.1-7.3	0
454E:					
Chetek, kame terrace	0-1	---	80-120	3.5-6.0	---
	1-4	3.0-16	---	5.1-7.3	0
	4-11	3.0-16	---	5.1-7.3	0
	11-16	1.0-15	---	5.1-7.3	0
	16-20	1.0-9.0	---	5.1-7.3	0
	20-60	1.0-3.0	---	5.1-7.3	0
468A:					
Oesterle, valley train	0-8	6.0-20	---	4.5-6.5	0
	8-11	3.0-15	---	4.5-6.5	0
	11-25	1.0-10	---	4.5-6.5	0
	25-31	0.0-6.0	---	5.6-6.5	0
	31-60	0.0-6.0	---	5.6-6.5	0
501A:					
Finchford	0-15	5.0-10	---	5.1-7.3	0
	15-19	5.0-10	---	5.1-7.3	0
	19-26	1.0-7.0	---	5.1-7.3	0
	26-80	1.0-5.0	---	5.1-7.3	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
501B:					
Finchford	0-15	5.0-10	---	5.1-7.3	0
	15-19	5.0-10	---	5.1-7.3	0
	19-26	1.0-7.0	---	5.1-7.3	0
	26-80	1.0-5.0	---	5.1-7.3	0
502B2:					
Chelsea	0-9	3.0-10	---	5.1-7.3	0
	9-30	3.0-10	---	5.1-6.5	0
	30-80	3.0-10	---	5.1-6.5	0
502C2:					
Chelsea	0-9	3.0-10	---	5.1-7.3	0
	9-30	3.0-10	---	5.1-6.5	0
	30-80	3.0-10	---	5.1-6.5	0
506A:					
Komro	0-14	3.0-10	---	5.1-7.3	0
	14-18	1.0-10	---	5.1-7.3	0
	18-38	0.0-7.0	---	5.1-7.3	0
	38-72	0.0-5.0	---	5.1-6.5	0
508A:					
Farrington	0-14	3.0-10	---	5.1-7.3	0
	14-18	1.0-10	---	5.1-7.3	0
	18-41	1.0-7.0	---	5.1-7.3	0
	41-72	1.0-5.0	---	5.1-6.5	0
510B:					
Boplain	0-9	3.0-15	---	5.1-7.3	0
	9-32	0.0-10	---	5.1-7.3	0
	32-37	0.0-7.0	---	4.5-6.5	0
	37-60	---	---	---	0
510C:					
Boplain	0-9	3.0-15	---	5.1-7.3	0
	9-32	0.0-10	---	5.1-7.3	0
	32-37	0.0-7.0	---	4.5-6.5	0
	37-60	---	---	---	0
511A:					
Plainfield	0-9	1.0-8.0	---	5.1-7.3	0
	9-32	0.0-7.0	---	5.1-6.5	0
	32-80	0.0-1.0	---	5.1-6.5	0
511B:					
Plainfield	0-9	1.0-8.0	---	5.1-7.3	0
	9-32	0.0-7.0	---	5.1-6.5	0
	32-80	0.0-1.0	---	5.1-6.5	0
511C:					
Plainfield	0-9	1.0-8.0	---	5.1-7.3	0
	9-32	0.0-7.0	---	5.1-6.5	0
	32-80	0.0-1.0	---	5.1-6.5	0
511F:					
Plainfield	0-1	---	80-120	3.5-6.0	---
	1-4	5.0-15	---	5.1-6.5	0
	4-32	0.0-7.0	---	5.1-6.5	0
	32-80	0.0-1.0	---	5.1-6.5	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
512B:					
Drammen	0-9	2.0-10	---	5.1-7.3	0
	9-44	1.0-8.0	---	5.1-7.3	0
	44-65	0.0-7.0	---	5.1-6.5	0
	65-72	0.0-1.0	---	5.1-6.5	0
512C:					
Drammen	0-9	2.0-10	---	5.1-7.3	0
	9-44	1.0-8.0	---	5.1-7.3	0
	44-65	0.0-7.0	---	5.1-6.5	0
	65-72	0.0-1.0	---	5.1-6.5	0
512D:					
Drammen	0-9	2.0-10	---	5.1-7.3	0
	9-44	1.0-8.0	---	5.1-7.3	0
	44-65	0.0-7.0	---	5.1-6.5	0
	65-72	0.0-1.0	---	5.1-6.5	0
516A:					
Aldo	0-7	3.0-6.0	---	5.1-7.3	0
	7-42	4.0-6.0	---	5.1-7.3	0
	42-80	0.0-1.0	---	5.1-6.5	0
546A:					
Prissel	0-9	5.0-20	---	5.1-7.3	0
	9-48	2.0-15	---	5.1-7.3	0
	48-56	2.0-15	---	5.1-6.5	0
	56-72	0.0-7.0	---	5.1-6.5	0
546B:					
Prissel	0-9	5.0-20	---	5.1-7.3	0
	9-48	2.0-15	---	5.1-7.3	0
	48-56	2.0-15	---	5.1-6.5	0
	56-72	0.0-7.0	---	5.1-6.5	0
546C:					
Prissel	0-9	5.0-20	---	5.1-7.3	0
	9-48	2.0-15	---	5.1-7.3	0
	48-56	2.0-15	---	5.1-6.5	0
	56-72	0.0-7.0	---	5.1-6.5	0
546F:					
Prissel	0-1	---	80-120	3.5-6.0	---
	1-4	5.0-20	---	5.1-7.3	0
	4-48	2.0-15	---	5.1-7.3	0
	48-56	2.0-15	---	5.1-6.5	0
	56-72	0.0-7.0	---	5.1-6.5	0
555A:					
Fordum, frequently flooded	0-6	10-45	---	4.5-8.4	0
	6-18	3.0-20	---	4.5-8.4	0
	18-30	3.0-20	---	4.5-8.4	0
	30-60	2.0-6.0	---	5.6-8.4	0
561B:					
Tarr	0-9	2.0-8.0	---	4.5-7.3	0
	9-34	1.0-7.0	---	4.5-6.5	0
	34-62	0.0-5.0	---	4.5-6.5	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
566A:					
Tint-----------------	0-9	2.0-10	---	4.5-7.3	0
	9-34	0.0-5.0	---	4.5-6.5	0
	34-60	0.0-5.0	---	5.1-6.5	0
573B:					
Plainbo, sand sheet--	0-8	3.0-20	---	3.6-7.3	0
	8-32	---	0.0-10	3.6-6.5	0
	32-37	---	0.0-10	3.6-6.5	0
	37-60	---	---	---	0
573C:					
Plainbo, sand sheet--	0-8	3.0-20	---	3.6-7.3	0
	8-32	---	0.0-10	3.6-6.5	0
	32-37	---	0.0-10	3.6-6.5	0
	37-60	---	---	---	0
588A:					
Meehan, valley train	0-8	---	2.0-15	3.5-7.3	0
	8-28	---	1.0-8.0	3.5-6.5	0
	28-60	---	0.0-4.0	3.5-7.3	0
589A:					
Newson, undrained----	0-3	---	20-50	3.5-6.5	0
	3-8	---	20-50	3.5-6.5	0
	8-22	1.0-7.0	---	4.5-6.5	0
	22-60	0.0-4.0	---	5.1-6.5	0
601C:					
Beavercreek----------	0-5	5.0-15	---	6.1-7.3	0
	5-12	5.0-15	---	6.1-7.3	0
	12-60	3.0-10	---	6.6-7.8	0-5
616B:					
Chaseburg------------	0-9	7.0-20	---	5.6-7.3	0
	9-60	10-35	---	5.6-7.3	0
619A:					
Vancecreek, undrained	0-16	9.0-40	---	5.1-6.5	0
	16-49	4.0-24	---	5.1-6.5	0
	49-60	2.0-24	---	5.1-7.8	0
626A:					
Arenzville-----------	0-10	7.0-20	---	5.6-7.3	0
	10-25	7.0-20	---	5.6-7.3	0
	25-40	10-35	---	5.6-7.3	0
	40-60	5.0-15	---	5.6-7.3	0
628A:					
Orion----------------	0-8	7.0-20	---	5.6-7.3	0
	8-32	7.0-20	---	5.6-7.3	0
	32-40	10-35	---	5.6-7.3	0
	40-60	5.0-15	---	5.6-7.3	0
629A:					
Ettrick, undrained---	0-16	10-45	---	5.6-7.3	0
	16-35	10-30	---	6.1-7.3	0
	35-60	2.0-25	---	6.1-7.3	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
636A:					
Quarderer	0-13	8.0-30	---	4.5-7.3	0
	13-22	---	4.0-20	4.5-6.0	0
	22-29	---	8.0-24	4.5-6.0	0
	29-55	---	3.0-18	4.5-6.0	0
	55-72	---	2.0-13	4.5-6.0	0
646A:					
Dunnbot	0-9	8.0-21	---	5.6-7.3	0
	9-36	8.0-21	---	5.6-7.3	0
	36-45	7.0-15	---	5.6-7.3	0
	45-72	1.0-5.0	---	5.6-7.3	0
656A:					
Scotah	0-4	3.0-15	---	5.6-7.3	0
	4-22	4.0-8.0	---	5.6-7.3	0
	22-60	1.0-5.0	---	5.6-7.3	0
766A:					
Moppet, occasionally flooded	0-4	---	6.0-20	3.6-6.0	0
	4-10	---	3.0-15	3.6-6.0	0
	10-39	---	3.0-15	3.6-6.0	0
	39-60	---	1.0-10	3.6-6.5	0
804B2:					
Arland, dissected	0-8	3.0-15	---	4.5-7.3	0
	8-10	1.0-15	---	4.5-7.3	0
	10-15	1.0-15	---	4.5-7.3	0
	15-23	2.0-15	---	4.5-6.5	0
	23-36	2.0-15	---	4.5-6.5	0
	36-60	---	---	---	---
804C2:					
Arland, dissected	0-8	3.0-15	---	4.5-7.3	0
	8-10	1.0-15	---	4.5-7.3	0
	10-15	1.0-15	---	4.5-7.3	0
	15-23	2.0-15	---	4.5-6.5	0
	23-36	2.0-15	---	4.5-6.5	0
	36-60	---	---	---	---
804D:					
Arland, dissected	0-1	---	80-120	3.5-6.0	---
	1-4	3.0-15	---	4.5-7.3	0
	4-10	1.0-15	---	4.5-7.3	0
	10-15	1.0-15	---	4.5-7.3	0
	15-23	2.0-15	---	4.5-6.5	0
	23-36	2.0-15	---	4.5-6.5	0
	36-60	---	---	---	---
814D2:					
Renova, dissected	0-8	---	---	5.6-6.5	0
	8-10	---	---	5.6-6.5	0
	10-19	---	---	4.5-6.0	0
	19-52	---	---	4.5-7.3	0
	52-60	---	---	7.4-7.8	5-15

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
816B2:					
Vlasaty, dissected---	0-7	---	---	6.1-6.5	0
	7-9	---	---	6.1-6.5	0
	9-16	---	---	5.1-6.0	0
	16-42	---	---	5.1-6.5	0
	42-60	---	---	7.4-8.4	5-15
816C2:					
Vlasaty, dissected---	0-7	---	---	6.1-6.5	0
	7-9	---	---	6.1-6.5	0
	9-16	---	---	5.1-6.0	0
	16-42	---	---	5.1-6.5	0
	42-60	---	---	7.4-8.4	5-15
826B2:					
Hersey---------------	0-8	6.0-20	---	5.1-7.3	0
	8-58	4.0-25	---	5.1-7.3	0
	58-115	2.0-25	---	5.1-7.3	0
826C2:					
Hersey---------------	0-8	6.0-20	---	5.1-7.3	0
	8-58	4.0-25	---	5.1-7.3	0
	58-115	2.0-25	---	5.1-7.3	0
828B:					
Vasa-----------------	0-9	---	---	5.6-7.3	0
	9-13	---	---	5.1-7.3	0
	13-60	---	---	6.6-7.3	0
	60-70	---	---	6.6-7.3	0-10
836B2:					
Spencer, dissected---	0-9	6.0-20	---	4.5-7.3	0
	9-22	---	2.0-20	4.5-6.5	0
	22-42	---	4.0-20	4.5-6.0	0
	42-48	2.0-15	---	5.1-6.5	0
	48-72	2.0-15	---	5.1-6.5	0
836C2:					
Spencer, dissected---	0-9	6.0-20	---	4.5-7.3	0
	9-22	---	2.0-20	4.5-6.5	0
	22-42	---	4.0-20	4.5-6.0	0
	42-48	2.0-15	---	5.1-6.5	0
	48-72	2.0-15	---	5.1-6.5	0
838B:					
Almena, dissected----	0-9	7.0-30	---	4.5-7.3	0
	9-13	---	2.0-20	4.5-6.0	0
	13-21	---	3.0-20	4.5-6.0	0
	21-42	---	4.0-25	4.5-6.0	0
	42-60	2.0-15	---	5.1-6.5	0
870B2:					
Santiago, dissected--	0-10	3.0-20	---	4.5-7.3	0
	10-15	1.0-15	---	4.5-6.5	0
	15-23	1.0-15	---	4.5-6.5	0
	23-87	1.0-15	---	4.5-6.5	0
	87-102	1.0-10	---	5.1-7.3	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
870C2:					
Santiago, dissected	0-10	3.0-20	---	4.5-7.3	0
	10-15	1.0-15	---	4.5-6.5	0
	15-23	1.0-15	---	4.5-6.5	0
	23-87	1.0-15	---	4.5-6.5	0
	87-102	1.0-10	---	5.1-7.3	0
875B:					
Amery, dissected	0-9	3.0-15	---	4.5-7.3	0
	9-22	1.0-15	---	4.5-6.0	0
	22-34	1.0-15	---	5.1-6.5	0
	34-41	1.0-15	---	5.1-6.5	0
	41-71	1.0-15	---	5.1-6.5	0
	71-80	1.0-15	---	5.6-6.5	0
875C2:					
Amery, dissected	0-9	3.0-15	---	4.5-7.3	0
	9-22	1.0-15	---	4.5-6.0	0
	22-34	1.0-15	---	5.1-6.5	0
	34-41	1.0-15	---	5.1-6.5	0
	41-71	1.0-15	---	5.1-6.5	0
	71-80	1.0-15	---	5.6-6.5	0
875D:					
Amery, dissected	0-3	3.0-15	---	4.5-7.3	0
	3-22	1.0-15	---	4.5-6.0	0
	22-34	1.0-15	---	5.1-6.5	0
	34-41	1.0-15	---	5.1-6.5	0
	41-71	1.0-15	---	5.1-6.5	0
	71-80	1.0-15	---	5.6-6.5	0
1125F:					
Dorerton	0-3	7.0-25	---	5.1-6.5	0
	3-15	7.0-13	---	5.1-7.3	0
	15-18	10-20	---	5.1-7.3	0
	18-30	10-19	---	5.6-7.3	0
	30-60	1.0-14	---	7.4-8.4	1-15
Elbaville	0-1	---	80-120	3.5-6.0	---
	1-5	10-30	---	5.1-6.5	0
	5-11	8.0-16	---	5.1-7.3	0
	11-21	13-26	---	5.1-7.3	0
	21-26	25-36	---	5.1-7.3	0
	26-37	10-26	---	6.6-7.8	0-5
	37-60	3.0-10	---	6.6-7.8	0-10
1145F:					
Gaphill	0-2	---	80-120	3.5-6.0	---
	2-5	10-30	---	4.5-6.5	0
	5-11	1.0-10	---	5.6-7.3	0
	11-32	2.0-15	---	5.6-7.3	0
	32-50	1.0-7.0	---	5.6-7.3	0
	50-56	0.0-6.0	---	5.6-7.3	0
	56-80	---	---	---	0
Rockbluff	0-2	---	80-120	3.5-6.0	---
	2-4	8.0-20	---	4.5-6.5	0
	4-9	0.0-6.0	---	5.1-7.3	0
	9-35	0.0-5.0	---	5.1-7.3	0
	35-52	0.0-3.0	---	5.1-7.3	0
	52-80	---	---	---	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
1224F:					
Boone----------------	0-1	---	80-120	3.5-6.0	---
	1-3	0.0-4.0	---	4.5-6.5	0
	3-21	0.0-3.0	---	4.5-6.5	0
	21-35	0.0-3.0	---	4.5-6.5	0
	35-60	---	---	---	0
Elevasil-------------	0-1	---	80-120	3.5-6.0	---
	1-3	4.0-15	---	4.5-6.5	0
	3-27	2.0-15	---	4.5-6.5	0
	27-31	0.0-9.0	---	4.5-6.5	0
	31-39	0.0-7.0	---	4.5-6.5	0
	39-60	---	---	---	0
1233F:					
Boone----------------	0-1	---	80-120	3.5-6.0	---
	1-3	0.0-4.0	---	4.5-6.5	0
	3-21	0.0-3.0	---	4.5-6.5	0
	21-35	0.0-3.0	---	4.5-6.5	0
	35-60	---	---	---	0
Tarr-----------------	0-2	---	80-120	3.5-6.0	---
	2-6	5.0-15	---	4.5-6.5	0
	6-34	1.0-7.0	---	4.5-6.5	0
	34-62	0.0-5.0	---	4.5-6.5	0
1275F:					
Hayriver-------------	0-1	---	80-120	3.5-6.0	---
	1-4	3.0-15	---	4.5-7.3	0
	4-13	2.0-12	---	4.5-7.3	0
	13-30	---	2.0-15	4.5-6.0	0
	30-60	---	---	---	---
Twinmound------------	0-1	---	80-120	3.5-6.0	---
	1-3	1.0-5.0	---	3.6-7.3	0
	3-17	0.0-6.0	---	3.6-7.3	0
	17-26	0.0-6.0	---	3.6-7.3	0
	26-60	---	---	---	0
1648A:					
Northbend------------	0-7	---	10-45	3.5-6.5	0
	7-34	---	8.0-40	3.5-6.5	0
	34-36	1.0-8.0	---	4.5-7.3	0
	36-60	1.0-4.0	---	4.5-7.3	0
Ettrick, flood plain, undrained-----------	0-16	10-45	---	5.6-7.3	0
	16-35	4.0-30	---	6.1-7.3	0
	35-60	2.0-25	---	6.1-7.3	0
1658A:					
Algansee-------------	0-4	6.0-15	---	5.6-7.3	0
	4-31	1.0-10	---	5.6-7.3	0
	31-60	1.0-4.0	---	5.6-7.3	0
Kalmarville, undrained-----------	0-6	11-24	---	5.6-7.3	0
	6-37	6.0-15	---	5.6-7.3	0
	37-42	6.0-15	---	5.6-7.3	0
	42-60	1.0-5.0	---	5.6-7.3	0

Table 26.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	meq/100 g	meq/100 g	pH	Pct
2002. Udorthents, earthen dams					
2003A. Riverwash					
2013. Pits, gravel					
2014. Pits, quarry, hard bedrock					
2016. Pits, quarry, soft bedrock					
2030: Udorthents, cut or fill					
Udipsamments, cut or fill					
2050. Landfill					
M-W. Miscellaneous water					
W. Water					

Table 27.--Soil Moisture Status by Depth

(Depths of layers are in feet. Absence of an entry indicates that the feature is not a concern or that data were not estimated. See text for definitions of terms used in this table)

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
11A: Markey, flood plain, undrained------	D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
20A: Palms, undrained	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Houghton, undrained------	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0: Moist* 0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
40A: Markey, undrained------	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Seelyeville, undrained------	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0: Moist* 0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
45A: Seelyeville, undrained------	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0: Moist* 0.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
45A:													
Cathro, undrained------	A/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
101B:													
Menahga, valley train----------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
101C:													
Menahga, valley train----------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
101E:													
Menahga, valley train----------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
115B2:													
Seaton----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
115C2:													
Seaton----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
115D2:													
Seaton----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
115E2:													
Seaton----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
116C2:													
Churchtown------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
116D2:													
Churchtown------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
116E2:													
Churchtown------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
125B2:													
Pepin-----------	B	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist
125C2:													
Pepin-----------	B	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist
125D2:													
Pepin-----------	B	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist
125E2:													
Pepin-----------	B	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist	0.0-5.5: Moist
135C2:													
Wickware--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
135D2:													
Wickware--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
135E2:													
Wickware--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
136B:													
Doritty---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist
136C2:													
Doritty---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist
144B2:													
NewGlarus-------	B	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist
144C2:													
NewGlarus-------	B	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist
144D2:													
NewGlarus-------	B	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist
144E2:													
NewGlarus-------	B	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist	0.0-3.7: Moist
161E:													
Fivepoints------	C	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
208A:													
Siouxcreek------	C	0.0-3.2: Moist --- ---	0.0-3.2: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-3.2: Moist --- ---	0.0-3.2: Moist --- ---	0.0-3.2: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-3.2: Moist
213B2:													
Hixton----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
213C2:													
Hixton----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
224B:													
Elevasil--------	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
224C2:													
Elevasil--------	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
224D2:													
Elevasil--------	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
224E2:													
Elevasil--------	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
233C:													
Boone-----------	A	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-2.9: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-2.9: Moist	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---	0.0-2.9: Moist --- ---
243B2:													
Hixton, thin solum----------	C	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
243C2: Hixton, thin solum	C	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist	0.0-1.7: Moist
244B: Elkmound	C	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
244C2: Elkmound	C	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
244D2: Elkmound	C	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
254B2: Norden	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
254C2: Norden	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
254D2: Norden	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
254E2: Norden	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
254F: Norden	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
255B2: Urne	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
255C2:													
Urne------------	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
255D2:													
Urne------------	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
255E2:													
Urne------------	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
255F:													
Urne------------	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
265B:													
Garne-----------	A	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.8: Moist	2.0-2.8: Moist	---	---	---	---
265C:													
Garne-----------	A	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist	0.0-2.8: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.8: Moist	2.0-2.8: Moist	---	---	---	---
266B:													
Hiles-----------	B	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.4: Moist	0.0-2.0: Moist	0.0-2.0: Moist
		---	---	---	2.0-2.2: Wet	2.0-2.2: Wet	---	---	---	---	---	2.0-2.2: Wet	2.0-2.2: Wet
		---	---	---	2.2-2.4: Moist	2.2-2.4: Moist	---	---	---	---	---	2.2-2.4: Moist	2.2-2.4: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
268A:													
Kert------------	C	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist
269A:													
Veedum, undrained------	B/D	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-1.0: Moist 1.0-2.2: Wet	0.0-1.5: Moist 1.5-2.2: Wet	0.0-1.0: Moist 1.0-2.2: Wet	0.0-2.2: Wet ---	0.0-2.2: Wet ---	0.0-2.2: Wet ---
273B2:													
Dobie-----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
Hixton, frigid--	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
273C2:													
Dobie-----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
Hixton, frigid--	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
273D2:													
Dobie-----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
Hixton, frigid--	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
273E2:													
Dobie-----------	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
Hixton, frigid--	B	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
275B2:													
Hayriver--------	B	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
Elevasil, frigid	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
275C2:													
Hayriver--------	B	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
Elevasil, frigid	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
275D2:													
Hayriver--------	B	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
Elevasil, frigid	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist
276B:													
Humbird, loamy subsoil--------	B	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.0: Moist 2.0-2.2: Wet 2.2-2.3: Moist	0.0-2.0: Moist 2.0-2.2: Wet 2.2-2.3: Moist	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.3: Moist --- ---	0.0-2.0: Moist 2.0-2.2: Wet 2.2-2.3: Moist	0.0-2.0: Moist 2.0-2.2: Wet 2.2-2.3: Moist
278A:													
Merrillan, loamy subsoil--------	C	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-2.8: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-2.8: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
282C:													
Twinmound-------	A	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.2: Moist	2.0-2.2: Moist	---	---	---	---
282F:													
Twinmound-------	A	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.2: Moist	2.0-2.2: Moist	---	---	---	---
313D2:													
Plumcreek-------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
313F:													
Plumcreek-------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
316B2:													
Ella------------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.0: Moist
		---	---	4.0-5.0: Wet	4.0-5.0: Wet	4.0-5.0: Wet	---	---	---	---	4.0-5.0: Wet	4.0-5.0: Wet	4.0-5.0: Wet
		---	---	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	---	---	---	---	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist
316C2:													
Ella------------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.0: Moist
		---	---	4.0-5.0: Wet	4.0-5.0: Wet	4.0-5.0: Wet	---	---	---	---	4.0-5.0: Wet	4.0-5.0: Wet	4.0-5.0: Wet
		---	---	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	---	---	---	---	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
318A: Bearpen	C	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist
349A: Rib, valley train, undrained	B/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
378A: Poskin, valley train	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
403A: Dakota	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
413A: Rasset	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
413B: Rasset	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
416A: Menomin	B	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
423A: Meridian--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
423B2: Meridian--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
423C2: Meridian--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
428A: Shiffer---------	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
429A: Lows, undrained	B/D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
432A: Kevilar---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---
432B: Kevilar---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
432C2:													
Kevilar---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---
432D2:													
Kevilar---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-4.0: Moist 4.0-5.0: Wet 5.0-6.7: Moist	0.0-6.7: Moist --- ---
433A:													
Forkhorn--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
433B:													
Forkhorn--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
433C2:													
Forkhorn--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
433D2:													
Forkhorn--------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
434B:													
Bilson----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
436A:													
Rusktown--------	B	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
438A: Hoopeston-------	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
453A: Burkhardt-------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
453B: Burkhardt-------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
454B: Chetek, kame terrace--------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
454C2: Chetek, kame terrace--------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
454D2:													
Chetek, kame terrace--------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
454E:													
Chetek, kame terrace--------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
468A:													
Oesterle, valley train----------	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
501A:													
Finchford-------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
501B:													
Finchford-------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
502B2:													
Chelsea---------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
502C2:													
Chelsea---------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
506A:													
Komro-----------	B	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-5.0: Moist 5.0-6.7: Wet	0.0-1.0: Moist 1.0-2.0: Dry 2.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---
508A:													
Farrington------	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
510B:													
Boplain---------	A	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-3.1: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-3.1: Moist	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---	0.0-3.1: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
510C:													
Boplain---------	A	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.9: Moist	2.0-2.9: Moist	---	---	---	---
511A:													
Plainfield------	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---
511B:													
Plainfield------	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---
511C:													
Plainfield------	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---
511F:													
Plainfield------	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
512B: Drammen	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
512C: Drammen	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
512D: Drammen	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
516A: Aldo	A	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-5.0: Moist 5.0-6.7: Wet	0.0-1.0: Moist 1.0-2.0: Dry 2.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---	0.0-4.0: Moist 4.0-6.7: Wet --- ---	0.0-4.5: Moist 4.5-6.7: Wet --- ---
546A: Prissel	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-6.7: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
546B:													
Prissel---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-6.7: Moist --- ---
546C:													
Prissel---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-6.7: Moist --- ---
546F:													
Prissel---------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.0: Wet 4.0-6.7: Moist	0.0-3.5: Moist 3.5-4.0: Wet 4.0-6.7: Moist	0.0-6.7: Moist --- ---
555A:													
Fordum, frequently flooded--------	D	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
561B:													
Tarr------------	A	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Dry 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
566A:													
Tint------------	B	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.5: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-5.0: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.5: Moist
		4.5-6.7: Wet	4.5-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.0-6.7: Wet	4.5-6.7: Wet	1.0-2.0: Dry	1.0-2.0: Dry	5.0-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.5-6.7: Wet
		---	---	---	---	---	---	2.0-5.0: Moist	2.0-5.5: Moist	---	---	---	---
		---	---	---	---	---	---	5.0-6.7: Wet	5.5-6.7: Wet	---	---	---	---
573B:													
Plainbo, sand sheet----------	A	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist	0.0-3.1: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-3.1: Moist	2.0-3.1: Moist	---	---	---	---
573C:													
Plainbo, sand sheet----------	A	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.9: Moist	2.0-2.9: Moist	---	---	---	---
588A:													
Meehan, valley train----------	C	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-2.5: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist
		2.5-6.7: Wet	2.5-6.7: Wet	2.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	3.0-6.7: Wet	3.0-6.7: Wet	2.5-6.7: Wet	2.0-6.7: Wet	2.0-6.7: Wet	2.5-6.7: Wet
589A:													
Newson, undrained------	A/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist	0.0-1.5: Moist	0.0-2.0: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-6.7: Wet	0.0-6.7: Wet
		---	---	---	---	---	1.0-6.7: Wet	1.5-6.7: Wet	2.0-6.7: Wet	1.5-6.7: Wet	1.0-6.7: Wet	---	---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydrologic group	January	February	March	April	May	June	July	August	September	October	November	December
601C:													
Beavercreek-----	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
616B:													
Chaseburg-------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
619A:													
Vancecreek, undrained------	B/D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
		---	---	---	---	---	---	1.0-6.7: Wet	1.5-6.7: Wet	1.0-6.7: Wet	---	---	---
626A:													
Arenzville------	B	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-5.0: Moist	0.0-5.5: Moist	0.0-5.0: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.5: Moist
		4.5-6.7: Wet	4.5-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.0-6.7: Wet	4.0-6.7: Wet	5.0-6.7: Wet	5.5-6.7: Wet	5.0-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.5-6.7: Wet
628A:													
Orion-----------	C	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-2.5: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist
		2.5-6.7: Wet	2.5-6.7: Wet	2.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	3.0-6.7: Wet	3.0-6.7: Wet	2.5-6.7: Wet	2.0-6.7: Wet	2.0-6.7: Wet	2.5-6.7: Wet
629A:													
Ettrick, undrained------	B/D	0.0-0.5: Moist	0.0-0.5: Moist	0.0: Moist*	0.0: Moist*	0.0: Moist*	0.0-0.5: Moist	0.0-1.0: Moist	0.0-2.0: Moist	0.0-1.0: Moist	0.0-0.5: Moist	0.0: Moist*	0.0-0.5: Moist
		0.5-6.7: Wet	0.5-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.5-6.7: Wet	1.0-6.7: Wet	2.0-6.7: Wet	1.0-6.7: Wet	0.5-6.7: Wet	0.0-6.7: Wet	0.5-6.7: Wet
636A:													
Quarderer-------	B	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.0: Moist	0.0-4.5: Moist	0.0-5.0: Moist	0.0-5.5: Moist	0.0-5.0: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-4.5: Moist
		4.5-6.7: Wet	4.5-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.0-6.7: Wet	4.5-6.7: Wet	5.0-6.7: Wet	5.5-6.7: Wet	5.0-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	4.5-6.7: Wet

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
646A:													
Dunnbot	B	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet
656A:													
Scotah	B	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet
766A:													
Moppet, occasionally flooded	B	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet
804B2:													
Arland, dissected	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
804C2:													
Arland, dissected	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
804D:													
Arland, dissected	B	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
814D2:													
Renova, dissected	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
816B2: Vlasaty, dissected------	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
		---	---	2.0-4.0: Wet	2.0-4.0: Wet	2.5-4.5: Wet	---	---	---	---	2.5-4.5: Wet	2.5-4.5: Wet	2.5-4.5: Wet
		---	---	4.0-6.7: Moist	4.0-6.7: Moist	4.5-6.7: Moist	---	---	---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist
816C2: Vlasaty, dissected------	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
		---	---	2.0-4.0: Wet	2.0-4.0: Wet	2.5-4.5: Wet	---	---	---	---	2.5-4.5: Wet	2.5-4.5: Wet	2.5-4.5: Wet
		---	---	4.0-6.7: Moist	4.0-6.7: Moist	4.5-6.7: Moist	---	---	---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist
826B2: Hersey----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
		---	---	3.0-4.5: Wet	3.0-4.5: Wet	3.0-4.5: Wet	---	---	---	---	3.0-4.5: Wet	3.0-4.5: Wet	3.0-4.5: Wet
		---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist	---	---	---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist
826C2: Hersey----------	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist
		---	---	3.0-4.5: Wet	3.0-4.5: Wet	3.0-4.5: Wet	---	---	---	---	3.0-4.5: Wet	3.0-4.5: Wet	3.0-4.5: Wet
		---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist	---	---	---	---	4.5-6.7: Moist	4.5-6.7: Moist	4.5-6.7: Moist
828B: Vasa------------	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist
		---	---	1.5-2.0: Wet	1.5-2.0: Wet	1.5-2.0: Wet	1.5-2.0: Wet	---	---	---	1.5-2.0: Wet	1.5-2.0: Wet	1.5-2.0: Wet
		---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
836B2: Spencer, dissected------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist
836C2: Spencer, dissected------	B	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist
838B: Almena, dissected------	C	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist
870B2: Santiago, dissected------	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
870C2: Santiago, dissected------	C	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
875B: Amery, dissected	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
875C2:													
Amery, dissected	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
875D:													
Amery, dissected	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
1125F:													
Dorerton--------	B	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist
Elbaville-------	B	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist	0.0-5.0: Moist
1145F:													
Gaphill---------	B	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist	0.0-4.7: Moist
Rockbluff-------	A	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist	0.0-4.3: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-4.3: Moist	2.0-4.3: Moist	---	---	---	---
1224F:													
Boone-----------	A	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.9: Moist	2.0-2.9: Moist	---	---	---	---
Elevasil--------	B	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist	0.0-3.2: Moist

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
1233F:													
Boone-----------	A	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist	0.0-2.9: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.9: Moist	2.0-2.9: Moist	---	---	---	---
Tarr------------	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---
1275F:													
Hayriver--------	B	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist
Twinmound-------	A	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist	0.0-2.2: Moist
		---	---	---	---	---	---	1.0-2.0: Dry	1.0-2.0: Dry	---	---	---	---
		---	---	---	---	---	---	2.0-2.2: Moist	2.0-2.2: Moist	---	---	---	---
1648A:													
Northbend-------	C	0.0-2.5: Moist	0.0-2.5: Moist	0.0-2.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-2.5: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist
		2.5-6.7: Wet	2.5-6.7: Wet	2.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	1.5-6.7: Wet	3.0-6.7: Wet	3.0-6.7: Wet	2.5-6.7: Wet	2.0-6.7: Wet	2.0-6.7: Wet	2.5-6.7: Wet
Ettrick, flood plain, undrained------	D	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-1.0: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
		---	---	---	---	---	---	1.0-6.7: Wet	1.5-6.7: Wet	1.0-6.7: Wet	---	---	---

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
1658A:													
Algansee--------	C	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet
Kalmarville, undrained------	D	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
2002. Udorthents, earthen dams													
2003A. Riverwash													
2013. Pits, gravel													
2014. Pits, quarry, hard bedrock													
2016. Pits, quarry, soft bedrock													
2030: Udorthents, cut or fill.													
Udipsamments, cut or fill.													
2050. Landfill													

See footnote at end of table.

Table 27.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro-logic group	January	February	March	April	May	June	July	August	September	October	November	December
M-W. Miscellaneous water													
W. Water													

* The moisture status is transitory at about the indicated depth.

Table 28.--Flooding Frequency and Duration

(See text for definitions of terms used in this table. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
11A:												
Markey, flood plain, undrained------	Rare Brief	Rare Brief	Frequent Long	Frequent Long	Frequent Long	Frequent Long	Rare Brief	Rare Brief	Occasional Long	Rare Brief	Rare Brief	Rare Brief
20A:												
Palms, undrained	None	None	None	None	None	None	None	None	None	None	None	None
Houghton, undrained------	None	None	None	None	None	None	None	None	None	None	None	None
40A:												
Markey, undrained------	None	None	None	None	None	None	None	None	None	None	None	None
Seelyeville, undrained------	None	None	None	None	None	None	None	None	None	None	None	None
45A:												
Seelyeville, undrained------	None	None	None	None	None	None	None	None	None	None	None	None
Cathro, undrained------	None	None	None	None	None	None	None	None	None	None	None	None
101B:												
Menahga, valley train----------	None	None	None	None	None	None	None	None	None	None	None	None
101C:												
Menahga, valley train----------	None	None	None	None	None	None	None	None	None	None	None	None
101E:												
Menahga, valley train----------	None	None	None	None	None	None	None	None	None	None	None	None
115B2:												
Seaton----------	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
115C2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
115D2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
115E2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
116C2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
116D2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
116E2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
125B2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None
125C2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None
125D2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None
125E2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None
135C2:												
Wickware	None	None	None	None	None	None	None	None	None	None	None	None
135D2:												
Wickware	None	None	None	None	None	None	None	None	None	None	None	None
135E2:												
Wickware	None	None	None	None	None	None	None	None	None	None	None	None
136B:												
Doritty	None	None	None	None	None	None	None	None	None	None	None	None
136C2:												
Doritty	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
144B2: NewGlarus	None	None	None	None	None	None	None	None	None	None	None	None
144C2: NewGlarus	None	None	None	None	None	None	None	None	None	None	None	None
144D2: NewGlarus	None	None	None	None	None	None	None	None	None	None	None	None
144E2: NewGlarus	None	None	None	None	None	None	None	None	None	None	None	None
161E: Fivepoints	None	None	None	None	None	None	None	None	None	None	None	None
208A: Siouxcreek	None	None	None	None	None	None	None	None	None	None	None	None
213B2: Hixton	None	None	None	None	None	None	None	None	None	None	None	None
213C2: Hixton	None	None	None	None	None	None	None	None	None	None	None	None
224B: Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
224C2: Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
224D2: Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
224E2: Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
233C: Boone	None	None	None	None	None	None	None	None	None	None	None	None
243B2: Hixton, thin solum	None	None	None	None	None	None	None	None	None	None	None	None
243C2: Hixton, thin solum	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
244B:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
244C2:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
244D2:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
254B2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254C2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254D2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254E2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254F:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
255B2:												
Urne------------	None	None	None	None	None	None	None	None	None	None	None	None
255C2:												
Urne------------	None	None	None	None	None	None	None	None	None	None	None	None
255D2:												
Urne------------	None	None	None	None	None	None	None	None	None	None	None	None
255E2:												
Urne------------	None	None	None	None	None	None	None	None	None	None	None	None
255F:												
Urne------------	None	None	None	None	None	None	None	None	None	None	None	None
265B:												
Garne-----------	None	None	None	None	None	None	None	None	None	None	None	None
265C:												
Garne-----------	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
266B:												
Hiles	None	None	None	None	None	None	None	None	None	None	None	None
268A:												
Kert	None	None	None	None	None	None	None	None	None	None	None	None
269A:												
Veedum, undrained	None	None	None	None	None	None	None	None	None	None	None	None
273B2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None
273C2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None
273D2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None
273E2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None
275B2:												
Hayriver	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None
275C2:												
Hayriver	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None
275D2:												
Hayriver	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
276B: Humbird, loamy subsoil	None	None	None	None	None	None	None	None	None	None	None	None
278A: Merrillan, loamy subsoil	None	None	None	None	None	None	None	None	None	None	None	None
282C: Twinmound	None	None	None	None	None	None	None	None	None	None	None	None
282F: Twinmound	None	None	None	None	None	None	None	None	None	None	None	None
313D2: Plumcreek	None	None	None	None	None	None	None	None	None	None	None	None
313F: Plumcreek	None	None	None	None	None	None	None	None	None	None	None	None
316B2: Ella	None	None	None	None	None	None	None	None	None	None	None	None
316C2: Ella	None	None	None	None	None	None	None	None	None	None	None	None
318A: Bearpen	None	None	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	None	None
349A: Rib, valley train, undrained	None	None	None	None	None	None	None	None	None	None	None	None
378A: Poskin, valley train	None	None	None	None	None	None	None	None	None	None	None	None
403A: Dakota	None	None	None	None	None	None	None	None	None	None	None	None
413A: Rasset	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
413B:												
Rasset----------	None	None	None	None	None	None	None	None	None	None	None	None
416A:												
Menomin---------	None	None	None	None	None	None	None	None	None	None	None	None
423A:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
423B2:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
423C2:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
428A:												
Shiffer---------	None	None	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	None	None	None	None	None	None
429A:												
Lows, undrained	None	None	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	None	None
432A:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432B:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432C2:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432D2:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
433A:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
433B:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
433C2:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
433D2: Forkhorn	None	None	None	None	None	None	None	None	None	None	None	None
434B: Bilson	None	None	None	None	None	None	None	None	None	None	None	None
436A: Rusktown	None	None	None	None	None	None	None	None	None	None	None	None
438A: Hoopeston	None	None	None	None	None	None	None	None	None	None	None	None
453A: Burkhardt	None	None	None	None	None	None	None	None	None	None	None	None
453B: Burkhardt	None	None	None	None	None	None	None	None	None	None	None	None
454B: Chetek, kame terrace	None	None	None	None	None	None	None	None	None	None	None	None
454C2: Chetek, kame terrace	None	None	None	None	None	None	None	None	None	None	None	None
454D2: Chetek, kame terrace	None	None	None	None	None	None	None	None	None	None	None	None
454E: Chetek, kame terrace	None	None	None	None	None	None	None	None	None	None	None	None
468A: Oesterle, valley train	None	None	None	None	None	None	None	None	None	None	None	None
501A: Finchford	None	None	None	None	None	None	None	None	None	None	None	None
501B: Finchford	None	None	None	None	None	None	None	None	None	None	None	None
502B2: Chelsea	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
502C2:												
Chelsea---------	None	None	None	None	None	None	None	None	None	None	None	None
506A:												
Komro-----------	None	None	None	None	None	None	None	None	None	None	None	None
508A:												
Farrington------	None	None	None	None	None	None	None	None	None	None	None	None
510B:												
Boplain---------	None	None	None	None	None	None	None	None	None	None	None	None
510C:												
Boplain---------	None	None	None	None	None	None	None	None	None	None	None	None
511A:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
511B:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
511C:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
511F:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
512B:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
512C:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
512D:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
516A:												
Aldo------------	None	None	None	None	None	None	None	None	None	None	None	None
546A:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None
546B:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
546C:												
Prissel	None	None	None	None	None	None	None	None	None	None	None	None
546F:												
Prissel	None	None	None	None	None	None	None	None	None	None	None	None
555A:												
Fordum, frequently flooded	Rare Brief	Rare Brief	Occasional Brief	Frequent Long	Frequent Long	Occasional Brief	Rare Brief	Rare Brief	Occasional Brief	Occasional Brief	Occasional Brief	Rare Brief
561B:												
Tarr	None	None	None	None	None	None	None	None	None	None	None	None
566A:												
Tint	None	None	None	None	None	None	None	None	None	None	None	None
573B:												
Plainbo, sand sheet	None	None	None	None	None	None	None	None	None	None	None	None
573C:												
Plainbo, sand sheet	None	None	None	None	None	None	None	None	None	None	None	None
588A:												
Meehan, valley train	None	None	None	None	None	None	None	None	None	None	None	None
589A:												
Newson, undrained	None	None	None	None	None	None	None	None	None	None	None	None
601C:												
Beavercreek	Rare Extremely brief	Rare Extremely brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Extremely brief	Rare Extremely brief	Rare Extremely brief	Rare Extremely brief	Occasional Very brief	Occasional Very brief	Rare Extremely brief
616B:												
Chaseburg	Rare Extremely brief	Rare Extremely brief	Occasional Extremely brief	Occasional Extremely brief	Occasional Extremely brief	Occasional Extremely brief	Rare Extremely brief	Rare Extremely brief	Rare Extremely brief	Occasional Extremely brief	Occasional Extremely brief	Rare Extremely brief

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
619A: Vancecreek, undrained	Rare Very brief	Occasional Brief	Frequent Brief	Frequent Brief	Frequent Brief	Occasional Brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief
626A: Arenzville	Rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief
628A: Orion	Rare Very brief	Rare Very brief	Occasional Brief	Occasional Brief	Occasional Brief	Occasional Brief	Rare Very brief	Rare Very brief	Rare Very brief	Occasional Brief	Occasional Brief	Rare Very brief
629A: Ettrick, undrained	Rare Very brief	Occasional Brief	Frequent Brief	Frequent Brief	Frequent Brief	Occasional Brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief
636A: Quarderer	Rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief
646A: Dunnbot	Very rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief	Rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief
656A: Scotah	Very rare Very brief	Rare Very brief	Occasional Very brief	Occasional Very brief	Occasional Very brief	Rare Very brief	Rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief	Very rare Very brief
766A: Moppet, occasionally flooded	Very rare Very brief	Very rare Very brief	Rare Very brief	Occasional Brief	Occasional Brief	Rare Very brief	Very rare Very brief	Very rare Very brief	Rare Very brief	Rare Very brief	Rare Very brief	Very rare Very brief

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
804B2:												
Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
804C2:												
Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
804D:												
Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
814D2:												
Renova, dissected	None	None	None	None	None	None	None	None	None	None	None	None
816B2:												
Vlasaty, dissected	None	None	None	None	None	None	None	None	None	None	None	None
816C2:												
Vlasaty, dissected	None	None	None	None	None	None	None	None	None	None	None	None
826B2:												
Hersey	None	None	None	None	None	None	None	None	None	None	None	None
826C2:												
Hersey	None	None	None	None	None	None	None	None	None	None	None	None
828B:												
Vasa	None	None	None	Rare	Rare	None	None	None	None	None	None	None
836B2:												
Spencer, dissected	None	None	None	None	None	None	None	None	None	None	None	None
836C2:												
Spencer, dissected	None	None	None	None	None	None	None	None	None	None	None	None
838B:												
Almena, dissected	None	None	None	Rare	Rare	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
870B2:												
Santiago, dissected	None	None	None	None	None	None	None	None	None	None	None	None
870C2:												
Santiago, dissected	None	None	None	None	None	None	None	None	None	None	None	None
875B:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
875C2:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
875D:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
1125F:												
Dorerton	None	None	None	None	None	None	None	None	None	None	None	None
Elbaville	None	None	None	None	None	None	None	None	None	None	None	None
1145F:												
Gaphill	None	None	None	None	None	None	None	None	None	None	None	None
Rockbluff	None	None	None	None	None	None	None	None	None	None	None	None
1224F:												
Boone	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
1233F:												
Boone	None	None	None	None	None	None	None	None	None	None	None	None
Tarr	None	None	None	None	None	None	None	None	None	None	None	None
1275F:												
Hayriver	None	None	None	None	None	None	None	None	None	None	None	None
Twinmound	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
1648A:												
Northbend	Very rare Very brief	Very rare Very brief	Frequent Long	Frequent Long	Frequent Long	Frequent Long	Rare Very brief	Very rare Very brief	Occasional Brief	Rare Very brief	Rare Very brief	Very rare Very brief
Ettrick, flood plain, undrained	Very rare Brief	Very rare Brief	Frequent Long	Frequent Long	Frequent Long	Frequent Long	Rare Brief	Very rare Brief	Occasional Long	Rare Brief	Rare Brief	Very rare Brief
1658A:												
Algansee	Very rare Very brief	Very rare Very brief	Frequent Long	Frequent Long	Frequent Long	Frequent Long	Rare Very brief	Very rare Very brief	Occasional Brief	Rare Very brief	Rare Very brief	Very rare Very brief
Kalmarville, undrained	Very rare Brief	Very rare Brief	Frequent Long	Frequent Long	Frequent Long	Frequent Long	Rare Brief	Very rare Brief	Occasional Long	Rare Brief	Rare Brief	Very rare Brief
2002. Udorthents, earthen dams												
2003A. Riverwash												
2013. Pits, gravel												
2014. Pits, quarry, hard bedrock												
2016. Pits, quarry, soft bedrock												
2030:												
Udorthents, cut or fill.												
Udipsamments, cut or fill.												

Table 28.--Flooding Frequency and Duration--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
2050. Landfill												
M-W. Miscellaneous water												
W. Water												

Table 29.--Ponding Frequency, Duration, and Depth

(Depth refers to the depth, in feet, of the water above the surface. See text for definitions of terms used in this table. Absence of an entry indicates that no estimate was made)

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
11A:												
Markey, flood plain, undrained	Occasional Very long Depth: 0.3	Occasional Very long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Long Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Very long Depth: 0.3
20A:												
Palms, undrained	Occasional Very long Depth: 0.3	Occasional Very long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Long Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Very long Depth: 0.3
Houghton, undrained	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Occasional Long Depth: 0.5	Occasional Long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 0.5
40A:												
Markey, undrained	Occasional Very long Depth: 0.3	Occasional Very long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Long Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Very long Depth: 0.3
Seelyeville, undrained	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Occasional Long Depth: 0.5	Occasional Long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 0.5
45A:												
Seelyeville, undrained	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Occasional Long Depth: 0.5	Occasional Long Depth: 0.5	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 1.0	Frequent Very long Depth: 0.5

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
45A:												
Cathro, undrained	Occasional Very long Depth: 0.3	Occasional Very long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Long Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Long Depth: 0.3	Frequent Very long Depth: 0.5	Frequent Very long Depth: 0.5	Occasional Very long Depth: 0.3
101B:												
Menahga, valley train	None	None	None	None	None	None	None	None	None	None	None	None
101C:												
Menahga, valley train	None	None	None	None	None	None	None	None	None	None	None	None
101E:												
Menahga, valley train	None	None	None	None	None	None	None	None	None	None	None	None
115B2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
115C2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
115D2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
115E2:												
Seaton	None	None	None	None	None	None	None	None	None	None	None	None
116C2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
116D2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
116E2:												
Churchtown	None	None	None	None	None	None	None	None	None	None	None	None
125B2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None
125C2:												
Pepin	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
125D2:												
Pepin-----------	None	None	None	None	None	None	None	None	None	None	None	None
125E2:												
Pepin-----------	None	None	None	None	None	None	None	None	None	None	None	None
135C2:												
Wickware--------	None	None	None	None	None	None	None	None	None	None	None	None
135D2:												
Wickware--------	None	None	None	None	None	None	None	None	None	None	None	None
135E2:												
Wickware--------	None	None	None	None	None	None	None	None	None	None	None	None
136B:												
Doritty---------	None	None	None	None	None	None	None	None	None	None	None	None
136C2:												
Doritty---------	None	None	None	None	None	None	None	None	None	None	None	None
144B2:												
NewGlarus-------	None	None	None	None	None	None	None	None	None	None	None	None
144C2:												
NewGlarus-------	None	None	None	None	None	None	None	None	None	None	None	None
144D2:												
NewGlarus-------	None	None	None	None	None	None	None	None	None	None	None	None
144E2:												
NewGlarus-------	None	None	None	None	None	None	None	None	None	None	None	None
161E:												
Fivepoints------	None	None	None	None	None	None	None	None	None	None	None	None
208A:												
Siouxcreek------	None	None	None	None	None	None	None	None	None	None	None	None
213B2:												
Hixton----------	None	None	None	None	None	None	None	None	None	None	None	None
213C2:												
Hixton----------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
224B:												
Elevasil--------	None	None	None	None	None	None	None	None	None	None	None	None
224C2:												
Elevasil--------	None	None	None	None	None	None	None	None	None	None	None	None
224D2:												
Elevasil--------	None	None	None	None	None	None	None	None	None	None	None	None
224E2:												
Elevasil--------	None	None	None	None	None	None	None	None	None	None	None	None
233C:												
Boone-----------	None	None	None	None	None	None	None	None	None	None	None	None
243B2:												
Hixton, thin solum----------	None	None	None	None	None	None	None	None	None	None	None	None
243C2:												
Hixton, thin solum----------	None	None	None	None	None	None	None	None	None	None	None	None
244B:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
244C2:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
244D2:												
Elkmound--------	None	None	None	None	None	None	None	None	None	None	None	None
254B2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254C2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254D2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254E2:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None
254F:												
Norden----------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
255B2:												
Urne	None	None	None	None	None	None	None	None	None	None	None	None
255C2:												
Urne	None	None	None	None	None	None	None	None	None	None	None	None
255D2:												
Urne	None	None	None	None	None	None	None	None	None	None	None	None
255E2:												
Urne	None	None	None	None	None	None	None	None	None	None	None	None
255F:												
Urne	None	None	None	None	None	None	None	None	None	None	None	None
265B:												
Garne	None	None	None	None	None	None	None	None	None	None	None	None
265C:												
Garne	None	None	None	None	None	None	None	None	None	None	None	None
266B:												
Hiles	None	None	None	None	None	None	None	None	None	None	None	None
268A:												
Kert	None	None	None	None	None	None	None	None	None	None	None	None
269A:												
Veedum, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.3
273B2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None
273C2:												
Dobie	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
273D2:												
Dobie-----------	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid--	None	None	None	None	None	None	None	None	None	None	None	None
273E2:												
Dobie-----------	None	None	None	None	None	None	None	None	None	None	None	None
Hixton, frigid--	None	None	None	None	None	None	None	None	None	None	None	None
275B2:												
Hayriver--------	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None
275C2:												
Hayriver--------	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None
275D2:												
Hayriver--------	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil, frigid	None	None	None	None	None	None	None	None	None	None	None	None
276B:												
Humbird, loamy subsoil--------	None	None	None	None	None	None	None	None	None	None	None	None
278A:												
Merrillan, loamy subsoil--------	None	None	None	None	None	None	None	None	None	None	None	None
282C:												
Twinmound-------	None	None	None	None	None	None	None	None	None	None	None	None
282F:												
Twinmound-------	None	None	None	None	None	None	None	None	None	None	None	None
313D2:												
Plumcreek-------	None	None	None	None	None	None	None	None	None	None	None	None
313F:												
Plumcreek-------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
316B2:												
Ella------------	None	None	None	None	None	None	None	None	None	None	None	None
316C2:												
Ella------------	None	None	None	None	None	None	None	None	None	None	None	None
318A:												
Bearpen---------	None	None	None	None	None	None	None	None	None	None	None	None
349A:												
Rib, valley train, undrained------	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.3
378A:												
Poskin, valley train----------	None	None	None	None	None	None	None	None	None	None	None	None
403A:												
Dakota----------	None	None	None	None	None	None	None	None	None	None	None	None
413A:												
Rasset----------	None	None	None	None	None	None	None	None	None	None	None	None
413B:												
Rasset----------	None	None	None	None	None	None	None	None	None	None	None	None
416A:												
Menomin---------	None	None	None	None	None	None	None	None	None	None	None	None
423A:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
423B2:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
423C2:												
Meridian--------	None	None	None	None	None	None	None	None	None	None	None	None
428A:												
Shiffer---------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
429A:												
Lows, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Brief Depth: 0.5	Occasional Brief Depth: 0.3	Rare Very brief Depth: 0.3	Rare Very brief Depth: 0.3	Rare Very brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3
432A:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432B:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432C2:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
432D2:												
Kevilar---------	None	None	None	None	None	None	None	None	None	None	None	None
433A:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
433B:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
433C2:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
433D2:												
Forkhorn--------	None	None	None	None	None	None	None	None	None	None	None	None
434B:												
Bilson----------	None	None	None	None	None	None	None	None	None	None	None	None
436A:												
Rusktown--------	None	None	None	None	None	None	None	None	None	None	None	None
438A:												
Hoopeston-------	None	None	None	None	None	None	None	None	None	None	None	None
453A:												
Burkhardt-------	None	None	None	None	None	None	None	None	None	None	None	None
453B:												
Burkhardt-------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
454B:												
Chetek, kame terrace--------	None	None	None	None	None	None	None	None	None	None	None	None
454C2:												
Chetek, kame terrace--------	None	None	None	None	None	None	None	None	None	None	None	None
454D2:												
Chetek, kame terrace--------	None	None	None	None	None	None	None	None	None	None	None	None
454E:												
Chetek, kame terrace--------	None	None	None	None	None	None	None	None	None	None	None	None
468A:												
Oesterle, valley train----------	None	None	None	None	None	None	None	None	None	None	None	None
501A:												
Finchford-------	None	None	None	None	None	None	None	None	None	None	None	None
501B:												
Finchford-------	None	None	None	None	None	None	None	None	None	None	None	None
502B2:												
Chelsea---------	None	None	None	None	None	None	None	None	None	None	None	None
502C2:												
Chelsea---------	None	None	None	None	None	None	None	None	None	None	None	None
506A:												
Komro-----------	None	None	None	None	None	None	None	None	None	None	None	None
508A:												
Farrington------	None	None	None	None	None	None	None	None	None	None	None	None
510B:												
Boplain---------	None	None	None	None	None	None	None	None	None	None	None	None
510C:												
Boplain---------	None	None	None	None	None	None	None	None	None	None	None	None
511A:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
511B:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
511C:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
511F:												
Plainfield------	None	None	None	None	None	None	None	None	None	None	None	None
512B:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
512C:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
512D:												
Drammen---------	None	None	None	None	None	None	None	None	None	None	None	None
516A:												
Aldo------------	None	None	None	None	None	None	None	None	None	None	None	None
546A:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None
546B:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None
546C:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None
546F:												
Prissel---------	None	None	None	None	None	None	None	None	None	None	None	None
555A:												
Fordum, frequently flooded--------	None	None	None	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	None	None	None	None
561B:												
Tarr------------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
566A: Tint	None	None	None	None	None	None	None	None	None	None	None	None
573B: Plainbo, sand sheet	None	None	None	None	None	None	None	None	None	None	None	None
573C: Plainbo, sand sheet	None	None	None	None	None	None	None	None	None	None	None	None
588A: Meehan, valley train	None	None	None	None	None	None	None	None	None	None	None	None
589A: Newson, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Brief Depth: 0.5	Rare Very brief Depth: 0.5	Rare Very brief Depth: 0.3	Rare Very brief Depth: 0.3	Rare Very brief Depth: 0.3	Rare Very brief Depth: 0.3	Rare Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3
601C: Beavercreek	None	None	None	None	None	None	None	None	None	None	None	None
616B: Chaseburg	None	None	None	None	None	None	None	None	None	None	None	None
619A: Vancecreek, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Brief Depth: 0.5	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.3
626A: Arenzville	None	None	None	None	None	None	None	None	None	None	None	None
628A: Orion	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
629A: Ettrick, undrained	Rare Very brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Brief Depth: 0.5	Frequent Brief Depth: 0.5	Frequent Brief Depth: 0.5	Occasional Brief Depth: 0.3	Occasional Very brief Depth: 0.3	Occasional Very brief Depth: 0.3	Occasional Very brief Depth: 0.3	Occasional Very brief Depth: 0.3	Frequent Very brief Depth: 0.5	Rare Very brief Depth: 0.3
636A: Quarderer	None	None	None	None	None	None	None	None	None	None	None	None
646A: Dunnbot	None	None	None	None	None	None	None	None	None	None	None	None
656A: Scotah	None	None	None	None	None	None	None	None	None	None	None	None
766A: Moppet, occasionally flooded	None	None	None	None	None	None	None	None	None	None	None	None
804B2: Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
804C2: Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
804D: Arland, dissected	None	None	None	None	None	None	None	None	None	None	None	None
814D2: Renova, dissected	None	None	None	None	None	None	None	None	None	None	None	None
816B2: Vlasaty, dissected	None	None	None	None	None	None	None	None	None	None	None	None
816C2: Vlasaty, dissected	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
826B2:												
Hersey----------	None	None	None	None	None	None	None	None	None	None	None	None
826C2:												
Hersey----------	None	None	None	None	None	None	None	None	None	None	None	None
828B:												
Vasa------------	None	None	None	None	None	None	None	None	None	None	None	None
836B2:												
Spencer, dissected------	None	None	None	None	None	None	None	None	None	None	None	None
836C2:												
Spencer, dissected------	None	None	None	None	None	None	None	None	None	None	None	None
838B:												
Almena, dissected------	None	None	None	None	None	None	None	None	None	None	None	None
870B2:												
Santiago, dissected------	None	None	None	None	None	None	None	None	None	None	None	None
870C2:												
Santiago, dissected------	None	None	None	None	None	None	None	None	None	None	None	None
875B:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
875C2:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
875D:												
Amery, dissected	None	None	None	None	None	None	None	None	None	None	None	None
1125F:												
Dorerton--------	None	None	None	None	None	None	None	None	None	None	None	None
Elbaville-------	None	None	None	None	None	None	None	None	None	None	None	None
1145F:												
Gaphill---------	None	None	None	None	None	None	None	None	None	None	None	None

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
1145F:												
Rockbluff	None	None	None	None	None	None	None	None	None	None	None	None
1224F:												
Boone	None	None	None	None	None	None	None	None	None	None	None	None
Elevasil	None	None	None	None	None	None	None	None	None	None	None	None
1233F:												
Boone	None	None	None	None	None	None	None	None	None	None	None	None
Tarr	None	None	None	None	None	None	None	None	None	None	None	None
1275F:												
Hayriver	None	None	None	None	None	None	None	None	None	None	None	None
Twinmound	None	None	None	None	None	None	None	None	None	None	None	None
1648A:												
Northbend	None	None	None	None	None	None	None	None	None	None	None	None
Ettrick, flood plain, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Occasional Long Depth: 0.3
1658A:												
Algansee	None	None	None	None	None	None	None	None	None	None	None	None
Kalmarville, undrained	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Occasional Brief Depth: 0.3	Frequent Long Depth: 0.5	Occasional Long Depth: 0.3
2002. Udorthents, earthen dams												
2003A. Riverwash												
2013. Pits, gravel												

Table 29.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
2014. Pits, quarry, hard bedrock												
2016. Pits, quarry, soft bedrock												
2030: Udorthents, cut or fill.												
Udipsamments, cut or fill.												
2050. Landfill												
M-W. Miscellaneous water												
W. Water												

Table 30.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In		In	In			
11A:								
Markey, flood plain, undrained	---	>80	---	8-25	25-50	High	High	Moderate
20A:								
Palms, undrained	---	>80	---	8-25	25-50	High	High	Moderate
Houghton, undrained	---	>80	---	25-30	40-60	High	High	Moderate
40A:								
Markey, undrained	---	>80	---	8-25	25-50	High	High	Moderate
Seelyeville, undrained	---	>80	---	25-30	40-60	High	High	Moderate
45A:								
Seelyeville, undrained	---	>80	---	25-30	40-60	High	High	Moderate
Cathro, undrained	---	>80	---	8-25	25-50	High	High	Moderate
101B:								
Menahga, valley train	---	>80	---	---	---	Low	Low	Moderate
101C:								
Menahga, valley train	---	>80	---	---	---	Low	Low	Moderate
101E:								
Menahga, valley train	---	>80	---	---	---	Low	Low	Moderate
115B2:								
Seaton	---	>80	---	---	---	High	Moderate	Moderate
115C2:								
Seaton	---	>80	---	---	---	High	Moderate	Moderate
115D2:								
Seaton	---	>80	---	---	---	High	Moderate	Moderate
115E2:								
Seaton	---	>80	---	---	---	High	Moderate	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
116C2:								
Churchtown-------------	---	>80	---	---	---	High	Moderate	Moderate
116D2:								
Churchtown-------------	---	>80	---	---	---	High	Moderate	Moderate
116E2:								
Churchtown-------------	---	>80	---	---	---	High	Moderate	Moderate
125B2:								
Pepin------------------	Bedrock (lithic)	45-80	Indurated	---	---	High	Moderate	Moderate
125C2:								
Pepin------------------	Bedrock (lithic)	45-80	Indurated	---	---	High	Moderate	Moderate
125D2:								
Pepin------------------	Bedrock (lithic)	45-80	Indurated	---	---	High	Moderate	Moderate
125E2:								
Pepin------------------	Bedrock (lithic)	45-80	Indurated	---	---	High	Moderate	Moderate
135C2:								
Wickware---------------	---	>80	---	---	---	High	Moderate	Moderate
135D2:								
Wickware---------------	---	>80	---	---	---	High	Moderate	Moderate
135E2:								
Wickware---------------	---	>80	---	---	---	High	Moderate	Moderate
136B:								
Doritty----------------	---	>80	---	---	---	High	High	Moderate
136C2:								
Doritty----------------	---	>80	---	---	---	High	High	Moderate
144B2:								
NewGlarus--------------	Bedrock (lithic)	40-60	Indurated	---	---	Moderate	Moderate	Moderate
144C2:								
NewGlarus--------------	Bedrock (lithic)	40-60	Indurated	---	---	Moderate	Moderate	Moderate
144D2:								
NewGlarus--------------	Bedrock (lithic)	40-60	Indurated	---	---	Moderate	Moderate	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
144E2:								
NewGlarus	Bedrock (lithic)	40-60	Indurated	---	---	Moderate	Moderate	Moderate
161E:								
Fivepoints	Bedrock (lithic)	20-40	Indurated	---	---	Moderate	Moderate	High
208A:								
Siouxcreek	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Moderate	Moderate
213B2:								
Hixton	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
213C2:								
Hixton	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
224B:								
Elevasil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
224C2:								
Elevasil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
224D2:								
Elevasil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
224E2:								
Elevasil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
233C:								
Boone	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	Moderate
243B2:								
Hixton, thin solum	Bedrock (paralithic)	18-25	Weakly cemented	---	---	Moderate	Low	Moderate
243C2:								
Hixton, thin solum	Bedrock (paralithic)	18-25	Weakly cemented	---	---	Moderate	Low	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
244B:								
Elkmound	Bedrock (paralithic)	10-20	Weakly cemented	---	---	Moderate	Low	Moderate
244C2:								
Elkmound	Bedrock (paralithic)	10-20	Weakly cemented	---	---	Moderate	Low	Moderate
244D2:								
Elkmound	Bedrock (paralithic)	10-20	Weakly cemented	---	---	Moderate	Low	Moderate
254B2:								
Norden	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
254C2:								
Norden	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
254D2:								
Norden	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
254E2:								
Norden	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
254F:								
Norden	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
255B2:								
Urne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
255C2:								
Urne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
255D2:								
Urne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
255E2:								
Urne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
255F:								
Urne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
265B:								
Garne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
265C:								
Garne	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
266B:								
Hiles	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Moderate	High
268A:								
Kert	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	High	High
269A:								
Veedum, undrained	Bedrock (paralithic)	20-40	Weakly cemented	---	---	High	High	High
273B2:								
Dobie	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Hixton, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
273C2:								
Dobie	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Hixton, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
273D2:								
Dobie	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Hixton, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
273E2:								
Dobie	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Hixton, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
275B2:								
Hayriver	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Elevasil, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
275C2:								
Hayriver	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Elevasil, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
275D2:								
Hayriver	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Elevasil, frigid	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
276B:								
Humbird, loamy subsoil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	High	High
278A:								
Merrillan, loamy subsoil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	High	High

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In		In	In			
282C:								
Twinmound	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	High
282F:								
Twinmound	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	High
313D2:								
Plumcreek	---	>80	---	---	---	High	Moderate	Moderate
313F:								
Plumcreek	---	>80	---	---	---	High	Moderate	Moderate
316B2:								
Ella	---	>80	---	---	---	High	Moderate	Moderate
316C2:								
Ella	---	>80	---	---	---	High	Moderate	Moderate
318A:								
Bearpen	---	>80	---	---	---	High	High	Moderate
349A:								
Rib, valley train, undrained	---	>80	---	---	---	High	High	Moderate
378A:								
Poskin, valley train	---	>80	---	---	---	Moderate	Moderate	Moderate
403A:								
Dakota	---	>80	---	---	---	Moderate	Low	Moderate
413A:								
Rasset	---	>80	---	---	---	Moderate	Low	Moderate
413B:								
Rasset	---	>80	---	---	---	Moderate	Low	Moderate
416A:								
Menomin	---	>80	---	---	---	Moderate	Low	Moderate
423A:								
Meridian	---	>80	---	---	---	Moderate	Low	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
423B2:								
Meridian	---	>80	---	---	---	Moderate	Low	Moderate
423C2:								
Meridian	---	>80	---	---	---	Moderate	Low	Moderate
428A:								
Shiffer	---	>80	---	---	---	Moderate	Moderate	Moderate
429A:								
Lows, undrained	---	>80	---	---	---	High	High	Moderate
432A:								
Kevilar	---	>80	---	---	---	Moderate	Moderate	Moderate
432B:								
Kevilar	---	>80	---	---	---	Moderate	Moderate	Moderate
432C2:								
Kevilar	---	>80	---	---	---	Moderate	Moderate	Moderate
432D2:								
Kevilar	---	>80	---	---	---	Moderate	Moderate	Moderate
433A:								
Forkhorn	---	>80	---	---	---	Moderate	Low	Moderate
433B:								
Forkhorn	---	>80	---	---	---	Moderate	Low	Moderate
433C2:								
Forkhorn	---	>80	---	---	---	Moderate	Low	Moderate
433D2:								
Forkhorn	---	>80	---	---	---	Moderate	Low	Moderate
434B:								
Bilson	---	>80	---	---	---	Moderate	Low	Moderate
436A:								
Rusktown	---	>80	---	---	---	Moderate	Low	Moderate
438A:								
Hoopeston	---	>80	---	---	---	Moderate	Moderate	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
453A:								
Burkhardt	---	>80	---	---	---	Low	Low	Moderate
453B:								
Burkhardt	---	>80	---	---	---	Low	Low	Moderate
454B:								
Chetek, kame terrace	---	>80	---	---	---	Low	Low	Moderate
454C2:								
Chetek, kame terrace	---	>80	---	---	---	Low	Low	Moderate
454D2:								
Chetek, kame terrace	---	>80	---	---	---	Low	Low	Moderate
454E:								
Chetek, kame terrace	---	>80	---	---	---	Low	Low	Moderate
468A:								
Oesterle, valley train	---	>80	---	---	---	Moderate	Low	Moderate
501A:								
Finchford	---	>80	---	---	---	Low	Low	Moderate
501B:								
Finchford	---	>80	---	---	---	Low	Low	Moderate
502B2:								
Chelsea	---	>80	---	---	---	Low	Low	Moderate
502C2:								
Chelsea	---	>80	---	---	---	Low	Low	Moderate
506A:								
Komro	---	>80	---	---	---	Low	Low	Moderate
508A:								
Farrington	---	>80	---	---	---	Low	Low	Moderate
510B:								
Boplain	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In		In	In			
510C:								
Boplain	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	Moderate
511A:								
Plainfield	---	>80	---	---	---	Low	Low	Moderate
511B:								
Plainfield	---	>80	---	---	---	Low	Low	Moderate
511C:								
Plainfield	---	>80	---	---	---	Low	Low	Moderate
511F:								
Plainfield	---	>80	---	---	---	Low	Low	Moderate
512B:								
Drammen	---	>80	---	---	---	Low	Low	Moderate
512C:								
Drammen	---	>80	---	---	---	Low	Low	Moderate
512D:								
Drammen	---	>80	---	---	---	Low	Low	Moderate
516A:								
Aldo	---	>80	---	---	---	Low	Low	Moderate
546A:								
Prissel	---	>80	---	---	---	Low	Moderate	Moderate
546B:								
Prissel	---	>80	---	---	---	Low	Moderate	Moderate
546C:								
Prissel	---	>80	---	---	---	Low	Moderate	Moderate
546F:								
Prissel	---	>80	---	---	---	Low	Moderate	Moderate
555A:								
Fordum, frequently flooded	---	>80	---	---	---	High	High	Low

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
561B:								
Tarr	---	>80	---	---	---	Low	Low	High
566A:								
Tint	---	>80	---	---	---	Low	Low	High
573B:								
Plainbo, sand sheet	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	High
573C:								
Plainbo, sand sheet	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	High
588A:								
Meehan, valley train	---	>80	---	---	---	Low	Low	High
589A:								
Newson, undrained	---	>80	---	---	---	Moderate	High	High
601C:								
Beavercreek	---	>80	---	---	---	Moderate	Low	Low
616B:								
Chaseburg	---	>80	---	---	---	High	Moderate	Moderate
619A:								
Vancecreek, undrained	---	>80	---	---	---	High	High	Moderate
626A:								
Arenzville	---	>80	---	---	---	High	Moderate	Low
628A:								
Orion	---	>80	---	---	---	High	High	Low
629A:								
Ettrick, undrained	---	>80	---	---	---	High	High	Low
636A:								
Quarderer	---	>80	---	---	---	High	Moderate	Moderate
646A:								
Dunnbot	---	>80	---	---	---	Moderate	Moderate	Low

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
656A:								
Scotah	---	>80	---	---	---	Low	Low	Low
766A:								
Moppet, occasionally flooded	---	>80	---	---	---	Moderate	Moderate	Moderate
804B2:								
Arland, dissected	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Moderate	Moderate
804C2:								
Arland, dissected	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Moderate	Moderate
804D:								
Arland, dissected	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Moderate	Moderate
814D2:								
Renova, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
816B2:								
Vlasaty, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
816C2:								
Vlasaty, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
826B2:								
Hersey	---	>80	---	---	---	High	Moderate	Moderate
826C2:								
Hersey	---	>80	---	---	---	High	Moderate	Moderate
828B:								
Vasa	---	>80	---	---	---	High	High	Low
836B2:								
Spencer, dissected	---	>80	---	---	---	High	Moderate	Moderate
836C2:								
Spencer, dissected	---	>80	---	---	---	High	Moderate	Moderate

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In		In	In			
838B:								
Almena, dissected	---	>80	---	---	---	High	Moderate	Moderate
870B2:								
Santiago, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
870C2:								
Santiago, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
875B:								
Amery, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
875C2:								
Amery, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
875D:								
Amery, dissected	---	>80	---	---	---	Moderate	Moderate	Moderate
1125F:								
Dorerton	Bedrock (lithic)	45-70	Indurated	---	---	Moderate	Low	Moderate
Elbaville	Bedrock (lithic)	60-80	Indurated	---	---	Moderate	Moderate	Moderate
1145F:								
Gaphill	Bedrock (paralithic)	40-80	Weakly cemented	---	---	Moderate	Low	Moderate
Rockbluff	Bedrock (paralithic)	40-80	Weakly cemented	---	---	Low	Low	Moderate
1224F:								
Boone	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	Moderate
Elevasil	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
1233F:								
Boone	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	Moderate
Tarr	---	>80	---	---	---	Low	Low	High

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In		In	In			
1275F:								
Hayriver	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Moderate	Low	Moderate
Twinmound	Bedrock (paralithic)	20-40	Weakly cemented	---	---	Low	Low	High
1648A:								
Northbend	---	>80	---	---	---	Moderate	Moderate	Moderate
Ettrick, flood plain, undrained	---	>80	---	---	---	High	High	Low
1658A:								
Algansee	---	>80	---	---	---	Low	Low	Low
Kalmarville, undrained	---	>80	---	---	---	High	High	Low
2002. Udorthents, earthen dams								
2003A. Riverwash								
2013. Pits, gravel								
2014. Pits, quarry, hard bedrock								
2016. Pits, quarry, soft bedrock								
2030:								
Udorthents, cut or fill								
Udipsamments, cut or fill.								
2050. Landfill								

Table 30.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In		In	In			
M-W. Miscellaneous water								
W. Water								

References

American Association of State Highway and Transportation Officials (AASHTO). 2000. Standard specifications for transportation materials and methods of sampling and testing. 20th edition, 2 volumes.

American Society for Testing and Materials (ASTM). 2001. Standard classification of soils for engineering purposes. ASTM Standard D 2487–00.

Attig, John W. 1993. Pleistocene geology of Taylor County, Wisconsin. Wisconsin Geological and Natural History Survey Bulletin 90.

Attig, J.W., L. Clayton, and D.M. Mickelson. 1988. Pleistocene stratigraphic units of Wisconsin 1984–1987. Wisconsin Geological and Natural History Survey Information Circular 62.

Austin, G.S. 1972. Summation of the lithic environment during the deposition of Paleozoic seas. *In* Geology of Minnesota: A centennial volume. Minnesota Geological Survey, pages 471 and 472.

Baker, R.W., J.F. Diehl, T.W. Simpson, S. Beske-Diehl, and L.W. Zelazny. 1983. Pre-Wisconsinan glacial stratigraphy, chronology, and paleomagnetics of west-central Wisconsin. Geological Society of America Bulletin 94: 1442–1449.

Baker, R.W., J.C. Knox, R.S. Lively, and B.M. Olson. 1997. Evidence for entrenchment of the upper Mississippi Valley by early Pleistocene time. Minnesota Geological Survey.

Bement, P.J., and K.M. Syverson. 1995. Evidence for a pre-late Wisconsin ice-margin position in the northern “driftless area,” Eau Claire County, Wisconsin. Geological Society of America Abstracts with Programs (North-Central Section), volume 27, number 3.

Bettis, E.A. III, R.G. Baker, W.R. Green, M.K. Whelan, and D.W. Benn. 1992. Late Wisconsinan and Holocene alluvial stratigraphy, paleoecology, and archaeological geology of east-central Iowa. Iowa Department of Natural Resources, Guidebook Series 12, pages 33–35.

Borchart, J.R. 1950. The climate of the central North American grassland. Annals of the Association of American Geographers 67(3): 323–342.

Clayton, L., J.W. Attig, D.M. Mickelson, and M.D. Johnson. 1991. Glaciation of Wisconsin. Wisconsin Geological and Natural History Survey, Educational Series 36.

Johnson, M.D. 1986. Pleistocene geology of Barron County, Wisconsin. Wisconsin Geological and Natural History Survey Information Circular 55.

Kotar, John, and T.L. Burger. 1996. A guide to forest communities and habitat types of central and southern Wisconsin. Department of Forestry, University of Wisconsin-Madison.

Kotar, John, J.A. Kovach, and T.L. Burger. 2002. A guide to forest communities and habitat types of northern Wisconsin. Department of Forest Ecology and Management, University of Wisconsin-Madison.

Leigh, David S., and James C. Knox. 1994. Loess of the upper Mississippi Valley driftless area. Quaternary Research 42, pages 30–40.

Packard, Stephen, and Cornelia F. Mutel. 1997. The tallgrass restoration handbook for prairies, savannas, and woodlands.

Ruhe, Robert V. 1969. Quaternary landscapes in Iowa.

Ruhe, Robert V. 1975. Geomorphology.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1998. Keys to soil taxonomy. 8th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

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

United States Department of Agriculture. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

United States Department of Agriculture. 1975. Soil survey of Dunn County, Wisconsin.

United States Department of Agriculture. 1981. Land resource regions and major land resource areas of the United States. U.S. Department of Agriculture Handbook 296.

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

Glossary

Ablation till. Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction in which a slope faces.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal 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).

Beach deposits. Material, such as sand and gravel, that is generally laid down parallel to an active or relict shoreline of a postglacial or glacial lake.

Beach ridge. A low, essentially continuous mound of beach or beach-and-dune material accumulated by the action of waves and currents on the backshore of a beach, beyond the present limit of storm waves or the reach of ordinary tides, and occurring singly or as one of a series of approximately parallel deposits. The ridges are roughly parallel to the shoreline and represent successive positions of an advancing shoreline.

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

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.

Blowout. A shallow depression from which all or most of the soil material has been removed by the wind.

A blowout has a flat or irregular floor formed by a resistant layer or by an accumulation of pebbles or cobbles. In some blowouts the water table is exposed.

Blowout (map symbol). A small saucer-, cup-, or trough-shaped hollow or depression formed by wind erosion on a preexisting sand deposit. The areas are typically less than 3 acres in size.

Board foot. A unit of measurement represented by a board 1 foot wide, 1 foot long, and 1 inch thick.

Bog. Waterlogged, spongy ground, consisting primarily of mosses, containing acidic, decaying vegetation, such as sphagnum, sedges, and heaths, that develops into peat.

Borrow pit (map symbol). An open excavation from which soil and underlying material have been removed, usually for construction purposes. The areas are typically less than 3 acres in size.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. 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.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the “Soil Survey Manual.”

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coprogenous earth (sedimentary peat). Fecal material deposited in water by aquatic organisms.

Cord. A unit of measurement of stacked wood. A standard cord occupies 128 cubic feet with dimensions of 4 feet by 4 feet by 8 feet.

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.

Cradle-knoll. A small mound made up of soil material that temporarily clung to the roots when a tree was uprooted.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cut or fill (map symbol). An area where the original soil profile has been altered by the addition or removal of more than about a foot of soil material. The area is typically less than 3 acres in size.

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.

Depression. Any relatively sunken part of the earth’s surface; especially a low-lying area surrounded by higher ground. A closed depression has no natural outlet for surface drainage. An open depression has a natural outlet for surface drainage.

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.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Disintegration moraine. A drift topography characterized by chaotic mounds and pits, generally randomly oriented, developed in supraglacial drift by collapse and flow as the underlying stagnant ice melted. Slopes may be steep and unstable. Abrupt changes between materials of differing lithology are common.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A relatively small, linear depression that, at some time, moves concentrated water and either does not have a defined channel or has only a small defined channel.

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.

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.

End moraine. A ridgelike accumulation that is being or was produced at the outer margin of an actively flowing glacier at any given time.

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 deposits. 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.

Escarpment, bedrock (map symbol). A relatively continuous and steep slope or cliff, produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.

Escarpment, other than bedrock (map symbol). A relatively continuous and steep slope or cliff that is generally produced by erosion but can be produced by faulting and that breaks the general continuity of more gently sloping land surfaces. Exposed nonbedrock material is nonsoil or is very shallow, poorly developed soil.

Esker. A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

Fan terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of 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*.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. 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.

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 habitat type. An association of dominant tree and ground flora species in a climax community.

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.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

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.

Geomorphology. The science that treats the general configuration of the earth's surface; specifically the study of the classification, description, nature, origin, and development of landforms and their relationships to underlying structures, and the history of geologic changes as recorded by these surface features. The term is especially applied to the genetic interpretation of landforms.

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.

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.

Gravel pit (map symbol). An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically less than 3 acres in size.

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.

Gravelly spot (map symbol). An area of soil in which the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter. The area is typically less than 3 acres in size.

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 (map symbol). A very small channel with steep sides cut by running water and through which water ordinarily runs only after a rain or an ice or snow melt. Generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope. 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.

Herbaceous peat. An accumulation of organic material, decomposed to some degree, that is predominantly the remains of sedges, reeds, cattails, and other herbaceous plants.

High-chroma zones. Zones having chroma of 3 or more. Typical color in areas of iron concentrations.

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.

Ice-walled lake plain. A relict surface marking the floor of an extinct lake basin that was formed on solid ground and surrounded by stagnant ice in a stable or unstable superglacial environment on stagnation moraines. As the ice melted, the lake plain became perched above the adjacent landscape. The lake plain is well sorted, generally fine textured, stratified deposits.

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 concentrations. High-chroma zones having a high content of iron and manganese oxide because of chemical oxidation and accumulation but having a clay content similar to that of the adjacent matrix. A type of redoximorphic concentration.

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.

Island (map symbol). A small area of soil within a body of water and above the normal water level. The island is a relatively permanent feature. The areas are typically less than 3 acres in size.

Kame. An irregular, short ridge or hill of stratified glacial drift.

Kame moraine. An end moraine that contains numerous kames. A group of kames along the front of a stagnant glacier, commonly comprising the slumped remnants of a formerly continuous outwash plain built up over the foot of rapidly wasting or stagnant ice.

Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake bed. The bottom of a lake; a lake basin.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Lakeshore. A narrow strip of land in contact with or bordering a lake; especially the beach of a lake.

Landfill (map symbol). An area of accumulated waste products of human habitation. Can be above or below natural ground level. The area is typically less than 3 acres in size.

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.

Levee (map symbol). An embankment built to confine or control water, especially one built along the banks of a river to prevent overflow onto lowlands.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Fine grained material, dominantly of silt-sized particles, deposited by wind.

Low strength. The soil is not strong enough to support loads.

Low-chroma zones. Zones having chroma of 2 or less. Typical color in areas of iron depletions.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

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.

Mine or quarry (map symbol). An open excavation from which soil and underlying material have been removed and in which the bedrock is exposed. Also used to denote surface openings to underground mines. The areas are typically less than 3 acres in size.

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).

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mucky peat. Unconsolidated soil material consisting primarily of organic matter that is in an intermediate stage of decomposition such that a significant part of the material can be recognized and a significant part of the material cannot be recognized.

Mudstone. Sedimentary rock formed by induration of silt and clay in approximately equal amounts.

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.

Perennial water (map symbol). A small natural or manmade lake, pond, or pit that contains water most of the year. The areas are typically less than 3 acres in size.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitted outwash plain. An outwash plain marked by many irregular depressions, such as kettles, shallow pits, and potholes, which formed by melting of incorporated ice masses. Common in Wisconsin and Minnesota.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau. An extensive upland mass with relatively flat summit area that is considerably elevated (more than 100 meters) above adjacent lowlands and separated from them on one or more sides by escarpments.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Poletimber. Hardwood trees ranging from 5 to 11 inches and conifers ranging from 5 to 9 inches in diameter at breast height.

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.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

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.

Rise. A slight increase in elevation of the land surface, typically with a broad summit and gently sloping sides.

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.

Rock outcrop (map symbol). An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock. The areas are typically less than 3 acres in size.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy spot (map symbol). An area of soil in which the surface layer contains more than 75 percent sand and where the named soils of the surrounding map unit have less than about 25 percent sand. The area is typically less than 3 acres in size.

Sapling. A tree ranging from 1 to 5 inches in diameter at breast height.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturated hydraulic conductivity (K_{sat}). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sawtimber. Hardwood trees more than 11 inches and conifers more than 9 inches in diameter at breast height.

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.

Seedling. A tree less than 1 inch in diameter at breast height.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

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.

Short, steep slope (map symbol). A narrow area that has slopes at least two slope classes steeper than the slope class of the surrounding map unit. The area is typically less than 3 acres in size.

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.

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.

Sinkhole. A depression in the landscape where limestone has been dissolved.

Sinkhole (map symbol). A closed depression formed either by solution of the surficial rock or by collapse of underlying caves. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography. The areas are typically less than 3 acres in size.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Slope (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

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.

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Spoil area (map symbol). Piles of earthy materials, either smoothed or uneven, resulting from human activity. The areas are typically less than 3 acres in size.

Stagnation moraine. A body of drift released by the melting of a glacier that ceased flowing. Commonly, but not always, occurs near ice margins; composed of till, ice-contact stratified drift, and small areas of glacial lake sediment. Typical landforms are knob-and-kettle topography, locally including ice-walled lake plains.

Stone line. A concentration of rock 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 grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsidence. The potential decrease in surface elevation as a result of the drainage of wet soils that have organic layers or semi-fluid, mineral layers. Subsidence, as a result of drainage, is attributed to (1) shrinkage from drying, (2) consolidation because of the loss of ground-water buoyancy, (3) compaction from tillage or manipulation, (4) wind erosion, (5) burning, or (6) biochemical oxidation.

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.

Swale. A slight depression in the midst of generally level land. A shallow depression in an undulating ground moraine resulting from uneven glacial deposition.

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. Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

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.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Very stony spot (map symbol). An area in which more than 3 percent of the surface is covered with rock fragments larger than 10 inches in diameter. The area is typically less than 3 acres in size.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical 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.

Wet spot (map symbol). An area of somewhat poorly drained to very poorly drained soils at least two drainage classes wetter than the named soils in the surrounding map unit. The area is typically less than 3 acres in size.

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.

Woody peat. An accumulation of organic material that is predominantly composed of trees, shrubs, and other woody plants.

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Welcome to eFOTG

What is eFOTG?

Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources.

Technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared. These documents are referred to as Field Office Technical Guides (FOTGs).

Appropriate parts of the Field Office Technical Guides are automated as data bases, computer programs, and other electronic-based materials such as those included in these web based pages.

- Electronic Access to Field Office Technical Guides
- Conservation Standards and Specifications
- Conservation Resources

What is in eFOTG?

Section I - General References
In this section you will find general state maps, descriptions of Major Land Resource Areas, watershed information, and links to NRCS reference manuals and handbooks. Section I contains links to researchers, universities, and agencies we work. Section I also contains conservation practice costs, agricultural laws and regulations, cultural resources, and information about protected plant and animal species.

Section II - Soil and Site Information
In this section you will find detailed information about soil, water, air, plant, and animal resources. NRCS Soil Surveys, Hydric Soils Interpretations, Ecological Site Descriptions, Forage Suitability Groups, Cropland Production Tables, Wildlife Habitat Evaluation Guides,

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Water Quality Guides, and other related information can be found here as it becomes available.

Section III - Conservation Management Systems
In this section you will find information on NRCS Quality Criteria, which establish standards for resource conditions that help provide sustained use.

Section IV - Practice Standards and Specifications
In this section you will find the NRCS Conservation Practices. Practice Standards define the practice and where it applies. Practice specifications are detailed requirements for installing the practice in the state.

Section V - Conservation Effects
In this section you will find background information on how Conservation Practices affect each identified resource concerns in the state.

United States Department of Agriculture
NRCS Natural Resources Conservation Service
Soil Data Mart

Prior to the Soil Data Mart, the primary source of on-line soil data was the National SSURGO Website. The Soil Data Mart supersedes the National SSURGO Website, but this transition will be ongoing for most of 2004. During this period of transition, data for a particular survey area may reside at either site, but never at both sites simultaneously. If you can't find the survey area of concern in the Soil Data Mart, please check the National SSURGO Website.

Welcome to the Soil Data Mart! The Soil Data Mart allows you to:

- Determine where soil tabular and spatial data is available.
- Download data for one soil survey area at a time.
- Download a template Microsoft Access® database for working with downloaded data.
- Generate a variety of reports for one soil survey area at a time.
- Find out who to contact for information about soil data for a particular state.
- "Subscribe" or "unsubscribe" to a soil survey area. A person who is subscribed will automatically be notified whenever data for that soil survey area is updated. You must register and login before doing this.

Select from the list of options across the top of the page. To get downloads or reports, begin by selecting a state or territory.

Select State

The Soil Data Mart may be unavailable on Tuesdays from 5 to 7 p.m. Mountain time due to maintenance activities.

The Soil Data Mart has been tested under Microsoft Internet Explorer® 5.0 and later, and under Netscape Navigator® 4.7 and later for Microsoft Windows®. There are differences in site navigation and mechanics under different versions of these two browsers. Some differences are more significant than others. There are some major differences under Netscape Navigator® 4.7 and 4.8. For details on site navigation and mechanics under different Microsoft Internet Explorer® and Netscape Navigator® browser versions, please see Navigating and Using the Soil Data Mart on the Soil Data Mart Help page.

The Soil Data Mart also provides two methods that allow it to be used by other applications, web site integration and a web service to access raw data from the Soil Data Mart database. Get detailed information.

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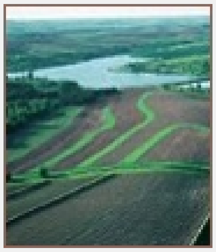
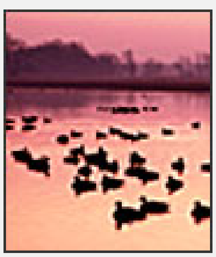


Conservation Cost-Share Program Underway - Wisconsin Allotted $15 Million

NRCS announced that nearly $15 million will be available through Environmental Quality Incentives Program this year to help farmers apply needed conservation practices on agricultural land in Wisconsin. The statewide signup period for manure storage ends May 28, 2004. Signup dates for other practices are scheduled by each county. Check with your local USDA Service Center for sign-up dates and eligible practices.

...More Info
...Read the News Release



Wildlife Habitat Program Sign-up Ends May 28th

The Wisconsin sign-up period for the Wildlife Habitat Incentives Program (WHIP) ends May 28, 2004. The state received $510,000 in federal funds this year to help landowners restore wildlife habitat.

...More Info About WHIP
...Read the News Release

NRCS People in the News

When Chanc Vogel was hired in 1998 as a soil scientist with the agency's Soil Survey Office in Richland Center, Wis., he had to find a way to learn and then use NRCS terms through sign language, since he is hearing impaired.

Information About:

- Soils
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- Air
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- Animals

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Patricia Leavenworth · State Conservationist

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

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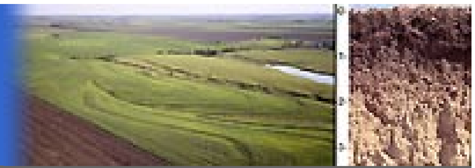
Soils



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Welcome to the NRCS **Soils** web site. **"Helping People Understand Soils"**

Soils is part of the National Cooperative Soil Survey, an effort of Federal and State agencies, universities, and professional societies to deliver scientifically based soil information.

Jan Lang Painting

The Living Soil

Soil and Water Stewardship Week sponsored by the National Association of Conservation Districts (NACD) is April 25 to May 2. This year the focus topic is "The Living Soil". The image used on the cover of materials is a painting with soils by Jan Lang of the National Soil Survey Center Laboratory. Several products are available from NACD that promote the stewardship of our soil resource.

...More Info

The different functions of soils

Ten Key Messages to Help People Understand Soils

Key messages to understanding soils have been added to the soil education site and to an educational CD entitled "Helping People Understand Soils-Tools for Educators, Version 2". The educational CD was released at the National Science Teachers Association conference in Atlanta, Georgia the first week of April 2004 by NRCS, USDA. The CD is available on request.

Information For:

- Geographers
- Soil Scientists
- Land Use Managers
- Teachers and Students

Soils In The News

- Proposed land plan causes concern
- Wetland Area Investigated
- Major cracks in new hospital due to soils
- Delaware students compete in Envirothon
- Soil based zoning enters discussion in town development plan
- Builder plans more units - residents claim soils not suited
- NRCS Begins Soil Survey in San Bernardino NF
- Students learn about real soil issues
- Signing soil terms

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A Soil Profile

A quick and inexpensive technique to make a mini-soil profile in now available. Check out this new technique on the soil education site. This technique provides the student with a learning experience that can be made in the classroom or in the field at a very low cost using a note card and double-sided carpet tape.

...More Info

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

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- International Taxonomy Committees
- Rationale for Concepts in Soil Taxonomy
- Soil Taxonomy Forum

Official Soil Series Descriptions (OSD)

This system will be down for maintenance from 9:00 AM to 5:00 PM on Sunday, May 16.

Introduction

OSD Fact Sheet

Data Base Access

- **View OSD by Series Name (with best-match feature)**
- **View OSDs by List of Series Names (with FTP option)**
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- **Soil Series Name Search**

Recommended Citation

When referencing the online Official Soil Series Description information in publications, the following citation is recommended:

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online WWW]. Available URL: "http://soils.usda.gov/soils/technical/classification/osd/index.html" [Accessed 10 February 2004].

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