United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with the Alaska Department of Natural Resources; Tanana Chiefs Conference, Inc.; Toghotthele Corp.; City of Nenana; Village of Nenana; Denali Borough; Fairbanks North Star Borough; U.S. Air Force; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station; and Fairbanks Soil and Water Conservation District

Soil Survey of Greater Nenana Area, Alaska

How To Use This Soil Survey

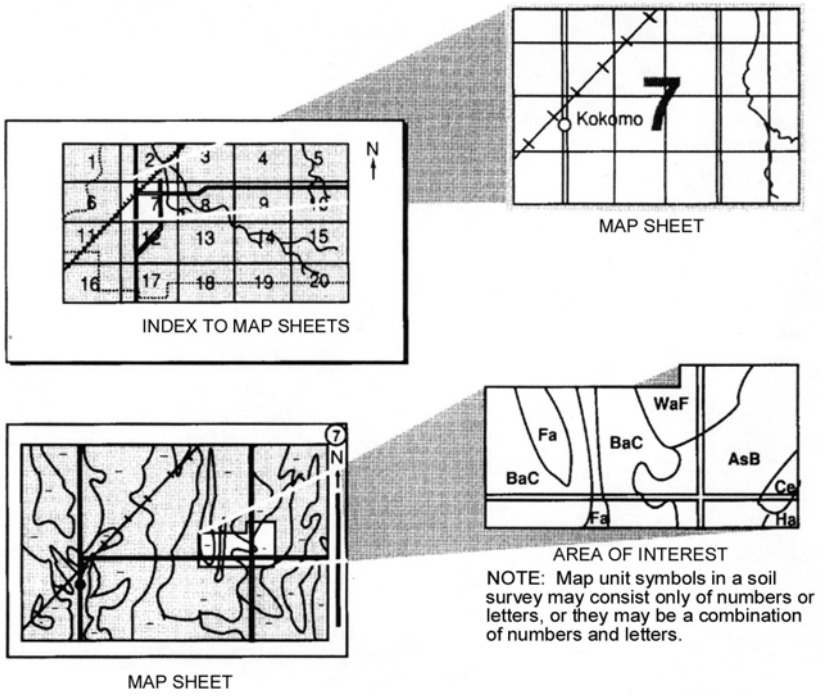
Detailed Soil Maps

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

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

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

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



This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural and Forestry Experiment Station, 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 2006. Soil names and descriptions were approved in 2007. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2006. This survey was made cooperatively by the Natural Resources Conservation Service and the Alaska Department of Natural Resources; Tanana Chiefs Conference, Inc.; Toghotthele Corp.; City of Nenana; Village of Nenana; Denali Borough; Fairbanks North Star Borough; U.S. Air Force; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station; and Fairbanks Soil and Water Conservation District. This survey is part of the technical assistance furnished through the Fairbanks Soil and Water Conservation District.

Cover: Interior Alaska Uplands in the foreground and interior Alaska lowlands, Minto flats, in the background.

Additional information about the nation’s natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is http://www.nrcs.usda.gov.

Contents

How To Use This Soil Survey iii
Contents v
Foreword ix
General Nature of the Survey Area 11
228—Interior Mountains 11
229—Interior Alaska Lowlands 11
231—Interior Alaska Highlands 12
Climate 12
How This Survey Was Made 12
Detailed Soil Map Units 15
28DY01—Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes 16
28HA01—Haplocryepts, 45 to 70 percent slopes 17
28HA02—Haplocryepts, 15 to 45 percent slopes 18
29BL01—Bolio peat 19
29CR01—Typic Cryorthents-Urban land complex 19
29DN01—Donnelly silt loam, 0 to 3 percent slopes 20
29DN02—Donnelly silt loam, 15 to 60 percent slopes 21
29DN04—Donnelly-Lupine complex 22
29DU01—Dumps, landfill 23
29EL01—Eielson-Piledriver complex, occasionally flooded 23
29EL02—Eielson-Tanana complex 24
29EL03—Eielson very fine sandy loam 26
29FA01—Faa silt loam, 3 to 30 percent slopes 26
29FU01—Fubar-Piledriver complex, occasionally flooded 27
29GE01—Gerstle-Moosehead complex 28
29GE03—Donnelly-Gerstle-Moosehead complex, 1 to 15 percent slopes 30
29HY01—Hydric Cryofibrists-Liscum complex 31
29LS01—Liscum-Terric Cryohemists-Bolio complex 32
29LU01—Lupine very fine sandy loam 34
29MS01—Mosquito peat 35
29NE01—Nenana silt loam, 0 to 3 percent slopes 36
29NE02—Nenana-Sawmill Creek complex 36
29NN01—Noonku very fine sandy loam 38
29PE01—Peede silt loam, ponded 38
29PL01— Eielson-Piledriver complex 39
29PT01—Pits, gravel 40
29SA01—Sawmill Creek silt loam 41
29TA01—Tatlanika-Totatlanika complex 42
29TC01—Tanacross peat 43
29TE01—Typic Cryaquents, Liscum and Terric Cryohemists soils, flood plains 44
29TN01—Tanana silt loam 46
29TN02—Tanana-Mosquito complex 46

29TT01—Totatlanika-Tatlanika complex 48
29TY01—Typic Haplocryepts, sandy 50
29WI01—Windy Creek-Browne complex 50
31BR01—Brigadier-Ester complex, 15 to 45 percent slopes 53
31BR02—Brigadier-Ester complex, 45 to 70 percent slopes 54
31BR03—Brigadier-Manchu complex, 3 to 7 percent slopes 55
31BR04—Brigadier-Manchu complex, 7 to 12 percent slopes 57
31BR05—Brigadier-Manchu complex, 12 to 20 percent slopes 58
31BR06—Brigadier-Manchu complex, 20 to 30 percent slopes 59
31BR07—Brigadier-Manchu complex, 30 to 45 percent slopes 61
31CH01—Chatanika silt loam, 0 to 3 percent slopes 62
31CH02—Chatanika silt loam, 3 to 7 percent slopes 63
31CH03—Chatanika silt loam, 7 to 12 percent slopes 64
31CH04—Chatanika-Goldstream complex, 0 to 5 percent slopes 64
31DU01—Dumps, mine tailings 66
31ES01—Ester peat, 20 to 45 percent slopes 66
31ES02—Ester peat, 45 to 70 percent slopes 67
31FA01—Fairbanks silt loam, 3 to 7 percent slopes 67
31FA02—Fairbanks silt loam, 7 to 12 percent slopes 68
31FA03—Fairbanks silt loam, 12 to 20 percent slopes 69
31FA04—Fairbanks silt loam, 20 to 30 percent slopes 70
31FA05—Fairbanks silt loam, 30 to 45 percent slopes 70
31FA06—Fairbanks silt loam, 45 to 70 percent slopes 71
31FA07—Fairbanks silt loams, gullied, 7 to 70 percent slopes 72
31FA08—Fairbanks-Steese complex, 3 to 7 percent slopes 73
31FA09—Fairbanks-Steese complex, 7 to 12 percent slopes 74
31FA10—Fairbanks-Steese complex, 12 to 20 percent slopes 75
31FA11—Fairbanks-Steese complex, 20 to 30 percent slopes 76
31FA12—Fairbanks-Steese complex, 30 to 45 percent slopes 77
31GD01—Goldstream peat, 0 to 3 percent 79
31GD02—Goldstream peat, 3 to 7 percent slopes 79
31GD03—Goldstream-Histels complex 80
31GL01—Gilmore silt loam, 3 to 7 percent slopes 81
31GL02—Gilmore silt loam, 7 to 12 percent slopes 82
31GL03—Gilmore silt loam, 12 to 20 percent slopes 83
31GL04—Gilmore silt loam, 20 to 30 percent slopes 84
31GL05—Gilmore silt loam, 30 to 45 percent slopes 84
31GL06—Gilmore silt loam, 45 to 70 percent slopes 85
31HA01—Happy silt loam, 1 to 7 percent slopes 86
31HI01—Histels 87
31MN01—Minto silt loam, 0 to 3 percent slopes 87
31MN02—Minto silt loam, 3 to 7 percent slopes 88
31MN03—Minto silt loam, 7 to 12 percent 89
31MN04—Minto silt loam, 12 to 20 percent slopes 90
31MN05—Minto-Chatanika complex, 0 to 3 percent slopes 90
31MN06—Minto-Chatanika complex, 3 to 7 percent slopes 92
31MN07—Minto-Chatanika complex, 7 to 12 percent slopes 93
31MN08—Minto-Chatanika complex, 12 to 20 percent slopes 94
31PT01—Pits, quarry 95
31RS01—Rosie silt loam, 15 to 90 percent slopes 95
31SA01—Saulich peat, 3 to 7 percent slopes 96
31SA02—Saulich peat, 7 to 12 percent slopes 97
31SA03—Saulich peat,12 to 20 percent slopes 98
31SA04—Saulich peat, 20 to 30 percent slopes 98

31SA05—Saulich-Minto complex, 3 to 7 percent slopes 99
31SA06—Saulich-Minto complex, 7 to 12 percent slopes 100
31SA07—Saulich-Minto complex, 12 to 20 percent slopes 101
31ST01—Steese silt loam, 3 to 7 percent slopes 103
31ST02—Steese silt loam, 7 to 12 percent slopes 103
31ST03—Steese silt loam, 12 to 20 percent slopes 104
31ST04—Steese silt loam, 20 to 30 percent slopes 105
31ST05—Steese silt loam, 30 to 45 percent slopes 106
31ST06—Steese silt loam, 45 to 70 percent slopes 106
31ST07—Steese-Gilmore complex, 7 to 12 percent slopes 107
31ST08—Steese-Gilmore complex, 12 to 20 percent slopes 108
31ST09—Steese-Gilmore complex, 20 to 30 percent slopes 110
31ST10—Steese-Gilmore complex, 30 to 45 percent slopes 111
31TE01— Typic Cryaquents, Histic Cryaquepts and Terric Cryofibrists soils, hills 112
31TG01—Toghotthele silt loam, 20 to 90 percent slopes 114
W—Water 114
Soil Properties 115
Engineering Index Properties 115
Physical Properties 116
Chemical Properties 118
Physical and Chemical Analyses of Selected Soils 119
Water Features 119
Soil Features 121
Use and Management of the Soils 123
Interpretive Ratings 123
Recreation 124
Engineering 125
Building Site Development 126
Sanitary Facilities 127
Hydric Soils 128
Classification of the Soils 131
Taxonomic Units and Their Morphology 132
MLRA 228 132
Dystrogelepts 132
Gelorthents 134
Haplocryepts 136
Turbels 137
MLRA 229 141
Histic Cryaquepts 141
Hydric Cryofibrists 142
Terric Cryohemists 143
Typic Cryorthents 145
Typic Haplocryepts 147
Formation of the Soils 149
Parent Material 149
Climate 150
Vegetation 151
Topography and Relief 152
Landforms 152
Floodplains 152
Hills 152
Upland Valleys 153
Fans 153

Mountains 153
Time 153
References 155
Glossary 157
Tables 169
Table 1. Temperature data at Nenana, Alaska 170
Table 2. Precipitation data at Nenana, Alaska 171
Table 3. Freeze Thaw Dates 172
Table 4. Growing Degree Days 173
Table 5. Acreage and Proportionate Extent of the Soils 174
Table 6. Engineering Index Properties 176
Table 7. Soil Texture and Particle Size Data 195
Table 8. Physical Properties of the Soils 216
Table 9. Chemical Properties of the Soils 232
Table 10. Water Features 248
Table 11. Soil Features 265
Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails 273
Table 13. Building Site Development: Structures 296
Table 14. Sanitary Facilities: Sewage Treatment and Landfill 312
Table 15. Hydric Soils List 333
Table 16. Classification of the Soils 355
NRCS Accessibility Statement 356

Issued: 2007

Foreword

This soil survey contains information that can be used in land-planning programs in the Greater Nenana Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, 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, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Government agencies, community officials, Alaska Native tribes, 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 or to permafrost. Some are too unstable to be used as a foundation for buildings or roads. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

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

Robert N. Jones, State Conservationist
Natural Resources Conservation Service

x

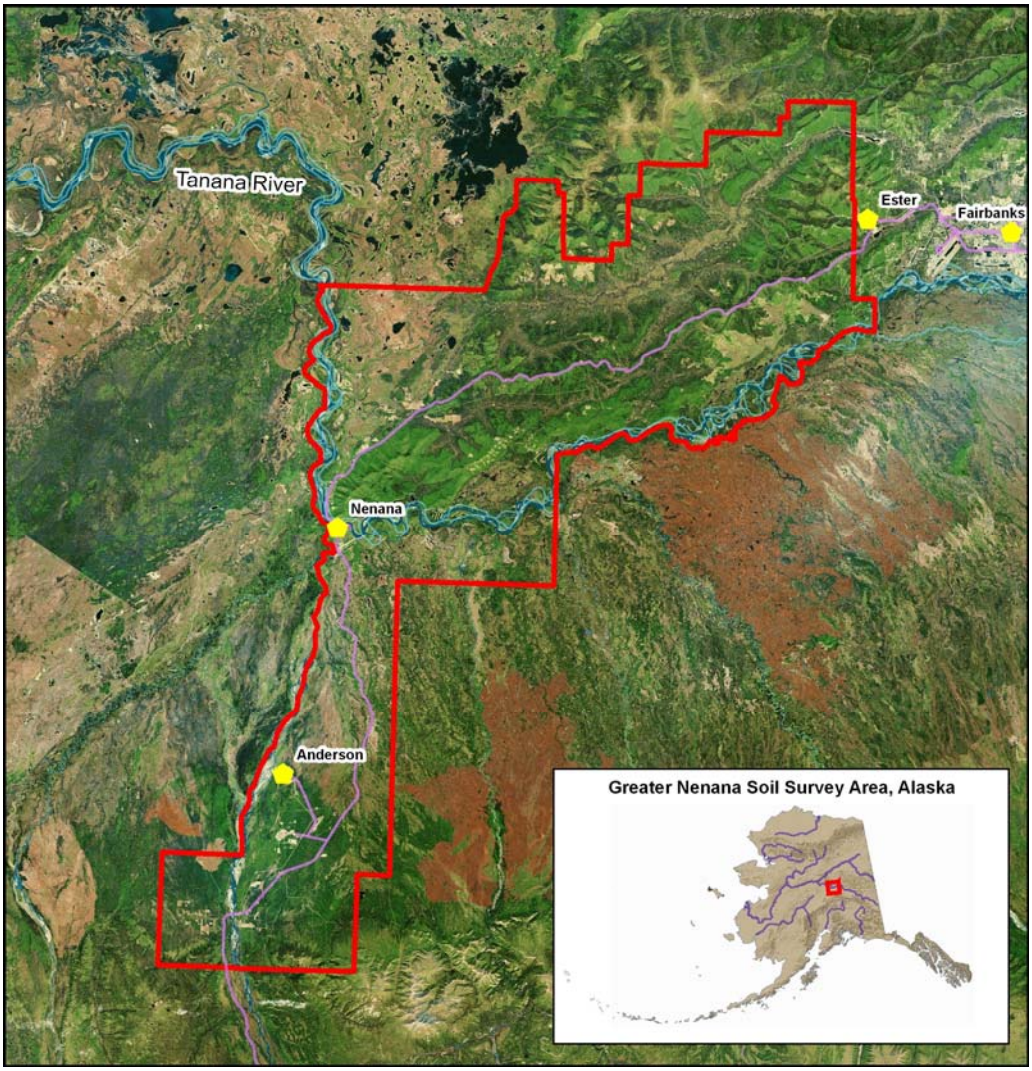


Figure 1. Location of the Greater Nenana soil survey area in Alaska.

Soil Survey of
Greater Nenana Area, Alaska

By Dennis Mulligan, Natural Resources Conservation Service

Fieldwork by Casey Schroeder, Joel Sankey, Cory Cole, Stephanie Schmit, Charles Moore, Jenny Magyar, Jon Kell, Mary Philbrick, Paul Reindfleisch, Rebecca Hofmann, Ryan Saunders, Shannon Johnson, Suzy Park, and Jonathan Bakken, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service
In cooperation with the Alaska Department of Natural; Tanana Chiefs Conference, Inc.; Toghotthele Corp.; City of Nenana; Village of Nenana; Denali Borough; Fairbanks North Star Borough; U.S. Air Force; University of Alaska Fairbanks, Agricultural and Forestry Experiment Station; and Fairbanks Soil and Water Conservation District

General Nature of the Survey Area

The Greater Nenana Area is in the interior of Alaska (fig. 1). The survey area is approximately 491,715 acres (198,990 h) in size.

This survey area is west and southwest of Fairbanks, Alaska and is bisected by the Parks Highway and the Alaska Railroad.

The Greater Nenana Area lies within three Major Land Resource Areas: 228—Interior Mountains, 229—Interior Alaska Lowlands, and 231—Interior Alaska Highlands.

228—Interior Mountains

The Interior Mountains portion of the survey area includes the foot hills of the Alaska Range and is underlain by Nenana gravels and Totatlanika schist blanketed by varying thicknesses of loess and loamy outwash. This area is characterized by low mountains, fans, and terraces. These are dissected in areas by streams forming steep-walled valleys. Elevations range from 1,000 to 2,540 feet (305 to 775 m).

229—Interior Alaska Lowlands

The Interior Alaska Lowlands portion of the survey area includes the broad, level flood plain that borders the Tanana and Nenana rivers and an expansive alluvial fan

originating at the Interior Mountains, sloping north and terminating at the active floodplains of the Tanana and Nenana rivers. Riverine features dominate the floodplain landscape and include meandering streams, sloughs, natural levees, and oxbow lakes. The lower portion of the fan is a broad nearly level plain marked by remnant channels and natural levees. It is drained by several small rivers and creeks that all flow generally to the north. The upper portion is a broad fan-shaped deposit of gravel blanketed with finer sands and silts that vary in thickness from just a few inches to more than 6 feet (1.8 m). Elevations range from 330 to 1,760 feet (101 to 536 m).

231—Interior Alaska Highlands

The Interior Alaska Highlands portion of the survey area consists mostly of dissected hills and low mountains interrupted by flat-bottomed valleys.

Usually, gently sloping alluvial fans lie between the Interior Alaska Highlands hills and the Interior Alaska Lowlands flood plain, but in many places the transition between the level flood plain and steep hills is abrupt.

Elevations in the Interior Alaska Highlands range from about 330 to 2,920 feet (101 to 890 m). Geologic materials consist of weathered bedrock covered with windblown silt (loess). The most common bedrock in the area is highly deformed Paleozoic and Precambrian schist. The schist is highly weathered and fractured near the surface with local intrusions of igneous rocks that are mainly granite, quartz, diorite, and basalt. The loess is only about a foot or two thick (< 1 m) on most hilltops and upper slopes. The loess may be many feet thick on hills nearest the Tanana River and also on the lower slopes of hills elsewhere where it has eroded from the hillsides and accumulated on lower slopes and in narrow upland valleys. Permafrost is present on lower slopes, valley bottoms, and north-facing slopes. Large bodies of ground ice are present in the thick silty deposits on lower slopes and valley bottoms. Periglacial features such as pingos, thermokarst pits and mounds, ice wedge polygons, and beaded streams dominate these lower slopes and upland valleys.

Climate

Tables 1 and 2 give data on temperature and precipitation for the survey area as recorded at Nenana, Alaska for the period 1949 to 2001. Table 3 shows probable dates of the first freeze in fall and the last freeze in spring. Table 4 provides data on length of the growing season.

The Greater Nenana Area has a continental subarctic climate, with long, cold winters and short, warm summers. Summer (June, July, and August) temperatures average 58 F (15ºC) and winter (November through March) temperatures average –0.5ºF (-18ºC). Extreme summer temperatures may exceed 90ºF (32ºC) while winter temperatures may dip below -60ºF (-51ºC).

Growing degree days are shown in table 4. 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 of 40 degrees F (4 degrees C).

The average annual precipitation is 11 inches (30 cm), with July and August on average the wettest months and April the driest. Snow covers the ground continuously from October to late April or early May.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and

miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. To characterize and map the soils, soil scientists 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 soil scientists also observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of native plants; and the kinds of geologic materials.

Before beginning the fieldwork, relevant information on the climate, geology, geomorphology, hydrology, and vegetation of the survey area was assembled. Aerial photography of the survey area was acquired and prepared for field use and mapping. Aerial color photography taken in 1996 and 1998 at a scale of 1:25:000 was used for field mapping. Field work for the soil survey was conducted between 2002 and 2006.

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

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

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

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

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

Detailed Soil Map Units

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

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

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

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

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

Map units that consist of one major component are called *consociations*. 29TN01—Tanana silt loam is an example.

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

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. 29GE01—Gerstle-Moosehead complex is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. There are no associations used in this survey area.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. 29TE01—Typic Cryaquents, Liscum and Terric Cryohemists soils, flood plains 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. 31PT01—Pits, quarry is an example.

Table 5 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

28DY01—Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes

Elevation: 1,598 to 2,539 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 60 to 100 days

Dystrogelepts and similar soils

Extent: 50 to 65 percent of the map unit
Landform: mountains
Position on slope: summits, shoulders
Slope shape: convex, linear
Slope range: 15 to 30 percent
Parent material: outwash
Depth to paralithic bedrock: 30 to 72 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 5.4 inches
Vegetation: cottonsedge and low shrub tundra
Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high saturated hydraulic conductivity

A—2 to 4 inches; fine sandy loam, moderately high saturated hydraulic conductivity
Bw—4 to 8 inches; fine sandy loam, moderately high saturated hydraulic conductivity
BC—8 to 23 inches; gravelly sandy loam, high saturated hydraulic conductivity
C—23 to 72 inches; gravelly sandy loam, high saturated hydraulic conductivity

Gelorthents and similar soils

Extent: 25 to 50 percent of the map unit
Landform: mountains
Position on slope: shoulders, summits
Slope shape: convex, linear
Slope range: 10 to 30 percent
Parent material: outwash
Depth to paralithic bedrock: 30 to 72 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.1 inches
Representative Profile:
A—0 to 6 inches; very gravelly fine sandy loam, very high saturated hydraulic conductivity
C—6 to 72 inches; very gravelly fine sandy loam, very high saturated hydraulic conductivity

Minor Components

Rock outcrop: 0 to 5 percent of the map unit
Turbels and similar soils: 2 to 10 percent of the map unit

28HA01—Haplocryepts, 45 to 70 percent slopes

Elevation: 997 to 1,598 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Haplocryepts and similar soils

Extent: 70 to 85 percent of the map unit
Landform: mountains
Position on slope: backslopes, shoulders
Slope shape: linear, concave, convex
Slope range: 45 to 70 percent
Parent material: loess over outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 11.4 inches
Vegetation: paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oe—0 to 4 inches; moderately decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 31 inches; silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; very gravelly sandy loam, very high saturated hydraulic conductivity

Minor Components

Haplocryepts and similar soils: 5 to 15 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit
Turbels and similar soils: 5 to 15 percent of the map unit

28HA02—Haplocryepts, 15 to 45 percent slopes

Elevation: 997 to 1,598 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Haplocryepts and similar soils

Extent: 70 to 85 percent of the map unit
Landform: mountains
Position on slope: backslopes, shoulders
Slope shape: linear, concave, convex
Slope range: 15 to 45 percent
Parent material: loess over outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 11.4 inches
Vegetation: paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oe—0 to 4 inches; moderately decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 31 inches; silt loam, moderately high saturated hydraulic conductivity
2C—31 to 72 inches; very gravelly sandy loam, very high saturated hydraulic conductivity

Minor Components

Haplocryepts and similar soils: 5 to 15 percent of the map unit

Turbels and similar soils: 5 to 15 percent of the map unit

29BL01—Bolio peat

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Bolio and similar soils

Extent: 70 to 85 percent of the map unit
Landform: flood plains, terraces
Slope shape: concave, linear
Slope range: 0 to 1 percent
Parent material: herbaceous organic material
Depth to permafrost: 6 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 5 inches
Ponding: frequent
Available water capacity (approximate): 6.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oe—3 to 16 inches; mucky peat, moderately high saturated hydraulic conductivity
Oef—16 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Lemeta and similar soils: 5 to 15 percent of the map unit
Tanacross and similar soils: 0 to 10 percent of the map unit
Water: 0 to 5 percent of the map unit

29CR01—Typic Cryorthents-Urban land complex

Elevation: 328 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryorthents, fill, and similar soils

Extent: 30 to 60 percent of the map unit
Landform: terraces, flood plains
Slope shape: linear
Slope range: 1 to 2 percent

Parent material: mine spoil or earthy fill over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 10 inches
Vegetation: seeded or planted grasses, shrubs, or trees
Representative Profile:
C1—0 to 30 inches; stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam, moderately high saturated hydraulic conductivity
2C2—30 to 63 inches; stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
3C3—63 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Urban land

Extent: 30 to 60 percent of the map unit
Landform: urban land
Slope range: 0 to 2 percent

Minor Components

Donnelly and similar soils: 0 to 10 percent of the map unit
Eielson, rare flooding, and similar soils: 0 to 10 percent of the map unit
Fubar, rare flooding, and similar soils: 0 to 10 percent of the map unit
Gerstle and similar soils: 0 to 10 percent of the map unit
Jarvis and similar soils: 0 to 10 percent of the map unit
Moosehead and similar soils: 0 to 10 percent of the map unit
Nenana and similar soils: 0 to 10 percent of the map unit
Piledriver, rare flooding, and similar soils: 0 to 10 percent of the map unit
Salchaket and similar soils: 0 to 10 percent of the map unit
Sawmill Creek and similar soils: 0 to 10 percent of the map unit
Volkmar and similar soils: 0 to 10 percent of the map unit

29DN01—Donnelly silt loam, 0 to 3 percent slopes

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Donnelly and similar soils

Extent: 80 to 95 percent of the map unit
Landform: outwash plains, fans, plains, terraces
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over sandy and gravelly alluvium and/or sandy and gravelly outwash
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate

Runoff: negligible
Drainage class: somewhat excessively drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: open black spruce forest or birch scrub
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
Bw—2 to 6 inches; gravelly silt loam, moderately high saturated hydraulic conductivity
BC—6 to 12 inches; gravelly silt loam, high saturated hydraulic conductivity
2C—12 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Lupine and similar soils: 0 to 10 percent of the map unit
Nenana and similar soils: 0 to 10 percent of the map unit

29DN02—Donnelly silt loam, 15 to 60 percent slopes

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Donnelly and similar soils

Extent: 85 to 95 percent of the map unit
Landform: escarpments, fans, plains, terraces
Slope shape: linear
Slope range: 15 to 60 percent
Parent material: loess over sandy and gravelly alluvium and/or sandy and gravelly outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—moderate
Runoff: high
Drainage class: somewhat excessively drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: open black spruce forest or birch scrub
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
Bw—2 to 6 inches; gravelly silt loam, moderately high saturated hydraulic conductivity
BC—6 to 12 inches; gravelly silt loam, high saturated hydraulic conductivity
2C—12 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Lupine and similar soils: 0 to 8 percent of the map unit
Moosehead and similar soils: 0 to 7 percent of the map unit

29DN04—Donnelly-Lupine complex

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Donnelly and similar soils

Extent: 35 to 60 percent of the map unit
Landform: fans, outwash plains, plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over sandy and gravelly alluvium and/or sandy and gravelly outwash
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: negligible
Drainage class: somewhat excessively drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: open black spruce forest or birch scrub
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
Bw—2 to 6 inches; gravelly silt loam, moderately high saturated hydraulic conductivity
BC—6 to 12 inches; gravelly silt loam, high saturated hydraulic conductivity
2C—12 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Lupine and similar soils

Extent: 15 to 50 percent of the map unit
Landform: terraces, fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 5.9 inches

Representative Profile:
Oe—0 to 3 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 16 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
BC—16 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity
2C—20 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Nenana and similar soils: 3 to 12 percent of the map unit
Sawmill Creek and similar soils: 0 to 12 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit
Volkmar and similar soils: 0 to 7 percent of the map unit

29DU01—Dumps, landfill

Elevation: 397 to 1,968 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, landfill

Extent: 100 percent of the map unit
Landform: sanitary landfills

29EL01—Eielson-Piledriver complex, occasionally flooded

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 120 days

Eielson, occasional flooding, and similar soils

Extent: 50 to 70 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest

Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 49 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—49 to 71 inches; stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—71 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Piledriver, occasional flooding, and similar soils

Extent: 25 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Fubar, occasional flooding, and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Riverwash: 0 to 5 percent of the map unit

29EL02—Eielson-Tanana complex

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson, rare flooding, and similar soils

Extent: 30 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent

Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 49 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—49 to 71 inches; stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—71 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Tanana and similar soils

Extent: 20 to 50 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjgf—25 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 0 to 7 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Tanacross and similar soils: 0 to 7 percent of the map unit

29EL03—Eielson very fine sandy loam

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Eielson, rare flooding, and similar soils

Extent: 70 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 49 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—49 to 71 inches; stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—71 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Piledriver, rare flooding, and similar soils: 2 to 12 percent of the map unit
Liscum and similar soils: 0 to 7 percent of the map unit
Noonku and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit

29FA01—Faa silt loam, 3 to 30 percent slopes

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Faa and similar soils

Extent: 85 to 95 percent of the map unit
Landform: dunes on flood plains
Position on slope: shoulders, backslopes
Slope shape: linear
Slope range: 3 to 30 percent
Parent material: loess over eolian sands

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—12 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 11.1 inches
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
C—12 to 39 inches; fine sandy loam, moderately high saturated hydraulic conductivity
2C—39 to 72 inches; fine sand, high saturated hydraulic conductivity

Minor Components

Eielson, rare flooding, and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit

29FU01—Fubar-Piledriver complex, occasionally flooded

Elevation: 328 to 1,640 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 120 days

Fubar, occasional flooding, and similar soils

Extent: 40 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: moderately well drained
Flooding: occasional
Depth to high water table (approximate): April-Sept.—54 inches
Ponding: none
Available water capacity (approximate): 3.4 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 10 inches; stratified fine sand to silt loam, moderately high saturated hydraulic conductivity
2C2—10 to 72 inches; very gravelly coarse sand, high saturated hydraulic conductivity

Piledriver, occasional flooding, and similar soils

Extent: 40 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Eielson, occasional flooding, and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Riverwash: 0 to 5 percent of the map unit

29GE01—Gerstle-Moosehead complex

Elevation: 328 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gerstle and similar soils

Extent: 25 to 50 percent of the map unit
Landform: terraces, alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 8 inches

Vegetation: black and white spruce, paper birch, and aspen forest
Representative Profile:
O—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 10 inches; very fine sandy loam, high saturated hydraulic conductivity
Bw—10 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity
BC—20 to 30 inches; stratified loamy fine sand to silt loam, high saturated hydraulic conductivity
C—30 to 51 inches; stratified sand to fine sandy loam, high saturated hydraulic conductivity
2C—51 to 72 inches; sand, high saturated hydraulic conductivity

Moosehead and similar soils

Extent: 30 to 60 percent of the map unit
Landform: terraces, alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over sandy and silty alluvium over sandy and gravelly alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 5.6 inches
Vegetation: paper birch, spruce, and aspen forest
Representative Profile:
O—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 7 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—7 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity
BC—20 to 26 inches; stratified fine sandy loam to very fine sandy loam, high saturated hydraulic conductivity
2C—26 to 72 inches; gravelly sand, high saturated hydraulic conductivity

Minor Components

Lupine and similar soils: 0 to 7 percent of the map unit
Donnelly and similar soils: 0 to 7 percent of the map unit
Histic Cryaquepts and similar soils: 0 to 5 percent of the map unit
Sawmill Creek and similar soils: 0 to 5 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit
Volkmar and similar soils: 0 to 7 percent of the map unit

29GE03—Donnelly-Gerstle-Moosehead complex, 1 to 15 percent slopes

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Donnelly and similar soils

Extent: 20 to 40 percent of the map unit
Landform: outwash plains, fans, terraces, plains
Slope shape: linear
Slope range: 1 to 12 percent
Parent material: loess over sandy and gravelly alluvium and/or sandy and gravelly outwash
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: low
Drainage class: somewhat excessively drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.5 inches
Vegetation: open black spruce forest or birch scrub
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
Bw—2 to 6 inches; gravelly silt loam, moderately high saturated hydraulic conductivity
BC—6 to 12 inches; gravelly silt loam, high saturated hydraulic conductivity
2C—12 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Gerstle and similar soils

Extent: 20 to 40 percent of the map unit
Landform: terraces, alluvial fans
Slope shape: linear
Slope range: 5 to 12 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—moderate
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 8 inches
Vegetation: black and white spruce, paper birch, and aspen forest
Representative Profile:
O—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 10 inches; very fine sandy loam, high saturated hydraulic conductivity
Bw—10 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity

BC—20 to 30 inches; stratified loamy fine sand to silt loam, high saturated hydraulic conductivity
C—30 to 51 inches; stratified sand to fine sandy loam, high saturated hydraulic conductivity
2C—51 to 72 inches; sand, high saturated hydraulic conductivity

Moosehead and similar soils

Extent: 20 to 45 percent of the map unit
Landform: alluvial fans, terraces
Slope shape: linear
Slope range: 1 to 15 percent
Parent material: loess over sandy and silty alluvium over sandy and gravelly alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—moderate
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 5.6 inches
Vegetation: paper birch, spruce, and aspen forest
Representative Profile:
O—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 7 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—7 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity
BC—20 to 26 inches; stratified fine sandy loam to very fine sandy loam, high saturated hydraulic conductivity
2C—26 to 72 inches; gravelly sand, high saturated hydraulic conductivity

Minor Components

Windy Creek and similar soils: 5 to 12 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit

29HY01—Hydric Cryofibrists-Liscum complex

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Hydric Cryofibrists and similar soils

Extent: 40 to 60 percent of the map unit
Landform: lakeshores on flood plains
Slope shape: concave, linear
Slope range: 0 percent
Parent material: organic material over water over lacustrine deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible

Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 6.8 inches
Representative Profile:
Oi—0 to 30 inches; peat, high saturated hydraulic conductivity
W—30 to 43 inches; water
O'i—43 to 69 inches; peat, high saturated hydraulic conductivity
Cg—69 to 72 inches; sand, moderately high saturated hydraulic conductivity

Liscum and similar soils

Extent: 20 to 35 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oa—3 to 11 inches; muck, moderately low saturated hydraulic conductivity
A—11 to 15 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bg—15 to 70 inches; stratified silt loam to loamy fine sand, moderately high saturated hydraulic conductivity
C—70 to 72 inches; fine sandy loam, high saturated hydraulic conductivity

Minor Components

Bolio and similar soils: 5 to 12 percent of the map unit
Terric Cryohemists and similar soils: 5 to 15 percent of the map unit
Water: 5 to 15 percent of the map unit

29LS01—Liscum-Terric Cryohemists-Bolio complex

Elevation: 328 to 1,247 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Liscum and similar soils

Extent: 25 to 45 percent of the map unit

Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oa—3 to 11 inches; muck, moderately low saturated hydraulic conductivity
A—11 to 15 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bg—15 to 70 inches; stratified silt loam to loamy fine sand, moderately high saturated hydraulic conductivity
C—70 to 72 inches; fine sandy loam, high saturated hydraulic conductivity

Terric Cryohemists and similar soils

Extent: 10 to 60 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium over lacustrine deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 11.3 inches
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oe—3 to 12 inches; gravelly mucky peat, moderately high saturated hydraulic conductivity
Oa—12 to 22 inches; gravelly muck, moderately low saturated hydraulic conductivity
Bg, Cg—22 to 72 inches; extremely gravelly silt loam, high saturated hydraulic conductivity

Bolio and similar soils

Extent: 15 to 40 percent of the map unit
Landform: flood plains, terraces
Slope shape: concave, linear
Slope range: 0 to 1 percent
Parent material: herbaceous organic material
Depth to permafrost: 6 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 5 inches
Ponding: frequent
Available water capacity (approximate): 6.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oe—3 to 16 inches; mucky peat, moderately high saturated hydraulic conductivity
Oef—16 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Eielson, rare flooding, and similar soils: 0 to 10 percent of the map unit
Peede and similar soils: 0 to 7 percent of the map unit
Totatlanika, very poorly drained, and similar soils: 0 to 7 percent of the map unit

29LU01—Lupine very fine sandy loam

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Lupine and similar soils

Extent: 60 to 80 percent of the map unit
Landform: terraces, fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 5.9 inches
Representative Profile:
Oe—0 to 3 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 16 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
BC—16 to 20 inches; very fine sandy loam, high saturated hydraulic conductivity
2C—20 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Donnelly and similar soils: 0 to 14 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit
Moosehead and similar soils: 0 to 7 percent of the map unit
Sawmill Creek and similar soils: 0 to 7 percent of the map unit
Volkmar and similar soils: 0 to 7 percent of the map unit

29MS01—Mosquito peat

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Mosquito and similar soils

Extent: 65 to 80 percent of the map unit
Landform: depressions on flood plains
Slope shape: linear, concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
Cgf—24 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Tanacross and similar soils: 5 to 12 percent of the map unit
Bolio and similar soils: 0 to 7 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit
Liscum and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit
Eielson, rare flooding, and similar soils: 0 to 5 percent of the map unit
Peede and similar soils: 0 to 7 percent of the map unit

29NE01—Nenana silt loam, 0 to 3 percent slopes

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Nenana and similar soils

Extent: 65 to 80 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, quaking aspen, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 13 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
BC—13 to 20 inches; gravelly very fine sandy loam, high saturated hydraulic conductivity
2C—20 to 72 inches; very gravelly loamy sand, high saturated hydraulic conductivity

Minor Components

Donnelly and similar soils: 0 to 10 percent of the map unit
Lupine and similar soils: 0 to 7 percent of the map unit
Moosehead and similar soils: 0 to 7 percent of the map unit
Richardson and similar soils: 0 to 7 percent of the map unit
Sawmill Creek and similar soils: 0 to 7 percent of the map unit
Histic Cryaquepts and similar soils: 0 to 5 percent of the map unit
Volkmar and similar soils: 0 to 5 percent of the map unit

29NE02—Nenana-Sawmill Creek complex

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Nenana and similar soils

Extent: 25 to 60 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: occasional
Available water capacity (approximate): 5.9 inches
Vegetation: white spruce, quaking aspen, and paper birch forest
Representative Profile:
Oe—0 to 3 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 13 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
BC—13 to 20 inches; gravelly very fine sandy loam, high saturated hydraulic conductivity
2C—20 to 72 inches; very gravelly loamy sand, high saturated hydraulic conductivity

Sawmill Creek and similar soils

Extent: 35 to 50 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over outwash
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: negligible
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 4.9 inches
Representative Profile:
Oe—0 to 4 inches; moderately decomposed plant material, high saturated hydraulic conductivity
A—4 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 14 inches; fine sandy loam, high saturated hydraulic conductivity
3Ck—14 to 72 inches; extremely gravelly loamy coarse sand, high saturated hydraulic conductivity

Minor Components

Volkmar and similar soils: 0 to 10 percent of the map unit

Richardson and similar soils: 0 to 10 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit

29NN01—Noonku very fine sandy loam

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Noonku and similar soils

Extent: 75 to 85 percent of the map unit
Landform: flood plains
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 9.2 inches
Vegetation: alder, willow, and bog birch scrub
Representative Profile:
Oe—0 to 2 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
A—2 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Cg1—6 to 47 inches; stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2Cg2—47 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 0 to 7 percent of the map unit
Piledriver, occasional flooding, and similar soils: 0 to 7 percent of the map unit
Tanacross and similar soils: 0 to 7 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit

29PE01—Peede silt loam, ponded

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Peede and similar soils

Extent: 60 to 90 percent of the map unit

Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: very poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 15.2 inches
Vegetation: grasses and sedges
Representative Profile:
Oe—0 to 5 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—5 to 59 inches; silt loam, moderately high saturated hydraulic conductivity
2C—59 to 72 inches; gravelly loamy sand, high saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 0 to 15 percent of the map unit
Mosquito and similar soils: 5 to 10 percent of the map unit
Water: 2 to 15 percent of the map unit

29PL01— Eielson-Piledriver complex

Elevation: 328 to 1,640 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 75 to 120 days

Eielson, rare flooding, and similar soils

Extent: 30 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 12.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—2 to 49 inches; very fine sandy loam, moderately high saturated hydraulic conductivity

C2—49 to 71 inches; stratified silt loam to fine sand, moderately high saturated hydraulic conductivity
2C3—71 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Piledriver, rare flooding, and similar soils

Extent: 25 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: somewhat poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—47 inches
Ponding: frequent
Available water capacity (approximate): 7.3 inches
Vegetation: white spruce and balsam poplar forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
C1—3 to 15 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
C2—15 to 33 inches; stratified sand to fine sand to very fine sandy loam, moderately high saturated hydraulic conductivity
2C3—33 to 72 inches; very gravelly sand, high saturated hydraulic conductivity

Minor Components

Noonku and similar soils: 0 to 7 percent of the map unit
Salchaket and similar soils: 0 to 7 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit
Fubar, rare flooding, and similar soils: 0 to 5 percent of the map unit
Riverwash: 0 to 5 percent of the map unit

29PT01—Pits, gravel

Elevation: 397 to 650 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Pits, gravel

Extent: 100 percent of the map unit
Landform: gravel pits
Slope range: 0 to 2 percent

29SA01—Sawmill Creek silt loam

Elevation: 656 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Sawmill Creek and similar soils

Extent: 75 to 85 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over outwash
Hazard of erosion (organic mat removed): by water—slight; by wind—moderate
Runoff: negligible
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-May—0 to more than 72 inches; June-Sept.—more than 72 inches
Ponding: frequent
Available water capacity (approximate): 4.9 inches
Representative Profile:
O2—0 to 4 inches; moderately decomposed plant material, high saturated hydraulic conductivity
A—4 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 14 inches; fine sandy loam, high saturated hydraulic conductivity
3Ck—14 to 72 inches; extremely gravelly loamy coarse sand, high saturated hydraulic conductivity

Minor Components

Gerstle and similar soils: 0 to 7 percent of the map unit
Lupine and similar soils: 0 to 7 percent of the map unit
Nenana and similar soils: 0 to 7 percent of the map unit
Volkmar and similar soils: 0 to 7 percent of the map unit
Browne and similar soils: 0 to 5 percent of the map unit

Figure 2. Typical landscape for Sawmill Creek soils. These soils occur on alluvial fans and terraces. Vegetation is black spruce (*Picea mariana*) forest with an understory of mixed shrubs that include labrador tea (*Ledum groenlandicum*), prickly rose (*Rosa acicularis*), and vaious willows (*Salix spp.*).

29TA01—Tatlanika-Totatlanika complex

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tatlanika, very poorly drained, and similar soils

Extent: 30 to 60 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: fine-silty alluvium
Depth to permafrost: 20 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 8.4 inches

Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 8 inches; silty clay loam, moderately low saturated hydraulic conductivity
Bjjg—8 to 23 inches; silt loam, moderately low saturated hydraulic conductivity
Cf—23 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Totatlanika, very poorly drained, and similar soils

Extent: 20 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: fine-silty alluvium
Depth to permafrost: 17 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 10.6 inches
Representative Profile:
Oi—0 to 4 inches; peat, high saturated hydraulic conductivity
Oa—4 to 9 inches; muck, moderately low saturated hydraulic conductivity
A—9 to 11 inches; mucky silty clay, moderately low saturated hydraulic conductivity
Bjjg—11 to 28 inches; silt loam, moderately low saturated hydraulic conductivity
Bjjgf—28 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 2 to 12 percent of the map unit
Peede and similar soils: 0 to 8 percent of the map unit
Bolio and similar soils: 0 to 5 percent of the map unit
Terric Cryohemists and similar soils: 0 to 5 percent of the map unit

29TC01—Tanacross peat

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanacross and similar soils

Extent: 70 to 80 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: organic material over alluvium

Depth to permafrost: 10 to 28 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; peat, high saturated hydraulic conductivity
A—9 to 11 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—11 to 17 inches; stratified fine sandy loam to silt loam, moderately high saturated hydraulic conductivity
Bjjgf—17 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Eielson, rare flooding, and similar soils: 0 to 10 percent of the map unit
Jarvis and similar soils: 0 to 7 percent of the map unit
Liscum and similar soils: 0 to 7 percent of the map unit
Noonku and similar soils: 0 to 7 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit

29TE01—Typic Cryaquents, Liscum and Terric Cryohemists soils, flood plains

Elevation: 328 to 1,247 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryaquents, frequent long ponding, and similar soils

Extent: 10 to 50 percent of the map unit
Landform: flood plains
Slope shape: concave
Slope range: 0 to 5 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:
Oe—0 to 6 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity

Cg—6 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Liscum and similar soils

Extent: 10 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 4 inches
Ponding: frequent
Available water capacity (approximate): 11.9 inches
Vegetation: sedges and grasses
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oa—3 to 11 inches; muck, moderately low saturated hydraulic conductivity
A—11 to 15 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bg—15 to 70 inches; stratified silt loam to loamy fine sand, moderately high saturated hydraulic conductivity
C—70 to 72 inches; fine sandy loam, high saturated hydraulic conductivity

Terric Cryohemists and similar soils

Extent: 10 to 50 percent of the map unit
Landform: depressions on flood plains
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium over lacustrine deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 11.3 inches
Representative Profile:
Oi—0 to 3 inches; peat, high saturated hydraulic conductivity
Oe—3 to 12 inches; gravelly mucky peat, moderately high saturated hydraulic conductivity
Oa—12 to 22 inches; gravelly muck, moderately low saturated hydraulic conductivity
Bg, Cg—22 to 72 inches; extremely gravelly silt loam, high saturated hydraulic conductivity

Minor Components

Bolio and similar soils: 2 to 15 percent of the map unit
Water: 2 to 15 percent of the map unit

29TN01—Tanana silt loam

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana and similar soils

Extent: 70 to 80 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjgf—25 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Liscum and similar soils: 0 to 7 percent of the map unit
Mosquito and similar soils: 0 to 7 percent of the map unit
Tanacross and similar soils: 2 to 10 percent of the map unit
Eielson, rare flooding, and similar soils: 0 to 5 percent of the map unit
Jarvis and similar soils: 0 to 5 percent of the map unit
Noonku and similar soils: 0 to 5 percent of the map unit
Piledriver, rare flooding, and similar soils: 0 to 7 percent of the map unit
Salchaket and similar soils: 0 to 5 percent of the map unit

29TN02—Tanana-Mosquito complex

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Tanana and similar soils

Extent: 50 to 70 percent of the map unit
Landform: flood plains, terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: alluvium and/or loess over alluvium
Depth to permafrost: 16 to 47 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—6 to 12 inches
Ponding: frequent
Available water capacity (approximate): 5.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—6 to 25 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
Cjjgf—25 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Mosquito and similar soils

Extent: 15 to 25 percent of the map unit
Landform: depressions on flood plains
Slope shape: linear, concave
Slope range: 0 to 1 percent
Parent material: organic material over alluvium
Depth to permafrost: 14 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 4.1 inches
Vegetation: black spruce and tamarack woodland
Representative Profile:
Oi—0 to 18 inches; peat, high saturated hydraulic conductivity
Cg—18 to 24 inches; very fine sandy loam, moderately high saturated hydraulic conductivity
Cgf—24 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Piledriver, rare flooding, and similar soils: 2 to 12 percent of the map unit
Liscum and similar soils: 0 to 7 percent of the map unit
Noonku and similar soils: 0 to 7 percent of the map unit

29TT01—Totatlanika-Tatlanika complex

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Totatlanika, poorly drained, and similar soils

Extent: 30 to 50 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: fine-silty alluvium
Depth to permafrost: 17 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 10.6 inches
Representative Profile:
Oi—0 to 4 inches; peat, high saturated hydraulic conductivity
Oa—4 to 9 inches; muck, moderately low saturated hydraulic conductivity
A—9 to 11 inches; mucky silty clay, moderately low saturated hydraulic conductivity
Bjjg—11 to 28 inches; silt loam, moderately low saturated hydraulic conductivity
Bjjgf—28 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Tatlanika, poorly drained, and similar soils

Extent: 20 to 40 percent of the map unit
Landform: flood plains
Slope shape: linear, concave
Slope range: 0 to 2 percent
Parent material: fine-silty alluvium
Depth to permafrost: 20 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-May—0 inches; June-Sept.—26 inches
Ponding: frequent
Available water capacity (approximate): 8.4 inches
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 8 inches; silty clay loam, moderately low saturated hydraulic conductivity
Bjjg—8 to 23 inches; silt loam, moderately low saturated hydraulic conductivity
Cf—23 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Hydric Cryofibrists and similar soils: 5 to 15 percent of the map unit
Liscum and similar soils: 2 to 12 percent of the map unit
Terric Cryohemists and similar soils: 5 to 15 percent of the map unit

Figure 3. Typical landscape for Totatlanika soils. These soils occur on flood plains. Vegetation is stunted black spruce (*P. mariana*) forest with an understory of mixed shrubs that include labrador tea (*L. groenlandicum*), blueberry (*Vaccinium uliginosum*), lingonberry (*vaccinium vitis-idea*) and vaious willows (*Salix spp.*) with a thick ground cover of peat mosses (*sphagnum spp.*) and tussock forming sedges (*Eriophorum spp.*).

29TY01—Typic Haplocryepts, sandy

Elevation: 328 to 1,132 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Haplocryepts, sandy, and similar soils

Extent: 75 to 85 percent of the map unit
Landform: levees on flood plains
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: sandy and gravelly alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: negligible
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.3 inches
Vegetation: white spruce, balsam poplar, and paper birch forest
Representative Profile:
Oe—0 to 2 inches; moderately decomposed plant material, high saturated hydraulic conductivity
A—2 to 4 inches; sandy loam, moderately high saturated hydraulic conductivity
BC—4 to 9 inches; brown loamy sand, high saturated hydraulic conductivity
C—9 to 72 inches; gravelly coarse sand, high saturated hydraulic conductivity

Minor Components

Piledriver, rare flooding, and similar soils: 5 to 12 percent of the map unit
Eielson, rare flooding, and similar soils: 0 to 10 percent of the map unit
Tanana and similar soils: 0 to 7 percent of the map unit

29WI01—Windy Creek-Browne complex

Elevation: 531 to 1,755 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Windy Creek and similar soils

Extent: 30 to 50 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over alluvium
Depth to permafrost: 12 to 35 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high

Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 5.9 inches
Representative Profile:
Oi—0 to 5 inches; peat, high saturated hydraulic conductivity
Oe—5 to 9 inches; mucky peat, moderately high saturated hydraulic conductivity
A—9 to 11 inches; mucky silt, moderately high saturated hydraulic conductivity
Bjjg—11 to 24 inches; silt, moderately high saturated hydraulic conductivity
Bgf—24 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Browne and similar soils

Extent: 30 to 60 percent of the map unit
Landform: alluvial fans
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loess over alluvium
Depth to permafrost: 14 to 30 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 5.6 inches
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
Oe—5 to 6 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
Bjjg—6 to 24 inches; silt, moderately high saturated hydraulic conductivity
Bgf—24 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Histic Cryaquepts and similar soils: 0 to 7 percent of the map unit
Nenana and similar soils: 0 to 7 percent of the map unit
Richardson and similar soils: 0 to 7 percent of the map unit

Figure 4. Typical landscape for Windy Creek soils. These soils occur on alluvial fans and terraces. Vegetation is stunted black spruce (*P. mariana*) forest with an understory of mixed shrubs that include Labrador tea (*L. groenlandicum*), blueberry (*Vaccinium uliginosum*), lingonberry (*vaccinium vitis-idea*) and various willows (*Salix spp.*) with a thick ground cover of peat mosses (*sphagnum spp.*).

31BR01—Brigadier-Ester complex, 15 to 45 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 15 to 25 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Ester and similar soils

Extent: 20 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 20 to 45 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to paralithic bedrock: 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland

Representative Profile:
Oi—0 to 9 inches; peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; permanently frozen very channery silt loam, very low saturated hydraulic conductivity
2Crf—21 to 72 inches; permanently frozen weathered bedrock, very low saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 2 to 7 percent of the map unit
Ester and similar soils: 0 to 7 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

31BR02—Brigadier-Ester complex, 45 to 70 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 30 to 55 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 45 to 60 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Ester and similar soils

Extent: 20 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 45 to 70 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to paralithic bedrock: 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; permanently frozen very channery silt loam, very low saturated hydraulic conductivity
2Crf—21 to 72 inches; permanently frozen weathered bedrock, very low saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 2 to 7 percent of the map unit
Ester and similar soils: 0 to 7 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit

31BR03—Brigadier-Manchu complex, 3 to 7 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 24 to 47 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—7 to 8 inches; June-Sept.—14 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 7 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—7 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 2 to 7 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Manchu and similar soils: 0 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31BR04—Brigadier-Manchu complex, 7 to 12 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—7 to 8 inches; June-Sept.—14 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest

Representative Profile:
Oi—0 to 7 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—7 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Manchu and similar soils: 0 to 10 percent of the map unit
Brigadier and similar soils: 2 to 7 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31BR05—Brigadier-Manchu complex, 12 to 20 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: summits, backslopes
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—7 to 8 inches; June-Sept.—14 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 7 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—7 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Manchu and similar soils: 0 to 5 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31BR06—Brigadier-Manchu complex, 20 to 30 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist

Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—7 to 8 inches; June-Sept.—14 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 7 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—7 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Manchu and similar soils: 0 to 5 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31BR07—Brigadier-Manchu complex, 30 to 45 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Brigadier and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 12 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 3.2 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 6 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—6 to 11 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—11 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—16 to 20 inches; very channery sandy loam, high saturated hydraulic conductivity
2Cr—20 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Manchu and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 24 to 47 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—7 to 8 inches; June-Sept.—14 to more than 72 inches
Ponding: none
Available water capacity (approximate): 6.7 inches
Vegetation: black spruce forest

Representative Profile:
Oi—0 to 7 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—7 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 28 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—28 to 39 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—39 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Manchu and similar soils: 0 to 5 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Manchu and similar soils: 0 to 5 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31CH01—Chatanika silt loam, 0 to 3 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 5 to 10 percent of the map unit
Goldstream and similar soils: 2 to 10 percent of the map unit
Minto and similar soils: 3 to 7 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Water: 0 to 5 percent of the map unit

31CH02—Chatanika silt loam, 3 to 7 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

31CH03—Chatanika silt loam, 7 to 12 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

31CH04—Chatanika-Goldstream complex, 0 to 5 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Chatanika and similar soils

Extent: 40 to 60 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave

Slope range: 0 to 5 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Goldstream and similar soils

Extent: 25 to 50 percent of the map unit
Landform: valley floors
Slope shape: linear
Slope range: 0 to 5 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; mucky peat, high saturated hydraulic conductivity
A—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—20 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 7 percent of the map unit
Histels and similar soils: 0 to 7 percent of the map unit
Minto and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 7 percent of the map unit
Water: 0 to 5 percent of the map unit

31DU01—Dumps, mine tailings

Elevation: 397 to 1,968 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Dumps, mine

Extent: 100 percent of the map unit
Landform: spoil piles
Slope range: 0 to 70 percent

31ES01—Ester peat, 20 to 45 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and similar soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 20 to 45 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to paralithic bedrock: 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; permanently frozen very channery silt loam, very low saturated hydraulic conductivity
2Crf—21 to 72 inches; permanently frozen weathered bedrock, very low saturated hydraulic conductivity

Minor Components

Brigadier and similar soils: 0 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 10 percent of the map unit

Saulich and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

31ES02—Ester peat, 45 to 70 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Ester and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear
Slope range: 45 to 70 percent
Parent material: mossy organic material over colluvium and/or loess over residuum weathered from schist
Depth to permafrost: 7 to 30 inches
Depth to paralithic bedrock: 14 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—4 inches
Ponding: none
Available water capacity (approximate): 2.1 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; peat, high saturated hydraulic conductivity
ABjj—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
2Cjjf—12 to 21 inches; permanently frozen very channery silt loam, very low saturated hydraulic conductivity
2Crf—21 to 72 inches; permanently frozen weathered bedrock, very low saturated hydraulic conductivity

Minor Components

Ester and similar soils: 5 to 10 percent of the map unit
Brigadier and similar soils: 5 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 3 to 10 percent of the map unit

31FA01—Fairbanks silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 2 to 10 percent of the map unit
Minto and similar soils: 5 to 12 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31FA02—Fairbanks silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest

Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 5 percent of the map unit
Fairbanks and similar soils: 0 to 15 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31FA03—Fairbanks silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 65 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

31FA04—Fairbanks silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 75 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Fairbanks and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

31FA05—Fairbanks silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear, convex
Slope range: 30 to 45 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained

Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 5 percent of the map unit
Fairbanks and similar soils: 0 to 15 percent of the map unit
Steese and similar soils: 0 to 15 percent of the map unit

31FA06—Fairbanks silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 45 to 70 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 15 percent of the map unit
Steese and similar soils: 0 to 15 percent of the map unit

31FA07—Fairbanks silt loams, gullied, 7 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 55 to 65 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: linear, convex
Slope range: 7 to 15 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Fairbanks and similar soils

Extent: 25 to 65 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 30 to 70 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit
Typic Cryaquents and similar soils: 0 to 3 percent of the map unit

31FA08—Fairbanks-Steese complex, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 40 to 70 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 25 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches

Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit

31FA09—Fairbanks-Steese complex, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 40 to 70 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 25 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist

Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

31FA10—Fairbanks-Steese complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 50 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 25 to 40 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 2 to 5 percent of the map unit

31FA11—Fairbanks-Steese complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained

Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 15 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 3 to 15 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 3 to 10 percent of the map unit

31FA12—Fairbanks-Steese complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Fairbanks and similar soils

Extent: 35 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.2 inches
Vegetation: white spruce, paper birch, and quaking aspen forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A,Bw—3 to 30 inches; silt loam, moderately high saturated hydraulic conductivity
C—30 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Steese and similar soils

Extent: 20 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit

31GD01—Goldstream peat, 0 to 3 percent

Elevation: 328 to 1,690 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 70 to 85 percent of the map unit
Landform: valley floors
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; mucky peat, high saturated hydraulic conductivity
A—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—20 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 2 to 7 percent of the map unit
Histels and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Happy and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents, frequent long ponding, and similar soils: 0 to 5 percent of the map unit

31GD02—Goldstream peat, 3 to 7 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 70 to 85 percent of the map unit
Landform: valley floors

Slope shape: linear
Slope range: 3 to 7 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; mucky peat, high saturated hydraulic conductivity
A—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—20 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 15 percent of the map unit
Histels and similar soils: 0 to 7 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Typic Cryaquents, frequent long ponding, and similar soils: 0 to 5 percent of the map unit

31GD03—Goldstream-Histels complex

Elevation: 328 to 1,690 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Goldstream and similar soils

Extent: 50 to 72 percent of the map unit
Landform: valley floors
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: organic material over loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 8 inches
Ponding: frequent

Available water capacity (approximate): 3.6 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 9 inches; mucky peat, high saturated hydraulic conductivity
A—9 to 12 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Bjjg—12 to 20 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—20 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Histels and similar soils

Extent: 15 to 40 percent of the map unit
Landform: flats on terraces, depressions on terraces
Slope shape: concave, linear
Slope range: 0 to 1 percent
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 24 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; permanently frozen mucky peat, very low saturated hydraulic conductivity
Cgf—26 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 3 to 12 percent of the map unit
Terric Cryofibrists and similar soils: 2 to 7 percent of the map unit

31GL01—Gilmore silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 70 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: convex, linear

Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31GL02—Gilmore silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 65 to 75 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest

Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 5 to 10 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

31GL03—Gilmore silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 10 to 15 percent of the map unit
Gilmore and similar soils: 5 to 12 percent of the map unit

Steese and similar soils: 5 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit

31GL04—Gilmore silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 65 to 80 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit

31GL05—Gilmore silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,920 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 3 to 10 percent of the map unit
Brigadier and similar soils: 0 to 5 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31GL06—Gilmore silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Gilmore and similar soils

Extent: 80 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 45 to 70 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high

Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Ester and similar soils: 0 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 0 to 10 percent of the map unit
Rock outcrop: 0 to 5 percent of the map unit

31HA01—Happy silt loam, 1 to 7 percent slopes

Elevation: 328 to 1,690 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Happy and similar soils

Extent: 70 to 85 percent of the map unit
Landform: natural levees on flood plains
Slope shape: linear
Slope range: 1 to 7 percent
Parent material: alluvium
Depth to permafrost: 23 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: high
Drainage class: somewhat poorly drained
Flooding: occasional
Depth to high water table (approximate): April-May—0 to 16 inches; June-Sept.—28 inches
Ponding: frequent
Available water capacity (approximate): 8.2 inches
Representative Profile:
Oe—0 to 2 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
C/O—2 to 5 inches; stratified silt loam to moderately decomposed plant material, moderately high saturated hydraulic conductivity
C—5 to 20 inches; silt loam, moderately high saturated hydraulic conductivity
C/O'—20 to 32 inches; stratified silt loam to moderately decomposed plant material, moderately high saturated hydraulic conductivity

Cf—32 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 0 to 5 percent of the map unit
Histels and similar soils: 0 to 8 percent of the map unit
Water, fresh: 2 to 7 percent of the map unit
Aquic Cryofluvents and similar soils: 0 to 5 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit

31HI01—Histels

Elevation: 328 to 1,690 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Histels and similar soils

Extent: 85 to 90 percent of the map unit
Landform: flats on terraces, depressions on terraces
Slope shape: concave, linear
Slope range: 0 to 3 percent
Parent material: organic material over alluvium and/or loess
Depth to permafrost: 24 to 31 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 3.9 inches
Vegetation: black spruce woodland
Representative Profile:
Oi—0 to 12 inches; peat, high saturated hydraulic conductivity
Oe—12 to 17 inches; mucky peat, moderately high saturated hydraulic conductivity
Oef—17 to 26 inches; permanently frozen mucky peat, very low saturated hydraulic conductivity
Cgf—26 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 10 to 15 percent of the map unit

31MN01—Minto silt loam, 0 to 3 percent slopes

Elevation: 394 to 2,799 feet
Mean annual precipitation: 10 to 14 inches

Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 1 to 12 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 2 to 10 percent of the map unit

31MN02—Minto silt loam, 3 to 7 percent slopes

Elevation: 394 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none

Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 3 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 5 to 10 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

31MN03—Minto silt loam, 7 to 12 percent

Elevation: 394 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 60 to 70 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 5 to 15 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

31MN04—Minto silt loam, 12 to 20 percent slopes

Elevation: 394 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 15 percent of the map unit
Chatanika and similar soils: 1 to 10 percent of the map unit
Typic Cryaquents and similar soils: 0 to 5 percent of the map unit

31MN05—Minto-Chatanika complex, 0 to 3 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 35 to 50 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 0 to 3 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 2 to 10 percent of the map unit

31MN06—Minto-Chatanika complex, 3 to 7 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 30 to 40 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Minto and similar soils: 5 to 10 percent of the map unit
Saulich and similar soils: 0 to 10 percent of the map unit
Chatanika and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

31MN07—Minto-Chatanika complex, 7 to 12 percent slopes

Elevation: 394 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; brown slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none

Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 2 to 10 percent of the map unit
Minto and similar soils: 2 to 10 percent of the map unit

31MN08—Minto-Chatanika complex, 12 to 20 percent slopes

Elevation: 394 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Minto and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Chatanika and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 12 to 39 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 4.3 inches
Vegetation: black spruce forest
Representative Profile:
Oi—0 to 4 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—4 to 6 inches; mucky silt loam, moderately high saturated hydraulic conductivity
C/Ag—6 to 21 inches; silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 2 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit

31PT01—Pits, quarry

Mean annual precipitation: 10 to 14 inches

Pits, quarry

Extent: 100 percent of the map unit
Landform: quarries

31RS01—Rosie silt loam, 15 to 90 percent slopes

Elevation: 344 to 1,168 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Rosie and similar soils

Extent: 80 to 100 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: linear, convex
Slope range: 15 to 90 percent, southwest to southeast aspects
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 14 to 37 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: somewhat excessively drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 5 inches
Representative Profile:
A—0 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
Bk1—12 to 22 inches; channery silt loam, moderately high saturated hydraulic conductivity
Bk2—22 to 28 inches; very channery very fine sandy loam, high saturated hydraulic conductivity
2Crk—28 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Rock outcrop: 0 to 20 percent of the map unit

31SA01—Saulich peat, 3 to 7 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss

Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 7 percent of the map unit
Goldstream and similar soils: 0 to 6 percent of the map unit
Minto and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 3 to 10 percent of the map unit

31SA02—Saulich peat, 7 to 12 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Goldstream and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 3 to 5 percent of the map unit
Chatanika and similar soils: 1 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

31SA03—Saulich peat,12 to 20 percent slopes

Elevation: 328 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 5 to 10 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

31SA04—Saulich peat, 20 to 30 percent slopes

Elevation: 328 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 70 to 90 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 20 to 30 percent

Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 10 percent of the map unit
Saulich and similar soils: 0 to 10 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

31SA05—Saulich-Minto complex, 3 to 7 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity

Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minto and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 3 to 7 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 7 percent of the map unit
Chatanika and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 5 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit
Minto and similar soils: 0 to 5 percent of the map unit

31SA06—Saulich-Minto complex, 7 to 12 percent slopes

Elevation: 328 to 1,998 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches

Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minto and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 7 to 12 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Chatanika and similar soils: 0 to 7 percent of the map unit
Minto and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 7 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

31SA07—Saulich-Minto complex, 12 to 20 percent slopes

Elevation: 328 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Saulich and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: toeslopes, footslopes
Slope shape: linear, concave
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Depth to permafrost: 14 to 24 inches
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—8 inches
Ponding: frequent
Available water capacity (approximate): 3.6 inches
Vegetation: black spruce forest with low shrubs and moss
Representative Profile:
Oi—0 to 16 inches; peat, high saturated hydraulic conductivity
Bg/A—16 to 21 inches; mucky silt loam, moderately high saturated hydraulic conductivity
Cgf—21 to 72 inches; permanently frozen material, very low saturated hydraulic conductivity

Minto and similar soils

Extent: 30 to 45 percent of the map unit
Landform: hills
Position on slope: footslopes, toeslopes
Slope shape: linear, concave, convex
Slope range: 12 to 20 percent
Parent material: colluvium and/or loess
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: moderately well drained
Flooding: none
Depth to high water table (approximate): April-May—4 to 8 inches; June-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 12.6 inches
Vegetation: paper birch and white spruce forest
Representative Profile:
Oi—0 to 5 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—5 to 9 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—9 to 16 inches; silt loam, moderately high saturated hydraulic conductivity
C—16 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Minor Components

Minto and similar soils: 0 to 7 percent of the map unit
Saulich and similar soils: 0 to 7 percent of the map unit
Chatanika and similar soils: 0 to 7 percent of the map unit
Goldstream and similar soils: 0 to 5 percent of the map unit

Ester and similar soils: 0 to 5 percent of the map unit

31ST01—Steese silt loam, 3 to 7 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 75 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 3 to 7 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit

31ST02—Steese silt loam, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 70 to 80 percent of the map unit
Landform: hills

Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 2 to 10 percent of the map unit
Gilmore and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31ST03—Steese silt loam, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 60 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest

Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 2 to 15 percent of the map unit
Gilmore and similar soils: 2 to 15 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31ST04—Steese silt loam, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 70 to 85 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 2 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

31ST05—Steese silt loam, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 75 to 95 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Steese and similar soils: 5 to 15 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Ester and similar soils: 0 to 5 percent of the map unit

31ST06—Steese silt loam, 45 to 70 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 85 to 95 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 45 to 70 percent

Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 5 to 10 percent of the map unit

31ST07—Steese-Gilmore complex, 7 to 12 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 25 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: linear, convex
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity

2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Gilmore and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 7 to 12 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 10 percent of the map unit
Gilmore and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 1 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31ST08—Steese-Gilmore complex, 12 to 20 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Gilmore and similar soils

Extent: 20 to 40 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 12 to 20 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 10 percent of the map unit
Gilmore and similar soils: 2 to 15 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Steese and similar soils: 2 to 15 percent of the map unit

31ST09—Steese-Gilmore complex, 20 to 30 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 30 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex, linear
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Gilmore and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 20 to 30 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity

Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 2 to 15 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit
Fairbanks and similar soils: 0 to 10 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31ST10—Steese-Gilmore complex, 30 to 45 percent slopes

Elevation: 499 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Steese and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex, linear
Slope range: 30 to 45 percent
Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 20 to 40 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 6.1 inches
Vegetation: paper birch, white spruce, and quaking aspen forest
Representative Profile:
Oi—0 to 2 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—2 to 5 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—5 to 27 inches; silt loam, moderately high saturated hydraulic conductivity
2C—27 to 33 inches; very channery silt loam, high saturated hydraulic conductivity
2Cr—33 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Gilmore and similar soils

Extent: 30 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, summits
Slope shape: linear, convex
Slope range: 30 to 45 percent

Parent material: loess over residuum weathered from schist
Depth to paralithic bedrock: 13 to 24 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 2.9 inches
Vegetation: black spruce, paper birch, quaking aspen, and white spruce forest
Representative Profile:
Oi—0 to 3 inches; slightly decomposed plant material, high saturated hydraulic conductivity
A—3 to 6 inches; silt loam, moderately high saturated hydraulic conductivity
Bw—6 to 12 inches; silt loam, moderately high saturated hydraulic conductivity
2BC—12 to 19 inches; extremely channery silt loam, high saturated hydraulic conductivity
2Cr—19 to 72 inches; weathered bedrock, high saturated hydraulic conductivity

Minor Components

Gilmore and similar soils: 5 to 15 percent of the map unit
Steese and similar soils: 2 to 10 percent of the map unit

31TE01— Typic Cryaquents, Histic Cryaquepts and Terric Cryofibrists soils, hills

Elevation: 328 to 1,201 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Typic Cryaquents, frequent long ponding, and similar soils

Extent: 0 to 90 percent of the map unit
Landform: flood plains
Slope shape: concave
Slope range: 0 to 5 percent
Parent material: alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: low
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 13.9 inches
Vegetation: white spruce and paper birch forest
Representative Profile:
Oe—0 to 6 inches; moderately decomposed plant material, moderately high saturated hydraulic conductivity
Cg—6 to 72 inches; silt loam, moderately high saturated hydraulic conductivity

Histic Cryaquepts and similar soils

Extent: 20 to 50 percent of the map unit
Landform: depressions on terraces
Slope shape: concave
Slope range: 0 to 3 percent
Parent material: organic material over loess over alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—0 inches; June-Sept.—0 to 16 inches
Ponding: frequent
Available water capacity (approximate): 9.7 inches
Vegetation: sedges, grasses, and low shrubs
Representative Profile:
Oi—0 to 11 inches; peat, high saturated hydraulic conductivity
Bg—11 to 23 inches; silt loam, moderately high saturated hydraulic conductivity
2Cg—23 to 72 inches; very gravelly sandy loam, high saturated hydraulic conductivity

Terric Cryofibrists and similar soils

Extent: 0 to 80 percent of the map unit
Landform: thermokarst depressions
Position on slope: toeslopes
Slope shape: concave
Slope range: 0 to 1 percent
Parent material: organic material over lacustrine deposits and/or loess
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: negligible
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 15 inches
Vegetation: sedges
Representative Profile:
Oi—0 to 28 inches; peat, high saturated hydraulic conductivity
Oa—28 to 40 inches; muck, moderately low saturated hydraulic conductivity
Cg—40 to 72 inches; silty clay loam, moderately high saturated hydraulic conductivity

Minor Components

Histels and similar soils: 0 to 50 percent of the map unit
Water: 0 to 20 percent of the map unit

31TG01—Toghotthele silt loam, 20 to 90 percent slopes

Elevation: 344 to 2,799 feet
Mean annual precipitation: 10 to 14 inches
Frost-free period: 80 to 120 days

Toghotthele and similar soils

Extent: 80 to 95 percent of the map unit
Landform: climbing dunes on hills
Position on slope: shoulders, backslopes
Slope shape: linear
Slope range: 20 to 90 percent
Parent material: loess over eolian sands
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 72 inches
Ponding: none
Available water capacity (approximate): 11.9 inches
Representative Profile:
Oi—0 to 1 inch; slightly decomposed plant material, high saturated hydraulic conductivity
A—1 to 4 inches; silt loam, moderately high saturated hydraulic conductivity
Bw, BC—4 to 51 inches; silt loam, moderately high saturated hydraulic conductivity
2C—51 to 72 inches; fine sand, high saturated hydraulic conductivity

Minor Components

Fairbanks and similar soils: 0 to 5 percent of the map unit
Rosie and similar soils: 0 to 5 percent of the map unit
Gilmore and similar soils: 0 to 5 percent of the map unit
Steese and similar soils: 0 to 5 percent of the map unit

W—Water

Water

Extent: 100 percent of the map unit
Landform: rivers on flood plains, depressions on flood plains, lakes on flood plains, streams on flood plains, depressions on hills, lakes on hills

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

Tables 6 and 7 give 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 USDA. 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 (75 mm) 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, SP-SM.

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 (75 mm) 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.

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.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) 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 (75 mm) 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.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. The estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, 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.

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 8 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.

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.

Saturated Hydraulic Conductivity (K_{sat}) refers to the ability of a soil to transmit water or air. The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. K_{sat} 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. 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 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. Soils are grouped according to the amount of stable aggregates more than 0.84 millimeter in size. Soils containing rock fragments can occur in any group. The groups are as follows:

1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.

10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.

25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.

25 to 39 percent dry soil aggregates with greater than 35 percent clay or greater than 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.

40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.

45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.

50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.

Stony, gravelly, or wet soils and other soils not subject to wind erosion.

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 9 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.

Physical and Chemical Analyses of Selected Soils

The results of physical and chemical analysis of the following selected soils in the survey area are available at http://ssldata.nrcs.usda.gov/querypage.asp To query, check the *User Pedon ID* box and enter the User Pedon ID number, then select the *Execute Query* button. The data are for soils sampled at carefully selected sites. Unless otherwise indicated, the pedons are typical of the taxonomic unit. They are described in the section "Taxonomic Units and Their Morphology."

Correlated Name	User Pedon ID
Windy Creek	S04AK-068-001
Sawmill Creek	S04AK-068-002
Tanacross	S04AK-068-003
Eielson	S03AK-068-004
Lupine	S02AK-174-004
Happy	S04AK-090-001
Steese	S04AK-090-002
Totatlanika	S04AH-090-003
Chatanika	S04AK-090-004
Chatanika	S01AK-090-001

Water Features

Table 10 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

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

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as *none, very rare, rare, occasional, frequent*, and *very frequent*. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods is also considered. 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. The table indicates surface water *depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Moisture status indicates the water content in the soil at a specified depth. The *Status* is expressed as *wet*, *moist*, or *dry. Wet* refers to soil in which most of the pore space is filled with water and the water is retained at less than 0.00001 bar suction. *Moist* refers to soil in which some of the pore space is filled with water and the water is retained at between 0.00001 and 15 bar suction. *Dry* refers to soil with little to no water in the pore spaces. Any water is retained at greater than 15 bar suction, which is generally near or above the wilting point of common agricultural crops. *Frozen* is used to indicate that the temperature of the soil layer is below the freezing point of water.

Soil Features

Table 11 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 restricts roots or otherwise provides 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 high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures. Potential for frost action is expressed as *low, moderate,* or *high*.

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.

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, foresters, botanists, 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 rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for 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, permafrost, or unstable 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, and trails.

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. Other tables indicate the suitability of the soils for use as source materials. 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 *source, probable source*, and *improbable source* or as *good, fair,* and *poor*. In some tables, *slight, moderate,* and *severe* are used to describe the degree to which certain soil features or site characteristics result in limitations that affect a specified use of the soil.

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. The numerical ratings, as they relate to each specific interpretation, are explained in the sections that follow.

Recreation

The soils of the survey area are rated in table 12 according to limitations that affect their suitability for recreation. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

The ratings in the table are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality and vegetation.

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

Camp and picnic 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 and picnic areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Primitive camp areas are recreational areas that are used for tent camping by small groups of people. These areas are typically in undeveloped or minimally developed, remote locations off the road system. Primitive camp areas are subject to intermittent light to heavy foot traffic. The soils are rated as *not limited*, *somewhat limited*, and *very*

limited to indicate the extent to which soil and site properties limit the use and performance for the intended use. The critical properties are slope, the texture of the soil surface, the amount of small and large stones on the soil surface, permeability, and flooding and ponding hazards. Ratings for primitive camp areas can help land management agencies direct use to soils favorable for remote camping and thereby increase user satisfaction and minimize site damage. *Not limited* indicates that the soil has few features that limits its use as a primitive camp site. Intermittent use should not cause significant site degradation. *Somewhat limited* indicates that the soil has moderate limitations. Some moderate limitations are seasonal, such as wet ground, flooding, and dustiness during dry conditions. *Very limited* indicates that the soil has one or more features that are unfavorable during all seasons, such as steep slopes or poor soil drainage and a shallow water table.

Foot and ATV trails for hiking, horseback riding, and ATV use should require little or no slope modification and site preparation through cutting and filling. These trails are not covered with surfacing material or vegetation. The ratings are based on the soil properties that affect trafficability, erodibility, dustiness, and the ease of revegetation. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Engineering

This section provides information for planning land uses related to building sites. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, and construction materials. The ratings are based on observed performance of the soils and on the estimates given 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 (1.5 to 2.1 m). 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 (1.5 to 2.1 m) of the surface, soil wetness, depth to water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills,

septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

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

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

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Table 13 shows the degree and kind of soil limitations that affect structures and site improvements, including dwellings with and without basements, small commercial buildings.

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 values in the tables indicate the severity of individual limitations. The values 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 (1.00) and the point at which the soil feature is not a limitation (0.00). If the soil is not limited (value = 0.00), no entry appears for the numerical value.

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 (0.6 m) 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 (2.1 m). The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock, permafrost, 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 (0.6 m) or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding,

subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, permafrost, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Sanitary Facilities

Tables 14 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. 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 values in the tables indicate the severity of individual limitations. The values 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). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

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 4 and 6 feet (1.2 and 1.8 m) 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 water table, ponding, depth to bedrock, permafrost, 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 (1.2 m) 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 water table, ponding, depth to bedrock, permafrost, 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 (5 cm) 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 (102 cm), if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

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

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 (0.6 m) 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 water table, ponding, slope, and depth to bedrock, permafrost, 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 the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in *Soil Taxonomy* (Soil Survey Staff, 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff, 2006) and in the *Soil Survey Manual* (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite

determinations of hydric soils in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (Hurt and others, 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 cm). This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in table15. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1998).

Some map units consist almost entirely of hydric soils, such as map unit 29BL01—Bolio peat (in which all listed components are hydric). Other map units consist primarily of nonhydric soils, such as map unit 29CR01—Typic Cryorthents-Urban land complex (in which all listed components are nonhydric), or map unit 28DY0—Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils in table 15.

Table 15 also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

1. All Histels except Folistels and Histosols except Folists, or
2. Soils in Aquic suborders, subgroups, or subgroups, Albolls suborder, Historthels great group, Histoturbles great group, Pachic subgroups, or Cumulic subgroups that are:
   a. somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or
   b. poorly drained or very poorly drained and have either:
      i. water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in),
      or for other soils
      ii. water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in,
      or
      iii. water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or
3. Soils that are frequently ponded for a long duration or a very long duration during the growing season, or
4. Soils that are frequently flooded for a long duration or a very long duration during the growing season.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 2006 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 16 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 *Inceptisol*.

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 *cryept* (*cry,* meaning cold, plus *ept,* from Inceptisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is *Haplocryept* (*haplo,* meaning low base saturation, plus *cryept,* the suborder of the Inceptisols that has a cryic temperature regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *typic* identifies the subgroup that typifies the great group. An example is *Typic Haplocryept.*

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is *sandy-skeletal, mixed, Typic Haplocryepts*.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example from this survey area is the *Donnelly series*.

Taxonomic Units and Their Morphology

The Official Series Descriptions (OSDs) provide the most current information about those soils classified to the series level in this survey area. These descriptions are available on the Web at http://soils.usda.gov.

Descriptions for soils classified at higher taxonomic levels in this survey area are provided below. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small three-dimensional area of soil, typical of the taxonomic unit in the survey area is described. The detailed description of each soil horizon follows standards in the *Soil Survey Manual* (Soil Survey Division Staff 1993). Many of the technical terms used in the descriptions are defined in *Soil Taxonomy* (Soil Survey Staff, 1999) and in *Keys to Soil Taxonomy* (Soil Survey Staff 2006). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

MLRA 228

Dystrogelepts

Taxonomic Classification

• Dystrogelepts

Setting

Depth class: moderately deep to very deep
Drainage class: well drained
Saturated hydraulic conductivity: moderately high to high in the upper profile and high or very high in the gravelly substratum
Landforms and positions: summits and shoulders of mountains
Parent material: residuum and colluvium
Slope range: 10 to 50 percent
Elevation: 2,200 to 2,700 feet (122 to 549 m)
Climatic data (average annual):
Precipitation—12 to 16 inches (30 to 40 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Dystrogelepts—on a 34 percent slope at 2,400 feet (730 m) elevation, alder and alpine shrub

Oe—0 to 2 inches (0 to 5 cm); very dark gray (10YR 3/1) moderately decomposed plant material; many very fine to medium roots; very strongly acid (pH 4.8); abrupt smooth boundary.
A—2 to 4 inches (5 to 10 cm); very dark brown (7.5YR 2.5/2) fine sandy loam; moderate coarse granular structure; friable, nonsticky and nonplastic; common very fine and fine roots; 5 percent gravel; very strongly acid (pH 4.8); clear smooth boundary.

Bw—4 to 8 inches (10 to 20 cm); brown (7.5YR 4/4) fine sandy loam; weak fine subangular blocky structure; friable, nonsticky and nonplastic; few very fine roots; 10 percent gravel; strongly acid (pH 5.2); clear smooth boundary.
BC—8 to 23 inches (20 to 58 cm); dark yellowish brown (10YR 4/4) gravelly sandy loam; massive; very friable, nonsticky and nonplastic; few very fine roots; 30 percent gravel; strongly acid (pH 5.4); clear smooth boundary.
C—23 to 72 inches (58 to 183 cm); dark yellowish brown (10YR 4/4) gravelly sandy loam; massive; very friable, nonsticky and nonplastic; 30 percent gravel; moderately acid (pH 5.8)

Representative Pedon Location

Map unit: 28DY01—Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes
Location: Greater Nenana Soil Survey Area, Alaska; about 11 miles south of Anderson; in the SW 1/4 of the SW 1/4, section 33, T. 8 S., R. 8 W, Fairbanks Meridian; UTM north 7118983 and UTM east 395038, zone 6.

Range in Characteristics

Organic layer thickness: 2 to 5 inches (4 to 12 cm)
Depth to bedrock: 30 to greater than 72 inches (75 to greater than 183 cm)

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—slightly or moderately decomposed plant material
Reaction—very strongly acid to strongly acid

A horizon:
Color— hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—fine sandy loam, silt loam
Coarse fragments—0 to 50 percent
Reaction—very strongly acid to strongly acid

Bw horizon:
Color—hue of 7.5YR, or 10YR; value moist of 4 or 5; chroma moist of 4 or 6
Texture—fine sandy loam, silt loam
Coarse fragments—10 to 50 percent
Gravel content—10 to 50 percent
Reaction—strongly acid to slightly acid

BC and C horizons:
Color—value moist of 4 or 5; chroma moist of 4 or 6
Texture—sandy loam, silt loam
Coarse fragments—16 to 50 percent
Gravel content—16 to 40 percent
Cobble content—0 to 10 percent
Reaction—strongly acid to slightly acid

2Cr horizons: (where present)
Weathered bedrock of schist, conglomerate and/or greywacke

Gelorthents

Taxonomic Classification

- Gelorthents

Setting

Depth class: moderately deep to very deep
Drainage class: well drained
Saturated hydraulic conductivity: high to very high
Landforms and positions: summits and shoulders of mountains
Parent material: residuum and colluvium
Slope range: 10 to 50 percent
Elevation: 2,200 to 2,700 feet (122 to 549 m)
Climatic data (average annual):
Precipitation—12 to 16 inches (30 to 40 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Gelorthents—on a 46 percent slope at 2,400 feet (730 m) elevation, alpine shrub

A—0 to 6 inches (0 to 14 cm); dark brown (7.5YR 3/2) very gravelly fine sandy loam; weak fine granular structure; friable, nonsticky and nonplastic; common very fine and fine roots; 50 percent gravel; moderately acid (pH 5.8); clear smooth boundary.
C2—6 to 72 inches (14 to 183 cm); dark yellowish brown (10YR 4/4) very gravelly fine sandy loam; massive; very friable, nonsticky and nonplastic; 50 percent gravel; slightly acid (pH 6.2).

Representative Pedon Location

Map unit: 28DY01—Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes
Location: Greater Nenana Soil Survey Area, Alaska; about 11 miles south of Anderson; in the SW 1/4 of the SW 1/4, section 33 T. 8 S., R. 8 W.,Fairbanks Meridian; UTM north 7118814 and UTM east 394837, zone 6.

Range in Characteristics

Surface coarse fragments: 30 to 90 percent
Depth to bedrock: 30 to greater than 72 inches (75 to greater than 183 cm)

A horizon:
Color— hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Coarse fragments—36 to 70 percent
Gravel content—36 to 70 percent
Cobble content—0 to 10 percent
Reaction—strongly acid to slightly acid

C horizons:
Color—value moist of 4 or 5; chroma moist of 4 or 6
Coarse fragments—36 to 70 percent
Gravel content—36 to 70 percent

Cobble content—0 to 10 percent
Reaction—moderately acid to slightly acid

2C horizons: (where present)
Weathered bedrock of schist, conglomerate and/or greywacke

Figure 5. An example of a Haplocryepts. Profile of Sawmill Creek coarse-loamy over sandy or sandy-skeletal, mixed, superactive Typic Haplocryepts. Sawmill Creek soils have moderately deep mixed loess and alluvium over outwash or till.

Haplocryepts

Taxonomic Classification

• Haplocryepts

Setting

Depth class: very deep
Drainage class: well drained
Saturated Hydraulic Conductivity: moderately high in the loess mantle and high to very high in the gravelly substratum
Landforms and positions: backslopes and shoulders of mountains
Parent material: loess over colluvium
Slope range: 7 to 70 percent
Elevation: 1,000 to 2,200 feet (305 to 670 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Haplocryepts—on a 22 percent slope at 1,250 feet (381 m) elevation, under a white spruce forest

Oe—0 to 4 inches (0 to 10 cm); very dark grayish brown (10YR 3/2) moderately decomposed plant material; many very fine to coarse roots; strongly acid (pH 5.2); abrupt smooth boundary.
A—4 to 6 inches (10 to 14 cm); dark brown (7.5YR 3/4) silt loam; weak fine subangular blocky structure; friable, slightly sticky and slightly plastic; many very fine to coarse roots; moderately acid (pH 5.6); clear smooth boundary.
Bw1—6 to 20 inches (14 to 52 cm); dark yellowish brown (10YR 4/4) silt loam; moderate fine subangular blocky structure; friable, nonsticky and nonplastic; many very fine and fine and common medium roots; slightly acid (pH 6.2); clear smooth boundary.
Bw2—20 to 31 inches (52 to 80 cm); brown (10YR 4/3) silt loam; moderate fine subangular blocky structure; friable, nonsticky and nonplastic; neutral (pH 6.6); clear smooth boundary.
2C—31 to 72 inches (80 to 183 cm); olive brown (2.5Y 4/3) very gravelly sandy loam; massive; very friable, nonsticky and nonplastic; 40 percent gravel; slightly acid (pH 6.4).

Representative Pedon Location

Map unit: 28HA02—Haplocryepts, 15 to 45 percent slopes
Location: Greater Nenana Soil Survey Area, Alaska; about 12 miles south west of Anderson; in the SE 1/4 of the SE 1/4, section 34 T. 8 S., R. 9 W., Fairbanks Meridian; UTM north 7118121 and UTM east 388145, zone 6.

Range in Characteristics

Organic layer thickness: 2 to 7 inches (4 to 17 cm)

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 to 4; chroma moist from 1 to 4
Texture—slightly or moderately decomposed plant material
Reaction—strongly acid to moderately acid

A horizon:
Color— hue of 7.5YR or 10YR; value moist of 3 or 4; chroma moist from 2 to 4
Texture—silt loam or very fine sandy loam
Coarse fragments—0 to 10 percent
Reaction— strongly acid to moderately acid

Bw horizons:
Color—hue of 7.5YR or 10YR; value moist of 4 or 5; chroma moist from 3 to 6
Texture— silt loam or very fine sandy loam
Coarse fragments—0 to 10 percent
Gravel content—0 to 10 percent
Reaction—strongly acid to neutral

2C horizon:
Color—hue of 10YR or 2.5Y; value moist of 3 to 5; chroma moist from 3 or 4; or variegated.
Texture— sandy loam or loamy sand
Coarse fragments—16 to 59 percent
Gravel content—16 to 59 percent
Cobble content—0 to 10 percent
Reaction—strongly acid to neutral

Turbels

Taxonomic Classification

• Turbels

Setting

Depth class: shallow to moderately deep over permafrost
Drainage class: poorly
Saturated hydraulic conductivity: high in the organic mat and moderately high in the mineral soil above the permafrost
Landforms and positions: dominantly north facing depressions on hills
Parent material: loess over colluvium and bedrock
Slope range: 0 to 30 percent
Elevation: 1,000 to 2,200 feet (305 to 670 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Turbels—on a 20 percent slope at 2,000 feet (610 m) elevation under black spruce forest.

Oi—0 to 6 inches (0 to 15 cm); dark brown (7.5YR3/2) slightly decomposed plant material; many very fine to coarse roots; extremely acid (pH 4.2); clear smooth boundary.
Bjj—6 to 17 inches (15 to 42 cm); dark gray (10YR 4/1) silt loam; weak medium subangular blocky structure; friable; slightly sticky and slightly plastic; strongly acid (pH 5.2); abrupt wavy boundary.
Cf—17 to 72 inches (42 to 183 cm); permanently frozen material.

Representative Pedon Location

Map unit: 28HA02—Haplocryepts silt loam, 15 to 45 percent slopes
Location: Greater Nenana Soil Survey Area, Alaska; about 12 miles south west of Anderson; in the SE 1/4 of the SE 1/4, section 34 T. 8 S., R. 9 W, Fairbanks Meridian; UTM north 7118210 and UTM east 387881, zone 6.

Range in Characteristics

Organic layer thickness: 5 to 24 inches (13 to 61 cm)
Depth to frozen soil (July-Aug): 14 to 26 inches (36 to 65cm)

O horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; and chroma moist of 1 to 3
Texture—moderately or slightly decomposed plant material or moderately decomposed plant material
Reaction—extremely acid to very strongly acid

Bjj horizon:
Color— hue of 7.5YR, 10YR or 2.5Y; value moist of 3 or 4; and chroma moist from 1 to 4
Texture—silt loam or very fine sandy loam
Reaction—very strongly acid to moderately acid

Figure 6. An example of a Turbel. Profile of Totatlanika fine-silty, mixed, active, subgelic Typic Histoturbels. Totatlanika soils have moderately deep mixed alluvium over permafrost. Segregated ice seen in this photo starting around 70 cm are common in these soils.

Figure 7. An example of a Turbel. Profile of Windy Creek coarse-silty, mixed, active, subgelic Typic Histoturbels. Windy Creek soils have moderately deep mixed loess and alluvium over permafrost.

MLRA 229

Histic Cryaquepts

Taxonomic Classification

• Histic Cryaquepts

Setting

Depth class: very deep
Drainage class: poorly or very poorly drained
Saturated Hydraulic Conductivity: moderately high in the loamy surface materials
Landforms and positions: depressions on floodplains, terraces and fans
Parent material: organic matter over alluvium
Slope range: 0 to 2 percent
Elevation: 550 to 1,000 feet (167 to 304 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Histic Cryaquepts—on a level slope at 700 feet (213 m) elevation, under bog birch willow and sedge vegetation

Oi—0 to 7 inches (0 to 19 cm); dark yellowish brown (10YR 4/4) peat; many very fine to coarse roots; strongly acid (pH 5.5); clear wavy boundary.
Oe—7 to 11 inches (19 to 27 cm); black (7.5YR 2.5/1) mucky peat; many very fine to coarse roots; strongly acid (pH 5.5); clear wavy boundary.
Bg—11 to 23 inches (27 to 59 cm); light olive brown (2.5Y 4/3) and gray (2.5Y 5/1) very fine sandy loam; weak thin platy structure; friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; 10 percent medium brown (7.5Y 4/4) redoximorphic concentrations; moderately acid (pH 5.6); clear smooth boundary.
2Cg—23 to 72 inches (59 to 183 cm); brown (10YR 5/3) very gravelly sandy loam; massive; friable, nonsticky and nonplastic; few fine and medium roots; 40 percent gravel; 15 percent medium brown (7.5Y 4/4) redoximorphic concentrations and 10 percent fine and medium gray (2.5Y 5/2) redoximorphic depletions; moderately acid (pH 5.7).

Representative Pedon Location

Map unit: 29NE01—Nenana silt loam, 0 to 3 percent slopes
Location: UTM zone 6, 7122882 m N, 385782 m E; about 7 miles south west of Clear Air Force Base

Range in Characteristics

Organic layer thickness: 8 to 16 inches (20 to 41 cm)

O Horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 to 4; chroma moist from 1 to 4
Texture—peat, mucky peat or muck
Reaction—extremely acid to moderately acid

A horizon: (where present)
Color—hue of 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 or 2
Texture—silt loam, very fine sandy loam, silty clay loam or silty clay or with a mucky modifier
Reaction—moderately acid to neutral

Bg horizon:
Color—hue of 2.5Y or 10YR; value moist of 3 to 5; chroma moist from 2 to 4
Texture—silt loam, very fine sandy loam or silty clay loam
Reaction—strongly acid to neutral

2Cg horizon:
Color—hue of 2.5Y or 10YR; value moist of 3 to 5; chroma moist from 2 to 4
Texture—very fine sandy loam, gravelly or very gravelly very fine sandy loam or silt loam
Coarse fragments—0 to 50 percent
Reaction—strongly acid to neutral

Hydric Cryofibrists

Taxonomic Classification

• Hydric Cryofibrists

Setting

Depth class: very deep
Drainage class: very poorly drained
Saturated Hydraulic Conductivity: high in the organic layers, moderately high in the mineral layer
Landforms and positions: lake margins and floating bogs on floodplains
Parent material: organic matter over water over lacustrine deposits
Slope: 0 percent
Elevation: 300 to 350 feet (91 to 106 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)
Growing degree days—1,800 degree days

Representative Pedon Description

Hydric Cryofibrists—on a lake margin at 331 feet (101 m) elevation, under sedges and buckbean

Oi—0 to 29 inches (0 to 75 cm); dark brown (10YR 3/3) peat; many very fine to medium roots; slightly acid (pH 6.2); diffuse wavy boundary.

W—29 to 43 inches (75 to 110 cm); water.
Oi'—43 to 69 inches (110 to 175 cm); dark brown (10YR 2/2) peat; slightly acid (pH 6.2); clear wavy boundary.
Cg—69 to 72 inches (175 to 183 cm); gray (N 5/) fine sand; massive; friable nonsticky and nonplastic; slightly acid (pH 6.2).

Representative Pedon Location

Map unit: 29HY01— Hydric Cryofibrists–Liscum complex
Location: Greater Nenana Soil Survey Area, Alaska; about 13 miles north of Nenana; in the NE 1/4 of the SE 1/4, section 13 T. 2 S., R. 8 W., Fairbanks Meridian; UTM north 7181058 and UTM east 401951 zone 6.

Range in Characteristics

Surface organic layer thickness: 24 to 51 inches (60 to 130 cm)

O horizon:
Color—hue of 7.5 YR or 10YR; value moist of 2 to 4; chroma moist from 1 to 3
Texture—peat or mucky peat
Reaction—moderately acid to slightly acid

W horizon:
Water or water with organic fibers not coherent enough to sample

O' horizon:
Color—value moist of 2 or 3; chroma moist from 1 to 3
Texture—peat, mucky peat or muck
Reaction—moderately acid to slightly acid

Cg horizon:
Color—hue of 2.5Y, N or variegated; value moist of 2 to 6; chroma moist from 0 to 2
Texture—sand, sandy loam, silt loam, mucky sand, mucky sandy loam or mucky silt loam
Reaction—moderately acid to slightly acid

Terric Cryohemists

Taxonomic Classification

• Terric Cryohemists

Setting

Depth class: very deep
Drainage class: very poorly drained
Saturated Hydraulic Conductivity: very high in the organic surface materials; moderately high in the loamy substratum
Landforms and positions: depressions on floodplains and terraces
Parent material: organic matter over alluvium
Slope range: 0 to 1 percent

Elevation: 350 to 650 feet (100 to 200 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Terric Cryohemists—in a level depression at 426 feet (130 m) elevation, under sedge vegetation

Oi—0 to 3 inches (0 to 8 cm); dark reddish brown (5YR 3/2) peat; many very fine to medium roots; extremely acid (pH 4.2); clear wavy boundary.
Oe1—3 to 5 inches (8 to 13 cm); black (7.5YR 2.5/1) mucky peat; many very fine to medium roots; strongly acid (pH 5.2); clear wavy boundary.
Oe2—5 to 12 inches (13 to 31 cm); black (7.5YR 2.5/1) mucky peat; many very fine and fine and few medium roots; neutral (pH 6.6); clear wavy boundary.
Oa—12 to 22 inches (31 to 56 cm); black (7.5YR 2.5/1) gravelly muck; many very fine and fine and few medium roots; 20 percent gravel and 13 percent cobbles; neutral (pH 6.8); clear wavy boundary.
Bg—22 to 28 inches (56 to 70 cm); 40 percent olive brown (2.5Y 4/4) and 30 percent gray (2.5Y 5/1) extremely gravelly sandy loam; massive; very friable, nonsticky and nonplastic; common very fine and fine roots; 60 percent gravel and 2 percent cobbles; 15 percent dark yellowish brown (10YR 4/6) redoximorphic concentrations and 15 percent dark gray (5Y 4/1) redoximorphic depletions; neutral (pH 6.8); diffuse wavy boundary.
Cg—28 to 72 inches (70 to 183 cm); greenish gray (5GY 5/1) extremely gravelly silt loam; massive; friable, nonsticky and nonplastic; 60 percent gravel and 2 percent cobbles; neutral (pH 6.8).

Representative Pedon Location

Map unit: 29LS01—Liscum-Terric Cryohemists-Bolio complex
Location: Greater Nenana Soil Survey Area, Alaska; about 2 miles north of Anderson; in the SE 1/4 of the SW 1/4, section 22 T. 6 S., R. 8 W., Fairbanks Meridian; UTM north 7140699 and UTM east 396248 zone 6.

Range in Characteristics

Organic layer thickness: 16 to 51 inches (41 to 130 cm)

Oi horizon:
Color—hue of 5YR, 7.5YR or 10YR; value moist of 2 or 3; chroma moist from 1 to 3
Reaction—extremely acid to slightly acid

Oe horizon:
Color—hue of 5YR, 7.5YR or10YR; value moist of 2 or 3; chroma moist from 1 to 3
Texture—mucky peat or gravelly mucky peat
Coarse fragments—0 to 20 percent
Gravel content—0 to 15 percent
Cobble content—0 to 5 percent
Reaction—strongly acid to slightly acid

Oa horizon (where present):
Color—hue of 5YR, 7.5YR or10YR; value moist of 2 or 3; chroma moist from 1 to 3

Texture—muck or muck with gravelly, very gravelly or extremely gravelly modifiers
Coarse fragments—0 to 65 percent
Gravel content—0 to 50 percent
Cobble content—0 to 15 percent
Reaction—moderately acid to neutral

Bg horizon:
Color—hue of 10Y, 5Y, 2.5Y, 5GY, or N; value moist from 2 to 4; chroma moist from 0 to 4
Texture—silt loam, sandy loam, silty clay loam, often with mucky, gravelly, very gravelly or extremely gravelly modifiers
Coarse fragments—0 to 65 percent
Gravel content—0 to 60 percent
Cobble content—0 to 5 percent
Reaction—moderately acid to neutral

Cg horizon:
Color—hue of 10Y, 5Y, 2.5Y, 5GY, or N; value moist from 2 to 4; chroma moist from 0 to 2
Texture—silt loam, sandy loam, silty clay loam, often with gravelly, very gravelly or extremely gravelly modifiers
Coarse fragments—0 to 65 percent
Gravel content—0 to 60 percent
Cobble content—0 to 5 percent
Reaction—moderately acid to neutral

Typic Cryorthents

Taxonomic Classification

• Typic Cryorthents

Setting

Depth class: deep or very deep
Drainage class: moderately well drained or well drained
Saturated Hydraulic Conductivity: moderately high in the loamy surface horizons; high to very high in the coarse-textured substratum
Landforms and positions: floodplains with disturbed or altered land
Parent material: loamy fill over alluvium
Slope range: 0 to 70 percent
Elevation: 400 to 600 feet (122 to 183 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Typic Cryorthents—on a level floodplain at 450 feet (137 m) elevation, under grass lawn vegetation

A—0 to 3 inches (0 to 8 cm); very dark grayish brown (10YR 3/2) gravelly loamy very fine sand; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine roots; 25 percent gravel; neutral; clear smooth boundary.
C1—3 to 30 inches (8 to 76 cm); light olive brown (2.5Y 5/3) stratified gravelly silt loam, gravelly very fine sandy loam, and gravelly sand; weak fine platy structure; very friable, nonsticky and nonplastic; few very fine roots; 15 percent gravel; neutral; gradual smooth boundary.
2C2—30 to 63 inches (76 to 160 cm); light olive brown (2.5Y 5/3) stratified very fine sandy loam and silt loam; weak fine platy structure; friable, nonsticky and nonplastic; few fine faint gray (2.5Y 6/1) redoximorphic depletions; slightly alkaline; abrupt smooth boundary.
3C3—63 to 72 inches (160 to 183 cm); light brownish gray (2.5Y 6/2) sand; single grain; loose, nonsticky and nonplastic; slightly alkaline.

Representative Pedon Location

Map unit: 29CR01—Typic Cryorthents-Urban land complex
Location: UTM zone 6, 469107 E, 7189193 N; in the Greater Fairbanks Area, Alaska

Range in Characteristics

Depth to undisturbed alluvial material: 20 to more than 60 inches (51 to more than 152 cm)

A horizon:
Color—value moist from 2 to 4
Texture—very fine sandy loam, gravelly loamy very fine sand, and very fine sandy loam
Gravel content—0 to 35 percent

C horizons:
Color—hue of 2.5Y; value moist from 3 to 5; chroma moist from 2 to 4
Texture—stratified loamy very fine sand, very fine sandy loam, gravelly and very gravelly loamy sand, and sandy loam
Gravel content—0 to 40 percent
Reaction—neutral to slightly alkaline

2C horizons:
Color—value moist from 3 to 5; chroma moist from 2 to 4
Texture—silt loam and sand; stratified with textures including very fine sandy loam, loamy very fine sand, very fine sand, and fine sand
Gravel content—0 to 10 percent
Reaction—neutral to slightly alkaline

3C horizons (when present):
Color—value moist of 4 to 6; chroma moist of 2
Texture—sand, gravelly sand, very gravelly loamy fine sand, or very gravelly sand
Gravel content—0 to 50 percent
Reaction—neutral to slightly alkaline

Typic Haplocryepts

Taxonomic Classification

• Typic Haplocryepts

Setting

Depth class: very deep
Drainage class: well drained or somewhat excessively
Saturated hydraulic conductivity: very high
Landforms and positions: levees on floodplains
Parent material: sandy and gravelly alluvium
Slope range: 0 to 2 percent
Elevation: 400 to 600 feet (122 to 183 m)
Climatic data (average annual):
Precipitation—10 to 14 inches (25 to 36 cm)
Air temperature—24° to 28°F (-4° to -2°C)

Representative Pedon Description

Typic Haplocryepts sandy—on a level floodplain at 450 feet (137 m) elevation under aspen forest

Oe—0 to 2 inches (0 to 5 cm); very dark brown (10YR 2/2) moderately decomposed plant material; many very fine to coarse roots; very strongly acid (pH 5.0); abrupt smooth boundary.
A—2 to 4 inches (5 to 10 cm); dark brown (7.5YR 3/2) sandy loam; weak fine granular structure; very friable, nonsticky and nonplastic; common very fine and fine and few medium and coarse roots; very strongly acid (pH 5.0); clear smooth boundary
BC—4 to 9 inches (10 to 23 cm); yellowish brown (10YR 5/4) loamy sand; weak fine subangular blocky; very friable, nonsticky and nonplastic; strongly acid (pH 5.5); gradual smooth boundary.
C—9 to 72 inches (23 to 183 cm); gravelly coarse sand; single grained; loose, nonsticky and nonplastic; 20 percent gravel; strongly acid (pH 5.5).

Representative Pedon Location

Map unit: 29TY01—Typic Haplocryepts, sandy
Location: Greater Nenana Soil Survey Area, Alaska; about 4½ miles south of Nenana; in the SW 1/4 of the SW 1/4, section 6 T. 5 S., R. 7 W., Fairbanks Meridian; UTM north 7154577 and UTM east 402629, zone 6.

Range in Characteristics

O horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 to 3; chroma moist of 1 to 3
Texture—slightly or moderately decomposed plant material
Reaction—very strongly acid or strongly acid

A horizon:
Color—hue of 7.5YR or 10YR; value moist of 2 to 5; chroma moist of 1 to 3
Texture—sandy loam or silt loam

Gravel content—0 to 14 percent
Reaction— very strongly acid to moderately acid

BC horizon:
Color—hue of 7.5YR or 10YR; value moist of 4 or 5;
Texture—sandy loam, gravelly sandy loam, very gravelly sandy loam, loamy sand, gravelly loamy sand, or very gravelly loamy sand
Gravel content—0 to 40 percent
Reaction—strongly acid to moderately acid

C horizon:
Color—value moist from 3 to 5; chroma moist from 2 to 4
Texture—gravelly or very gravelly coarse sand
Gravel content—0 to 40 percent
Reaction— strongly acid to moderately acid

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff, 1999).

Soil formation is controlled by genetic and environmental factors of climate (including temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these five soil-forming factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

Parent Material

Parent material is the unconsolidated mineral and organic material in which soil forms. Climate, relief, and organisms all interact with parent material over time to chemically and physically alter the parent material, resulting in soil. Because of the cold climate and the relatively young age of parent materials in Interior Alaska the majority of soils are weakly developed. Often, key soil properties such as particle size and mineralogy still closely resemble that of the parent material. The primary parent materials in the Greater Nenana Area include alluvium, bedrock, eolian sand, loess, outwash, and organic matter.

Loess is the most common parent material in the survey area and overlies or is mixed in with many of the other parent material types. Winds blowing through the Tanana Valley pick up silt from the sparsely vegetated river bars and recent alluvial deposits along the braided river channels and re-deposit the silt downwind as a loess mantle over the ground surface. The loess ranges from Pleistocene to Holocene in age and the movement and deposition of loess continues today. Thickness of the loess mantle ranges from a few inches to more than 6 feet (1.8 m) thick. Thickness of the loess mantle throughout the survey area varies depending on distance from major rivers and also on what erosional processes have impacted the loess since it was originally deposited. Thinner loess deposits are present on hill and mountain ridges, shoulders, and backslopes where erosional processes have transported the loess downslope. The loess mantle is thicker on footslopes and toeslopes where it has been redeposited due to colluviation. Colluviation and alluviation result in thick loess materials in the valley fills. While many of the soils in the survey area contain permafrost, those formed in thick Pleistocene age loess deposits often contain massive ground ice.

Alluvium, or river deposits, is a dominant parent material in portions of the survey area. The near-surface alluvium usually consists of stratified fine sand and silt, and occasionally clay, which ranges from a few inches to more than 6 feet (1.8 m) in thickness. These materials are underlain by sands and gravels. The soils usually have numerous strata with different particle-sizes or texture and buried organic layers. These are the result of multiple flood deposition and erosion events caused by the rivers. The near-surface alluvium in the Greater Nenana Area is Holocene in age. Active erosion of alluvial soils and deposition of new material by floods still occurs

along many of the rivers. Most of the alluvial soils occur within the Interior Alaska Lowlands portion of the survey area.

Many soils in the Interior Alaska Highlands portion of the survey area form from bedrock that is weathering in place. These soils usually have a thin mantle of loess that overlies weathering bedrock. The loess mantle is thinnest on ridge crests and steep slopes due to erosion. The primary bedrock type in the survey area is of metamorphic origin (mostly schist) of Precambrian age (Péwé et al. 1966; Weber et al., 1978). The bedrock is highly fractured in some places but in other places it can be consolidated. Within the Greater Nenana Area there are few of the outcroppings of basalt or granite that are more common in other parts of the Interior Alaska Highlands.

Several large sand dunes are present on the flood plain just south of the community of Nenana. The soils on these dunes formed in eolian sand that was subsequently mantled with loess. The eolian sands are calcareous, are strongly to violently effervescent, and have a pH that ranges from 7.0 to 8.2.

The outwash occurs in relatively level, fan shaped areas at the base of the Alaska Range. It is derived primarily from glaciers that formed farther up in the Alaska Range outside of the survey area. Soils in these areas have a loess or coarse loamy alluvium mantle that ranges from a few centimeters to more than 6 feet (1.8 m) thick and are underlain by sandy, gravelly, and cobbly outwash. In many areas carbonates from the loess mantle have leached into the coarser outwash leaving crusts and pendulums on gravels and cobbles.

Since most of the mineral-based parent materials are mantled by loess or mixed with loess, the soil properties are influenced by both the loess mantle and the underlying parent material. The variation in thickness of the loess mantle and the type of underlying parent material result in the diverse physical and chemical properties, and the soil classification, of the various soils throughout the survey area.

Organic matter, if sufficiently thick, also occurs as a parent material in the survey area. Organic matter accumulates when decomposition by microbial activity cannot keep pace with the annual addition of dead plant material. Cold temperatures, acidic plant materials, and wet conditions all contribute to slower decomposition rates. Nearly all soils in the survey area have an organic surface layer, unless it has been removed by flooding or human activity. Where the soils are coldest and wettest, however, the organic layer becomes several feet thick and effectively serves as the parent material for the soil.

Climate

The Greater Nenana Soil Survey Area is located in the interior of Alaska. The climate is subarctic continental and characterized by long cold winters and short warm summers. Daily low temperatures below -20 °F (-29 °C) are common for extended periods most winters. The mean annual air temperature is about 26 °F (-3 °C). The cold climate of the interior contributes to low soil temperatures and weak soil development. Many of the soils in the survey area are classified as Inceptisols (weakly developed soils) and Entisols (very weakly developed soils). The cold climate also contributes to the occurrence of permafrost (perennially frozen ground). Extensive areas of permafrost soils or Gelisols occur in the area.

In addition to the effects of the regional climate, the soil climate is influenced by local site conditions. The soils on steep, south-facing slopes receive more solar radiation and have higher evapo-transpiration rates than soils on north-facing slopes or those in level areas. As a result, the south-facing soils are warmer and drier. Snow cover on south-facing slopes does not last as long in the spring and seasonal frost in the soils melts early in the summer. The cooler, wetter conditions present on the

north-facing slopes result in thicker organic layers at the soil surface. The thicker organic layers better insulate the soils resulting in both a longer duration of seasonal frost and presence of permafrost. Meltwater and precipitation will perch above the impermeable permafrost resulting in the formation of redoximorphic features.

The surface organic layer has a strong influence on the local soil climate. A thick organic surface layer dominated by moss controls the soil temperature. During the summer months, the upper part of the organic layer dries and it serves to insulate the soil, keeping the soil temperature low. During the winter the organic surface layer is usually wet and frozen, reducing its ability to insulate, and allowing cold to penetrate into and further cool the soil. Generally, the thicker the organic mat, the colder the soil and the greater likelihood that permafrost will be present near the soil surface. Also, the thicker the organic mat, the wetter the soil, as soil moisture is perched on long-lasting seasonal frost or permafrost. More information regarding the importance of the surface organic layer is discussed in the vegetation section which follows.

Biological and chemical weathering processes are inhibited by the cold climate. Microbial activity, as well as the oxidation, transformation, and translocation of minerals within the soil all occur at relatively slow rates. These processes are further slowed during the period when the soil is seasonally frozen. In permafrost-affected soils, there is little or no chemical or biological activity within the perennially frozen layers.

Cold climate conditions result in physical transformations and translocations within many soils. The freezing and thawing of water and the movement of soil moisture to freezing fronts within the soil result in the churning or cryoturbation of soil layers and the sorting of various particle-sizes.

For more information on the climate of the survey area, see the section “General Nature of the Survey Area.”

Vegetation

Plants affect the soil by extracting water and nutrients from the soil, adding organic matter to the soil, and influencing the soil climate.

Forests of aspen, birch, and white spruce with an understory of deciduous shrubs can be found where the soils are relatively well drained and lack permafrost or where the depth to permafrost is below the rooting depth. Nutrient cycling through these soils tends to be fairly rapid because these plants annually grow nutrient-rich leaves that are added to the soil in fall. Warm, dry conditions in the summer encourage decomposition, freeing nutrients for additional plant growth.

Nutrients are cycled slowly through soils that support dominantly evergreen vegetation, such as spruce, Labrador tea, and mosses. Mosses also form a thick organic layer, which keeps the soil cooler and further slows decomposition. Nutrients accumulate in the thick mat in a form that is unavailable to plants. The forests on these soils tend to be less productive.

The survey area has an extensive fire history. The fires are most often started by lightning strikes and occasionally by human activities. Fires change the vegetation and thereby alter the soil properties affected by vegetation. Forest fires disturb or destroy the organic mat reducing its insulation value and destroy most of the canopy, this raises the soil temperature and releases stored nutrients.

The increase in soil temperature has a profound affect on permafrost soils. Over time the permafrost will progressively lower in the soil or may thaw completely, changing the temperature and moisture characteristics and the weathering processes of the soil and allowing for successional vegetation to establish. As time progresses

and the forest matures through several stages, spruce and moss may eventually become established and the soil may develop permafrost again.

This cycle of fires and post-fire vegetative changes is common throughout much of interior Alaska. Large areas of permafrost soils cycle between a poorly drained, shallow permafrost state and a well drained, thawed condition. Local site conditions and soil properties strongly influence the rate at which this cycle occurs and also whether the cycle completes or is interrupted or stopped.

Evidence for fire-induced cycles can be seen in soils on similar landscapes and similar landscape positions where the only difference is the vegetative community and fire history. Soils under mature spruce forests typically have a thick organic mat, shallow permafrost, and a water table perched above the permafrost. Soils elsewhere on similar landforms that have been impacted by fire often have only a thin organic layer, no permafrost, and are well drained.

If the soil is cultivated or the moss/organic layer is periodically disturbed, or site conditions are right, a soil can remain in a well drained, permafrost-free state indefinitely.

Topography and Relief

Topography and relief affect soil formation through their affect on soil climate, aspect, parent material, runoff, and drainage. Soils on convex landforms tend to shed water while soils on concave landforms accumulate and store water. Soils on convex landforms are more subject to erosion while soils on concave landforms are subject to accumulation of eroded materials.

Landforms

Floodplains

Floodplains are nearly level landforms that border the active river channels, and are subject to flooding during episodes of high stream flow. Floodplains are the youngest landforms in the survey area. Floodplain soils are weakly developed due to the young age of the parent material and periodic episodes of erosion and deposition, which slows or interrupts soil development.

The floodplain deposits in the Greater Nenana Area consist of varying thicknesses of stratified sandy, silty, and clayey alluvium over gravelly materials. The flood plains are marked with other features such as oxbows, backswamps, and abandoned channels. Soils associated with these features are typically wet because of permafrost or high regional water tables.

Hills

Elevation of the hills in the survey area range from about 450 to 2,006 feet (136 to 610 m). Slopes are often long and steep and slope aspect has a considerable effect on the soil climate and vegetation. The soils on steep south-facing slopes are warmer than the soils on north-facing slopes. Because of internal drainage and runoff due to slope these south-facing soils do not become wet enough to produce redoximorphic features. In contrast, the soils on steep north-facing slopes are cold and usually have thick organic layers and permafrost. Water is perched above this impermeable layer resulting in gley, depletions and concentrations.

Topography also affects the parent material in the bedrock uplands. Erosion and the down slope movement of soil material result in a thicker layer of wind-deposited

and slope-transported silty material on lower lying slopes. Large bodies of ground ice are present in the thick silty deposits on lower slopes. Periglacial features such as pingos, and thermokarst pits occur on these lower slopes.

Upland Valleys

These valleys are typically gently sloping or level and are dominated by permafrost-affected soils. Silty material washed in from the surrounding slopes can be many feet thick.

Large bodies of ground ice are present in these thick, silty deposits on valley bottoms. Periglacial features such as pingos, thermokarst pits, ice wedge polygons, and beaded streams dominate these upland valleys.

Fans

The fans that make up much of the southern portion of the survey area are typically gently sloping or level. The soils on the fans are formed in mantles of loess or alluvium overlying outwash. Soils are wet at the base of the fans due primarily to permafrost and runoff. Soils in the middle portion tend to be moderately to well drained because of the thickness of the coarse substratum and very deep water table.

Mountains

The Interior Mountains portion of the survey area includes the foothills of the Alaska Range and is characterized by low mountains, fans, and terraces. These are dissected in areas by streams forming steep-walled valleys. Elevations range from 1,000 to 2,540 feet (305 to 775 m).

Time

Time is an important factor in soil development. It is required for the transformation of parent material into a soil that has genetically related layers or horizons. The length of time required to form these horizons depends upon the other four soil forming factors. The cool climate and low precipitation of interior Alaska slows the soil forming process, thus, it takes much longer for the soil to develop.

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.

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

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

Federal Register. February 24, 1995. Hydric soils of the United States.

Jenny, Hans. 1941. Factors of Soil Formation.

Hurt, G.W., P.M. Whited, and R.F. Pringle, editors. Version 4.0, 1998. Field Indicators of Hydric Soils in the United States.

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

Péwé, T.L., C. Wahrhaftig, and F. Weber. 1966. Geologic map of the Fairbanks quadrangle, Alaska. U.S. Geological Survey, Miscellaneous Geological Investigations Map 1-455, scale 1:250,000.

Soil Survey Division Staff. 1993. Soil Survey Manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 2006. Keys to Soil Taxonomy. 10th 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.

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

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

Weber, F.R., H.L. Foster, T.E.C. Keith, and C. Dusel-Bacon. 1978. Preliminary geologic map of the Big Delta quadrangle, Alaska. U.S. Geological Survey Open File Report 78-529A, scale 1:250,000.

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.

Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

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.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 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.

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.

Boulders. Rock fragments larger than 2 feet (61 cm) in diameter.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 cm) along the longest axis. A single piece is called a channer.

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.

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 cm) 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 cm) 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, 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.

Congeliturbate. Soil material disturbed by frost action.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 cm) and 40 or 80 inches (102 or 203 cm).

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cryoturbation (frost churning). The mixing of the soil resulting in irregular or broken horizons, organic matter accumulation on the permafrost table, and oriented rock fragments due to frost action.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).

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.

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.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters (7 ft) are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

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 (7 ft) 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.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Esker. A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

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.

Fine textured soil. Sandy clay, silty clay, or clay.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 cm) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (305 m) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glacial drift. Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.

Glacial outwash. Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.

Glacial till. Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 mm to 7.6 cm) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 cm) in diameter.

Ground ice. Term used to denote bodies of more or less clear ice in permanently frozen ground. Ground ice may occur as segregated ice, disseminated ice, and massive ice.

Ground water. Water filling all the unblocked pores of the material below the water table.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

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.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet (305 m) 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.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

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.

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.

Kame. An irregular, short ridge or hill of stratified glacial drift.

Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

K_{sat}. Saturated hydraulic conductivity. 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 is often expressed as "permeability." The following K_{sat} rates and classes are used in this survey:

Rate	K_{sat} Class
in/hr	
< 0.0015	Very Low
0.06	Low
0.2	Mod. Low
0.6	Mod. High
2.0	
6.0	High
20.0	Very High
100	

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Fine grained material, dominantly of silt-sized particles, deposited by wind.

Low strength. The soil is not strong enough to support loads.

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.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

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.

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 in); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 in); and *coarse,* more than 15 millimeters (about 0.6 in).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet (305 m) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

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 water flow is predominantly divergent.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

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.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square m to 10 square m), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for two or more years.

Permeability. See K_{sat} (Saturated hydraulic conductivity).

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

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 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.

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.

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.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed

from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 percent
Gently sloping	2 to 4 percent
Moderately sloping	4 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steep	More than 45 percent

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5

Medium sand.....0.5 to 0.25
Fine sand .....0.25 to 0.10
Very fine sand .....0.10 to 0.05
Silt .....0.05 to 0.002
Clay ..... less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 cm). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thermokarst. Subsidence of the ground caused by melting of ground ice.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

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.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Tussock. A small mound, typically 0.5 to 1 foot (15 to 30 cm) high, consisting of densely packed dead parts of sedges or grasses.

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.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1. Temperature data at Nenana, Alaska

Station:(506309) NENANA MUNICIPAL AP From Year=1949 To Year=2001															
	Monthly Averages			Daily Extremes				Monthly Extremes				Max. Temp.		Min. Temp.	
	Max.	Min.	Mean	High	Date	Low	Date	Highest Mean	Year	Lowest Mean	Year	>= 90 F	<= 32 F	<= 32 F	<= 0 F
	F	F	F	F	dd/yyyy or yyyymmdd	F	dd/yyyy or yyyymmdd	F	-	F	-	# Days	# Days	# Days	# Days
Jan.	-0.4	-19.0	-9.7	45	25/1991	-67	25/1971	11.8	1985	-29.1	1971	0.0	29.2	30.4	24.9
Feb.	7.3	-14.9	-3.8	45	27/1969	-65	05/1968	13.2	1997	-23.4	1990	0.0	25.6	27.5	21.1
March	21.5	-5.7	7.9	55	28/1954	-59	01/1956	28.1	1965	-9.6	1959	0.0	22.8	30.1	18.6
April	39.4	16.0	27.4	71	27/1958	-33	02/1960	38.0	1995	17.0	1985	0.0	7.9	27.7	4.2
May	58.0	33.9	45.9	87	24/1960	2	02/1962	51.8	1995	38.1	1964	0.0	0.3	12.6	0.0
June	70.1	44.8	57.4	94	21/1991	24	09/1970	60.5	1971	51.1	1963	0.1	0.0	0.6	0.0
July	70.9	47.7	59.3	91	23/1955	31	22/1965	63.2	1990	55.2	1959	0.1	0.0	0.1	0.0
Aug.	65.1	43.4	54.2	88	12/1990	22	14/1969	58.7	1972	48.7	1969	0.0	0.0	2.5	0.0
Sept.	52.9	33.1	43.0	77	05/1957	-5	24/1992	50.3	1995	30.7	1992	0.0	0.6	13.8	0.1
Oct.	30.5	14.9	22.7	64	08/1969	-35	31/1975	31.4	1987	9.6	1996	0.0	17.6	29.3	4.6
Nov.	10.8	-5.8	2.5	54	23/1952	-52	09/1989	17.1	1952	-11.8	1989	0.0	27.8	29.6	18.4
Dec.	1.5	-16.6	-7.3	50	19/1985	-69	28/1961	11.8	1960	-29.8	1956	0.0	29.4	30.2	24.2
Annual	35.6	14.3	25.0	94	19910621	-69	19611228	27.6	1957	19.7	1956	0.2	161.2	234.5	116.0
Winter	2.8	-16.8	-6.9	50	19851219	-69	19611228	2.5	1987	-16.9	1969	0.0	84.2	88.2	70.2
Spring	39.6	14.7	27.1	87	19600524	-59	19560301	33.9	1965	19.7	1959	0.0	31.0	70.4	22.8
Summer	68.7	45.3	57.0	94	19910621	22	19690814	60.1	1972	53.9	1963	0.2	0.0	3.2	0.0
Fall	31.4	14.1	22.7	77	19570905	-52	19891109	28.5	1952	16.7	1996	0.0	46.0	72.7	23.1

Table updated on Jul 28, 2006
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons
Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May
Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Table 2. Precipitation data at Nenana, Alaska

Station:(506309) NENANA MUNICIPAL AP From Year=1949 To Year=2001														
	Precipitation											Total Snowfall		
	Mean	High	Year	Low	Year	1 Day Max.		>= 0.01 in.	>= 0.10 in.	>= 0.50 in.	>= 1.00 in.	Mean	High	Year
	in.	in.	-	in.	-	in.	dd/yyyy or yyyymmdd	# Days	# Days	# Days	# Days	in.	in.	-
Jan.	0.54	2.73	1957	0.00	1997	0.47	20/1957	6	2	0	0	7.7	28.0	1993
Feb.	0.46	2.01	1957	0.00	1976	0.87	18/1996	5	2	0	0	6.1	20.9	1957
March	0.31	2.48	1991	0.00	1989	1.11	25/1991	4	1	0	0	4.2	24.5	1967
April	0.19	0.87	1961	0.00	1969	0.49	30/1963	3	1	0	0	2.2	10.8	1961
May	0.51	1.76	1955	0.00	1987	0.72	26/1955	5	2	0	0	0.2	2.0	1992
June	1.37	3.62	1965	0.00	1998	1.50	25/1989	8	4	1	0	0.0	0.0	1950
July	2.17	4.74	1984	0.32	1989	1.30	24/1967	10	6	1	0	0.0	0.0	1950
Aug.	2.22	8.26	1967	0.66	1957	3.04	12/1967	11	6	1	0	0.0	0.0	1950
Sept.	1.14	3.73	1960	0.06	1968	1.57	16/1954	8	3	0	0	0.8	12.0	1992
Oct.	0.67	1.82	1996	0.00	2000	0.82	17/1988	8	2	0	0	6.7	17.2	1961
Nov.	0.65	2.23	1970	0.00	1983	0.65	22/1992	7	2	0	0	9.3	37.0	1990
Dec.	0.54	1.58	1970	0.00	1952	0.60	29/1967	7	2	0	0	7.8	26.0	1992
Annual	10.76	19.74	1967	7.55	1958	3.04	19670812	82	32	4	1	45.0	104.0	1992
Winter	1.53	5.45	1957	0.03	1976	0.87	19960218	18	5	0	0	21.6	56.0	1993
Spring	1.01	2.85	1991	0.18	1997	1.11	19910325	12	3	0	0	6.6	33.8	1967
Summer	5.76	13.99	1967	1.92	1957	3.04	19670812	29	16	3	0	0.0	0.0	1950
Fall	2.46	5.68	1993	0.69	1987	1.57	19540916	23	8	1	0	16.8	47.0	1992

Table updated on Jul 28, 2006
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons
Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May
Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Table 3. Freeze Thaw Dates

Fall 'Freeze' Probabilities (Jul. 31 - Dec. 31)											
Temp F	Earliest	10%	20%	30%	40%	50%	60%	70%	80%	90%	Latest
36.5	07/31	08/04	08/06	08/08	08/09	08/12	08/16	08/18	08/21	08/31	09/07
32.5	07/31	08/09	08/12	08/17	08/24	08/27	08/28	08/31	09/05	09/08	09/23
28.5	08/08	08/14	08/27	08/29	09/01	09/05	09/08	09/09	09/12	09/15	09/25
24.5	08/14	08/30	09/02	09/07	09/11	09/14	09/15	09/19	09/25	09/30	10/02
20.5	09/07	09/15	09/18	09/21	09/22	09/28	09/30	10/05	10/07	10/08	10/15

Earliest—Earliest date when a minimum temperature below the threshold occurred. 07/31 means the minimum temperature can go below the threshold temperature any day during the July 31 to Dec. 31 period. xx%—Percent probability that a minimum temperature below the threshold will occur on or before the given date. Latest—Latest date when a minimum temperature below the threshold occurred.

Length of 'Freeze Free' Season Probabilities											
Temp F	Shortest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Longest
36.5	6	10	22	31	45	54	57	61	66	77	104
32.5	6	39	67	80	82	87	91	95	100	106	129
28.5	74	83	91	98	103	113	114	117	119	123	131
24.5	91	111	117	120	126	128	130	139	148	152	159
20.5	122	132	144	145	152	154	155	157	159	164	173

Shortest—Least number of consecutive days recorded with minimum temperature above threshold. xx%—Percent probability that a consecutive number of days will occur with the minimum temperature not below the threshold. Longest—Greatest number of consecutive days recorded with minimum temperature above threshold. Note: All periods include August 1.

Table 4. Growing Degree Days

Station:(506309) NENANA MUNICIPAL AP
From Year=1949 To Year=2001
Growing Degree Days for Selected Base Temperature (F)

Base	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
40 M	0	0	0	13	212	522	599	442	148	7	0	0	1941
40 S	0	0	0	13	225	747	1345	1787	1935	1941	1941	1941	1941
45 M	0	0	0	3	102	373	444	292	64	2	0	0	1278
45 S	0	0	0	3	105	477	921	1213	1276	1278	1278	1278	1278
50 M	0	0	0	1	35	229	290	157	19	0	0	0	731
50 S	0	0	0	1	35	264	554	712	730	731	731	731	731
55 M	0	0	0	0	9	108	150	60	4	0	0	0	331
55 S	0	0	0	0	9	117	266	327	331	331	331	331	331
60 M	0	0	0	0	2	35	49	15	1	0	0	0	102
60 S	0	0	0	0	2	37	86	101	102	102	102	102	102
Corn Growing Degree Days													
50 M	0	0	0	13	142	308	339	240	84	3	0	0	1130
50 S	0	0	0	13	155	463	802	1042	1126	1130	1130	1130	1130

M = Monthly Data S - Running sum of monthly data.

Growing Degree Day units are computed as the difference between the daily average temperature and the base temperature. (Daily Ave. Temp. - Base Temp.) One unit is accumulated for each degree Fahrenheit the average temperature is above the base temperature. Negative numbers are discarded. Example: If the days high temperature was 95 and the low temperature was 51, the base 60 heating degree day units is ((95 + 51) / 2) - 60 = 13. This is done for each day of the month and summed.

Corn Growing Degree Day units have the limitations that the maximum daily temperatures greater than 86 F are set to 86 F and minimums less than 50 F are set to 50 F.

Months with 5 or more missing days are not considered; Years with 1 or more missing months are not considered

Table 5. Acreage and Proportionate Extent of the Soils

(An * under "Percent" indicates less than 0.1 percent)

Map symbol	Map unit name	Acres	Percent
28DY01	Dystrogelepts-Gelorthents complex, 10 to 30 percent slopes	1,901	0.4
28HA01	Haplocryepts, 45 to 70 percent slopes	1,121	0.2
28HA02	Haplocryepts, 15 to 45 percent slopes	3,124	0.7
29BL01	Bolio peat	10,775	2.3
29CR01	Typic Cryorthents-Urban land complex	978	0.2
29DN01	Donnelly silt loam, 0 to 3 percent slopes	5,555	1.2
29DN02	Donnelly silt loam, 15 to 60 percent slopes	635	0.1
29DN04	Donnelly-Lupine complex	4,568	1.0
29DU01	Dumps, landfill	67	*
29EL01	Eielson-Piledriver complex, occasionally flooded	18,725	4.0
29EL02	Eielson-Tanana complex	15,954	3.4
29EL03	Eielson very fine sandy loam	15,981	3.5
29FA01	Faa silt loam, 3 to 30 percent slopes	453	*
29FU01	Fubar-Piledriver complex, occasionally flooded	1,802	0.4
29GE01	Gerstle-Moosehead complex	9,490	2.1
29GE03	Donnelly-Gerstle-Moosehead complex, 1 to 15 percent slopes	4,765	1.0
29HY01	Hydric Cryofibrists-Liscum complex	8,307	1.8
29LS01	Liscum-Terric Cryohemists-Bolio complex	11,201	2.4
29LU01	Lupine very fine sandy loam	11,642	2.5
29MS01	Mosquito peat	3,892	0.8
29NE01	Nenana silt loam, 0 to 3 percent slopes	2,353	0.5
29NE02	Nenana-Sawmill Creek complex	4,037	0.9
29NN01	Noonku very fine sandy loam	3,255	0.7
29PE01	Peede silt loam, ponded	91	*
29PL01	Eielson-Piledriver complex	8,019	1.7
29PT01	Pits, gravel	219	*
29SA01	Sawmill Creek silt loam	4,542	1.0
29TA01	Tatlanika-Totatlanika complex	17,843	3.9
29TC01	Tanacross peat	13,520	2.9
29TE01	Typic Cryaquents, Liscum and Terric Cryohemists soils, floodplains	77	*
29TN01	Tanana silt loam	7,535	1.6
29TN02	Tanana-Mosquito complex	1,205	0.3
29TT01	Totatlanika-Tatlanika complex	6,390	1.4
29TY01	Typic Haplocryepts, sandy	1,628	0.4
29WI01	Windy Creek-Browne complex	14,323	3.1
31BR01	Brigadier-Ester complex, 15 to 45 percent slopes	3,914	0.8
31BR02	Brigadier-Ester complex, 45 to 70 percent slopes	475	0.1
31BR03	Brigadier-Manchu complex, 3 to 7 percent slopes	663	0.1
31BR04	Brigadier-Manchu complex, 7 to 12 percent slopes	1,392	0.3
31BR05	Brigadier-Manchu complex, 12 to 20 percent slopes	1,662	0.4
31BR06	Brigadier-Manchu complex, 20 to 30 percent slopes	2,174	0.5
31BR07	Brigadier-Manchu complex, 30 to 45 percent slopes	1,081	0.2
31CH01	Chatanika silt loam, 0 to 3 percent slopes	6,865	1.5
31CH02	Chatanika silt loam, 3 to 7 percent slopes	14,339	3.1
31CH03	Chatanika silt loam, 7 to 12 percent slopes	1,800	0.4
31CH04	Chatanika-Goldstream complex, 0 to 5 percent slopes	12,468	2.7
31DU01	Dumps, Mine Tailings	146	*
31ES01	Ester peat, 20 to 45 percent slopes	4,551	1.0
31ES02	Ester peat, 45 to 70 percent slopes	223	*
31FA01	Fairbanks silt loam, 3 to 7 percent slopes	1,376	0.3
31FA02	Fairbanks silt loam, 7 to 12 percent slopes	7,065	1.5
31FA03	Fairbanks silt loam, 12 to 20 percent slopes	18,547	4.0
31FA04	Fairbanks silt loam, 20 to 30 percent slopes	12,263	2.6
31FA05	Fairbanks silt loam, 30 to 45 percent slopes	1,618	0.3
31FA06	Fairbanks silt loam, 45 to 70 percent slopes	287	*
31FA07	Fairbanks silt loams, gullied, 7 to 70 percent slopes	5,474	1.2

Table 5. Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Map unit name	Acres	Percent
31FA08	Fairbanks-Steese complex, 3 to 7 percent slopes	393	*
31FA09	Fairbanks-Steese complex, 7 to 12 percent slopes	676	0.1
31FA10	Fairbanks-Steese complex, 12 to 20 percent slopes	2,020	0.4
31FA11	Fairbanks-Steese complex, 20 to 30 percent slopes	2,741	0.6
31FA12	Fairbanks-Steese complex, 30 to 45 percent slopes	811	0.2
31GD01	Goldstream peat, 0 to 3 percent	5,195	1.1
31GD02	Goldstream peat, 3 to 7 percent slopes	1,593	0.3
31GD03	Goldstream-Histels complex	5,053	1.1
31GL01	Gilmore silt loam, 3 to 7 percent slopes	1,290	0.3
31GL02	Gilmore silt loam, 7 to 12 percent slopes	751	0.2
31GL03	Gilmore silt loam, 12 to 20 percent slopes	1,649	0.4
31GL04	Gilmore silt loam, 20 to 30 percent slopes	2,801	0.6
31GL05	Gilmore silt loam, 30 to 45 percent slopes	2,542	0.5
31GL06	Gilmore silt loam, 45 to 70 percent slopes	241	*
31HA01	Happy silt loam, 1 to 7 percent slopes	4,124	0.9
31HI01	Histels	3,290	0.7
31MN01	Minto silt loam, 0 to 3 percent slopes	277	*
31MN02	Minto silt loam, 3 to 7 percent slopes	9,815	2.1
31MN03	Minto silt loam, 7 to 12 percent	16,642	3.6
31MN04	Minto silt loam, 12 to 20 percent slopes	1,793	0.4
31MN05	Minto-Chatanika complex, 0 to 3 percent slopes	1,864	0.4
31MN06	Minto-Chatanika complex, 3 to 7 percent slopes	19,066	4.1
31MN07	Minto-Chatanika complex, 7 to 12 percent slopes	4,169	0.9
31MN08	Minto-Chatanika complex, 12 to 20 percent slopes	234	*
31PT01	Pits, quarry	40	*
31RS01	Rosie silt loam, 15 to 90 percent slopes	780	0.2
31SA01	Saulich peat, 3 to 7 percent slopes	2,365	0.5
31SA02	Saulich peat, 7 to 12 percent slopes	291	*
31SA03	Saulich peat,12 to 20 percent slopes	417	*
31SA04	Saulich peat, 20 to 30 percent slopes	116	*
31SA05	Saulich-Minto complex, 3 to 7 percent slopes	2,218	0.5
31SA06	Saulich-Minto complex, 7 to 12 percent slopes	1,620	0.4
31SA07	Saulich-Minto complex, 12 to 20 percent slopes	170	*
31ST01	Steese silt loam, 3 to 7 percent slopes	285	*
31ST02	Steese silt loam, 7 to 12 percent slopes	1,721	0.4
31ST03	Steese silt loam, 12 to 20 percent slopes	7,215	1.6
31ST04	Steese silt loam, 20 to 30 percent slopes	21,139	4.6
31ST05	Steese silt loam, 30 to 45 percent slopes	8,024	1.7
31ST06	Steese silt loam, 45 to 70 percent slopes	333	*
31ST07	Steese-Gilmore complex, 7 to 12 percent slopes	608	0.1
31ST08	Steese-Gilmore complex, 12 to 20 percent slopes	486	0.1
31ST09	Steese-Gilmore complex, 20 to 30 percent slopes	1,440	0.3
31ST10	Steese-Gilmore complex, 30 to 45 percent slopes	792	0.2
31TE01	Typic Cryaquents, Histic Cryaquepts and Terric Cryofibrists soils, hills	80	*
31TG01	Togotthele silt loam, 20 to 90 percent slopes	403	*
W	Water	23,936	5.2
	Total	477,865	103.3

Table 6. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
28DY01:						
Dystrogelepts	0-2	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-4	Gravelly fine sandy loam, very gravelly fine sandy loam, silt loam, fine sandy loam	SM, ML	A-2, A-4	5-40	NP-5
	4-8	Gravelly fine sandy loam, very gravelly fine sandy loam, silt loam, fine sandy loam	GM, ML	A-4	5-35	NP-5
	8-23	Gravelly silt loam, very gravelly sandy loam, gravelly sandy loam	ML, GM	A-1, A-4	0-33	NP-6
	23-72	Gravelly silt loam, very gravelly sandy loam, gravelly sandy loam	ML, GM	A-1, A-4	0-29	NP-6
Gelorthents	0-6	Extremely gravelly fine sandy loam, very gravelly fine sandy loam	SM	A-2	0-36	NP-5
	6-72	Extremely gravelly fine sandy loam, very gravelly fine sandy loam	SM	A-2	0-27	NP-6
28HA01:						
Haplocryepts	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-6	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	6-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, very gravelly loamy sand, very gravelly sandy loam	SM	A-2	0-27	NP-6
28HA02:						
Haplocryepts	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-6	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	6-31	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	31-72	Gravelly loamy sand, gravelly sandy loam, very gravelly loamy sand, very gravelly sandy loam	SM	A-2	0-27	NP-6
29BL01:						
Bolio	0-3	Peat	PT	A-8	---	---
	3-16	Mucky peat	PT	A-8	---	---
	16-72	Permanently frozen material			---	---
29CR01:						
Typic Cryorthents, fill	0-30	Stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	CL-ML, SP-SM, SM	A-1, A-4, A-2	0-15	NP-5
	30-63	Stratified fine sand to silt loam	SM, ML	A-4	25-35	NP-10
	63-72	Extremely gravelly sand, very gravelly sand	GP, SP-SM	A-1	0-0	NP
Urban land	---	---	---	---	---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29DN01:						
Donnelly	0-2	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-6	Very gravelly silt loam, silt loam, gravelly silt loam	SM, ML	A-4	25-35	NP-10
	6-12	Gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly silt loam, extremely gravelly sandy loam, gravelly silt loam	SM, GM	A-2, A-4	25-35	NP-10
	12-72	Gravelly loamy sand, gravelly sand, very gravelly loamy sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly sand	SW-SM, GW, GP	A-1	0-0	NP
29DN02:						
Donnelly	0-2	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-6	Very gravelly silt loam, silt loam, gravelly silt loam	SM, ML	A-4	25-35	NP-10
	6-12	Gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly silt loam, extremely gravelly sandy loam, gravelly silt loam	SM, GM	A-2, A-4	25-35	NP-10
	12-72	Gravelly loamy sand, gravelly sand, very gravelly loamy sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly sand	SW-SM, GW, GP	A-1	0-0	NP
29DN04:						
Donnelly	0-2	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-6	Very gravelly silt loam, silt loam, gravelly silt loam	SM, ML	A-4	25-35	NP-10
	6-12	Gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly silt loam, extremely gravelly sandy loam, gravelly silt loam	SM, GM	A-2, A-4	25-35	NP-10
	12-72	Gravelly loamy sand, gravelly sand, very gravelly loamy sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly sand	SW-SM, GW, GP	A-1	0-0	NP
Lupine	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-6	Loam, very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	6-16	Very fine sandy loam	ML	A-4	25-35	NP-5
	16-20	Fine sandy loam, very fine sandy loam	SM	A-4	10-30	NP-2
	20-72	Extremely gravelly sand, very gravelly sand	SW-SM	A-1-a	0-0	NP
29DU01:						
Dumps, landfill	---	---	---	---	---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29EL01:						
Eielson, occasional flooding	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Piledriver, occasional flooding	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
29EL02:						
Eielson, rare flooding	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Tanana	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
29EL03:						
Eielson, rare flooding	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
29FA01:						
Faa--	0-3	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	0-0	NP
	3-6	Silt, silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	30-40	NP-10
	12-39	Silt loam, very fine sandy loam, fine sandy loam	ML	A-4	18-29	2-6
	39-72	Loamy sand, fine sand	SP-SM	A-3	0-14	NP
29FU01:						
Fubar, occasional flooding	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-10	Very fine sandy loam, stratified fine sand to silt loam	SM, ML	A-1, A-4	20-30	NP-5
	10-72	Fine sand, extremely gravelly sand, sand, very gravelly coarse sand	GW, SW-SM	A-1	0-0	NP
Piledriver, occasional flooding	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29GE01:						
Moosehead	0-5	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	5-7	Very fine sandy loam, silt loam	MH, ML	A-4, A-5	30-60	NP-10
	7-20	Stratified loamy fine sand to silt loam, very fine sandy loam	CL-ML, ML	A-4	0-15	NP-5
	20-26	Fine sandy loam, very fine sandy loam, stratified fine sandy loam to very fine sandy loam	SC-SM, SM	A-2-4, A-4	15-25	NP-10
	26-72	Gravelly sandy loam, very gravelly sand, very gravelly sandy loam, extremely gravelly sand, gravelly sand	GP-GM, GW, GP	A-1	0-0	NP
Gerstle	0-4	Highly decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	4-10	Silt loam, very fine sandy loam	ML	A-4	30-50	NP-10
	10-20	Fine sandy loam, very fine sandy loam	ML	A-4	30-50	NP-10
	20-30	Fine sandy loam, stratified loamy fine sand to silt loam	SM	A-4	15-30	NP-5
	30-51	Loamy sand, sandy loam, stratified sand to fine sandy loam	SM	A-4	0-0	NP
	51-72	Fine sandy loam, loamy sand, sand	SM	A-2-4	0-0	NP
29GE03:						
Donnelly	0-2	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-6	Very gravelly silt loam, silt loam, gravelly silt loam	SM, ML	A-4	25-35	NP-10
	6-12	Gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly silt loam, extremely gravelly sandy loam, gravelly silt loam	SM, GM	A-2, A-4	25-35	NP-10
	12-72	Gravelly loamy sand, gravelly sand, very gravelly loamy sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly sand	SW-SM, GW, GP	A-1	0-0	NP
Gerstle	0-4	Highly decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	4-10	Silt loam, very fine sandy loam	ML	A-4	30-50	NP-10
	10-20	Fine sandy loam, very fine sandy loam	ML	A-4	30-50	NP-10
	20-30	Fine sandy loam, stratified loamy fine sand to silt loam	SM	A-4	15-30	NP-5
	30-51	Loamy sand, sandy loam, stratified sand to fine sandy loam	SM	A-4	0-0	NP
	51-72	Fine sandy loam, loamy sand, sand	SM	A-2-4	0-0	NP
Moosehead	0-5	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	5-7	Very fine sandy loam, silt loam	MH, ML	A-4, A-5	30-60	NP-10
	7-20	Stratified loamy fine sand to silt loam, very fine sandy loam	CL-ML, ML	A-4	0-15	NP-5
	20-26	Fine sandy loam, very fine sandy loam, stratified fine sandy loam to very fine sandy loam	SC-SM, SM	A-2-4, A-4	15-25	NP-10
	26-72	Gravelly sandy loam, very gravelly sand, very gravelly sandy loam, extremely gravelly sand, gravelly sand	GP-GM, GW, GP	A-1	0-0	NP

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29HY01:						
Hydric Cryofibrists	0-30	Mucky peat, peat	PT	A-8	---	---
	30-43	Water			---	---
	43-69	Mucky peat, muck, peat	PT	A-8	---	---
	69-72	Mucky sand, mucky silt loam, mucky sandy loam, silt loam, sandy loam, sand	SM, ML	A-4	0-48	NP-6
Liscum	0-3	Peat	PT	A-8	---	---
	3-11	Muck	PT	A-8	---	---
	11-15	Mucky silt loam	OL, ML	A-5, A-4	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL-ML, CL, ML	A-4	0-30	NP-10
	70-72	Gravelly sandy loam, very gravelly sandy loam, fine sandy loam	SC-SM	A-2	0-15	NP-5
29LS01:						
Terric Cryohemists	0-3	Mucky peat, peat	PT	A-8	---	---
	3-12	Mucky peat, gravelly mucky peat	PT	A-8	---	---
	12-22	Very gravelly muck, extremely gravelly muck, muck, gravelly muck	PT	A-8	---	---
	22-72	Gravelly silt loam, gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly sandy loam, mucky silty clay loam, mucky silt loam, mucky sandy loam, silty clay loam, silt loam, sandy loam, extremely gravelly silt loam	SM, GP	A-4, A-5, A-7 5	0-68	NP-23
Liscum	0-3	Peat	PT	A-8	---	---
	3-11	Muck	PT	A-8	---	---
	11-15	Mucky silt loam	OL, ML	A-5, A-4	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL-ML, CL, ML	A-4	0-30	NP-10
	70-72	Gravelly sandy loam, very gravelly sandy loam, fine sandy loam	SC-SM	A-2	0-15	NP-5
Bolio	0-3	Peat	PT	A-8	---	---
	3-16	Mucky peat	PT	A-8	---	---
	16-72	Permanently frozen material			---	---
29LU01:						
Lupine	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-6	Loam, very fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	6-16	Very fine sandy loam	ML	A-4	25-35	NP-5
	16-20	Fine sandy loam, very fine sandy loam	SM	A-4	10-30	NP-2
	20-72	Extremely gravelly sand, very gravelly sand	SW-SM	A-1-a	0-0	NP
29MS01:						
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29NE01:						
Nenana	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-6	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
	6-13	Silt loam, very fine sandy loam	ML	A-4	25-35	NP-10
	13-20	Gravelly silt loam, gravelly sandy loam, silt loam, sandy loam, very fine sandy loam, gravelly very fine sandy loam	GM, ML	A-4	25-35	NP-10
	20-72	Gravelly loamy sand, gravelly sand, very gravelly sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly loamy sand	SP-SM, GW	A-1	0-0	NP
29NE02:						
Nenana	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-6	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
	6-13	Silt loam, very fine sandy loam	ML	A-4	25-35	NP-10
	13-20	Gravelly silt loam, gravelly sandy loam, silt loam, sandy loam, very fine sandy loam, gravelly very fine sandy loam	GM, ML	A-4	25-35	NP-10
	20-72	Gravelly loamy sand, gravelly sand, very gravelly sand, extremely gravelly loamy sand, extremely gravelly sand, very gravelly loamy sand	SP-SM, GW	A-1	0-0	NP
Sawmill Creek	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-5	Very fine sandy loam, silt loam	ML	A-5, A-4	30-50	NP-10
	5-12	Very fine sandy loam, silt loam	ML	A-5, A-4	30-50	NP-10
	12-14	Sandy loam, fine sandy loam	SM, ML	A-4	0-15	NP-5
	14-72	Very gravelly coarse sand, very gravelly loamy sand, extremely gravelly sandy loam, extremely gravelly loamy coarse sand	SM, GM	A-1-b, A-1-a	0-0	NP
29NN01:						
Noonku	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam	ML	A-4	20-35	NP-10
	6-47	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	47-72	Gravelly sand, extremely gravelly sand, very gravelly sand	SP-SM, SP	A-1	0-0	NP
29PE01:						
Peede	0-5	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	5-59	Very fine sandy loam, silt loam	ML	A-4	20-35	NP-10
	59-72	Fine sand, gravelly fine sand, gravelly loamy fine sand, gravelly sand, very gravelly fine sand, very gravelly loamy fine sand, very gravelly sand, very gravelly sandy loam, extremely gravelly fine sand, extremely gravelly loamy fine sand, extremely gravelly loamy sand, extremely gravelly sand, loamy fine sand, loamy sand, sand, gravelly loamy sand	SW-SM, SC-SM	A-1, A-2	0-24	NP-2

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29PL01:						
Eielson, rare flooding	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-49	Very fine sandy loam	ML	A-4	25-30	NP-5
	49-71	Stratified silt loam to fine sand	SM, ML	A-4	25-30	NP-5
	71-72	Gravelly sand, extremely gravelly sand, very gravelly sand	GP-GM	A-1	0-0	NP
Piledriver, rare flooding	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Stratified fine sand to silt loam, very fine sandy loam	ML	A-4	25-30	NP-5
	15-33	Stratified sand to fine sand to very fine sandy loam	CL-ML, SM	A-2, A-4	20-25	NP-5
	33-72	Sand, very gravelly sand	SM, SW, SP-SM	A-2, A-1	0-0	NP
29PT01:						
Pits, gravel	---	---	---	---	---	---
29SA01:						
Sawmill Creek	0-4	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	4-5	Very fine sandy loam, silt loam	ML	A-5, A-4	30-50	NP-10
	5-12	Very fine sandy loam, silt loam	ML	A-5, A-4	30-50	NP-10
	12-14	Sandy loam, fine sandy loam	SM, ML	A-4	0-15	NP-5
	14-72	Very gravelly coarse sand, very gravelly loamy sand, extremely gravelly sandy loam, extremely gravelly loamy coarse sand	SM, GM	A-1-b, A-1-a	0-0	NP
29TA01:						
Tatlanika, very poorly drained	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-8	Silty clay, silt loam, silty clay loam	MH	A-7	46-78	13-34
	8-23	Silty clay loam, silt loam	CL	A-7, A-6	30-58	13-35
	23-72	Permanently frozen material			---	---
Totatlanika, very poorly drained	0-4	Peat	PT	A-8	---	---
	4-9	Muck	PT	A-8	---	---
	9-11	Mucky silty clay loam, mucky silt loam, mucky silty clay	MH	A-7-5	54-86	16-35
	11-28	Silty clay loam, silt loam	CL	A-7, A-6	30-58	13-35
	28-72	Permanently frozen material			---	---
29TC01:						
Tanacross	0-9	Peat	PT	A-8	---	---
	9-11	Mucky silt loam	OL, ML	A-4	30-40	NP-10
	11-17	Stratified fine sandy loam to silt loam	ML	A-4	0-40	NP-10
	17-72	Permanently frozen material			---	---
29TE01:						
Typic Cryaquents, frequent long ponding	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
Liscum	0-3	Peat	PT	A-8	---	---
	3-11	Muck	PT	A-8	---	---
	11-15	Mucky silt loam	OL, ML	A-5, A-4	30-50	NP-10
	15-70	Stratified silt loam to loamy fine sand	CL-ML, CL, ML	A-4	0-30	NP-10
	70-72	Gravelly sandy loam, very gravelly sandy loam, fine sandy loam	SC-SM	A-2	0-15	NP-5

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29TE01:						
Terric Cryohemists	0-3	Mucky peat, peat	PT	A-8	---	---
	3-12	Mucky peat, gravelly mucky peat	PT	A-8	---	---
	12-22	Very gravelly muck, extremely gravelly muck, muck, gravelly muck	PT	A-8	---	---
	22-72	Gravelly silt loam, gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam, extremely gravelly sandy loam, mucky silty clay loam, mucky silt loam, mucky sandy loam, silty clay loam, silt loam, sandy loam, extremely gravelly silt loam	SM, GP	A-4, A-5, A-7-5	0-68	NP-23
29TN01:						
Tanana	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
29TN02:						
Tanana	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam, mucky silt loam	OL, ML	A-4	30-40	NP-10
	6-25	Stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-10
	25-72	Permanently frozen material			---	---
Mosquito	0-18	Peat	PT	A-8	---	---
	18-24	Silt loam, stratified silt loam to loamy fine sand, very fine sandy loam	ML	A-4	30-40	NP-5
	24-72	Permanently frozen material			---	---
29TT01:						
Totatlanika, poorly drained	0-4	Peat	PT	A-8	---	---
	4-9	Muck	PT	A-8	---	---
	9-11	Mucky silty clay loam, mucky silt loam, mucky silty clay	MH	A-7-5	54-86	16-35
	11-28	Silty clay loam, silt loam	CL	A-7, A-6	30-58	13-35
	28-72	Permanently frozen material			---	---
Tatlanika, poorly drained	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-8	Silty clay, silt loam, silty clay loam	MH	A-7	46-78	13-34
	8-23	Silty clay loam, silt loam	CL	A-7, A-6	30-58	13-35
	23-72	Permanently frozen material			---	---
29TY01:						
Typic Haplocryepts, sandy	0-2	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, sandy loam	SM, ML	A-4	0-31	NP-6
	4-9	Gravelly loamy sand, gravelly sandy loam, very gravelly loamy sand, very gravelly sandy loam, sandy loam, loamy sand	SM, ML	A-1, A-4	0-29	NP-6
	9-72	Very gravelly coarse sand, gravelly coarse sand	SP-SM	A-1	0-20	NP-2

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
29WI01:						
Browne	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-6	Moderately decomposed plant material	PT	A-8	---	---
	6-24	Silt loam, silt	ML	A-4	16-34	2-8
	24-72	Permanently frozen material			---	---
Windy Creek	0-5	Peat	PT	A-8	---	---
	5-9	Mucky peat	PT	A-8	---	---
	9-11	Silt, silt loam, mucky silt	ML, OL	A-4	25-53	2-7
	11-24	Silt loam, silt	ML	A-4	16-34	2-8
	24-72	Permanently frozen material			---	---
31BR01:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
31BR02:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
31BR03:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Slightly decomposed plant material	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31BR04:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Slightly decomposed plant material	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
31BR05:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Slightly decomposed plant material	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
31BR06:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Slightly decomposed plant material	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---
31BR07:						
Brigadier	0-6	Slightly decomposed plant material	PT	A-8	0-0	NP
	6-11	Silt loam	OL, ML	A-4	30-40	NP-10
	11-16	Silt loam	ML	A-4	25-35	NP-10
	16-20	Very gravelly loam, very channery sandy loam	GC-GM, GP-GM, GM	A-1, A-4, A-2	0-15	NP-5
	20-72	Weathered bedrock			---	---
Manchu	0-7	Slightly decomposed plant material	PT	A-8	---	---
	7-9	Mucky silt loam, silt loam	ML	A-4	25-35	NP-10
	9-28	Silt, silt loam	ML	A-4	25-35	NP-10
	28-39	Extremely channery loam, very channery silt loam	GM	A-4, A-2	25-35	NP-10
	39-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31CH01:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31CH02:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31CH03:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31CH04:						
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
31DU01:						
Dumps, mine	---	---	---	---	---	---
31ES01:						
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
31ES02:						
Ester	0-9	Peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-4	30-40	NP-5
	12-21	Permanently frozen very channery silt loam	GM	A-2, A-4	---	---
	21-72	Permanently frozen weathered bedrock			---	---
31FA01:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA02:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA03:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31FA04:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA05:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA06:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA07:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
31FA08:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31FA09:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31FA10:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31FA11:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31FA12:						
Fairbanks	0-3	Slightly decomposed plant material	PT	A-8	0-0	NP
	3-30	Silt loam	ML	A-4	30-40	NP-10
	30-72	Silt, silt loam	ML	A-4	25-35	NP-10
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31GD01:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
31GD02:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
31GD03:						
Goldstream	0-9	Peat, mucky peat	PT	A-8	---	---
	9-12	Silt loam, mucky silt loam	ML	A-5, A-4	30-50	NP-10
	12-20	Silt loam	ML	A-4	25-35	NP-10
	20-72	Permanently frozen material			---	---
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---
31GL01:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31GL02:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31GL03:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31GL04:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31GL05:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31GL06:						
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31HA01:						
Happy	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-5	Stratified silt loam to moderately decomposed plant material	OH, OL, ML	A-5	0-60	NP-5
	5-20	Silt loam	ML	A-4	0-29	NP-5
	20-32	Stratified silt loam to moderately decomposed plant material	OH, OL, ML	A-5	0-60	NP-5
	32-72	Permanently frozen material			---	---
31HI01:						
Histels	0-12	Peat	PT	A-8	0-0	NP
	12-17	Mucky peat	PT	A-8	0-0	NP
	17-26	Permanently frozen mucky peat			---	---
	26-72	Permanently frozen material			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31MN01:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31MN02:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31MN03:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31MN04:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31MN05:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31MN06:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31MN07:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31MN08:						
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
Chatanika	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, mucky silt loam	MH, OH	A-5	70-100	NP-15
	6-21	Silt loam	ML	A-4	25-35	NP-5
	21-72	Permanently frozen material			---	---
31PT01:						
Pits, quarry	---	---	---	---	---	---
31RS01:						
Rosie	0-12	Silt loam	ML	A-4	0-42	NP-8
	12-22	Silt, channery silt loam	ML	A-4	0-35	NP-9
	22-28	Very channery silt loam, extremely channery silt loam, very channery very fine sandy loam	GM	A-2, A-4	0-23	NP-6
	28-72	Weathered bedrock			---	---
31SA01:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
31SA02:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
31SA03:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
31SA04:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
31SA05:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31SA06:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31SA07:						
Saulich	0-16	Mucky peat, peat	PT	A-8	---	---
	16-21	Silt loam, mucky silt loam	ML, OL	A-4	30-40	NP-10
	21-72	Permanently frozen material			---	---
Minto	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-9	Silt loam	ML	A-4	25-40	NP-10
	9-16	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
	16-72	Silt, silt loam	CL-ML, ML	A-4	15-25	NP-5
31ST01:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31ST02:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31ST03:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31ST04:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31ST05:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31ST06:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
31ST07:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31ST08:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31ST09:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---

Table 6. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
31ST10:						
Steese	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-5	Silt loam	ML	A-4	25-35	NP-10
	5-27	Silt, silt loam	ML	A-4	25-35	NP-10
	27-33	Channery silt loam, extremely channery silt loam, very channery silt loam	GM	A-1, A-4, A-2	0-0	NP
	33-72	Weathered bedrock			---	---
Gilmore	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-6	Silt loam	ML	A-4	30-40	NP-10
	6-12	Silt, silt loam	ML	A-4	25-35	NP-10
	12-19	Very channery silt loam, extremely channery silt loam	GM	A-2, A-4	---	NP
	19-72	Weathered bedrock			---	---
31TE01:						
Typic Cryaquents, frequent long ponding	0-6	Moderately decomposed plant material	PT	A-8	---	---
	6-72	Silt loam	ML	A-4	25-40	NP-10
Histic Cryaquepts	0-11	Mucky peat, muck, peat	PT	A-8	---	---
	11-23	Very fine sandy loam, silt loam	ML	A-4	25-35	NP-10
	23-72	Gravelly silt loam, gravelly sandy loam, very gravelly silt loam, very gravelly sandy loam	SM, GM	A-2, A-4	25-35	NP-10
Terric Cryofibrists	0-28	Peat	PT	A-8	---	---
	28-40	Muck	PT	A-8	---	---
	40-72	Silt loam, very fine sandy loam, silty clay loam	ML, CL	A-4, A-7, A-6	30-45	NP-30
31TG01:						
Toghotthele	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-4	Silt, silt loam	ML	A-4	30-40	NP-10
	4-51	Silt, silt loam	ML	A-4	30-40	NP-10
	51-72	Sand, fine sand	SP-SM	A-3	0-14	NP
W:						
Water	---	---	---	---	---	---

Table 7. Soil Texture and Particle Size Data

(Data are for soil components only. Miscellaneous area components not listed. Under Rock Fragments, Kind, 'gravel' =fine, medium, and coarse gravel, 'm&c gravel' = medium and coarse gravel, and 'f gravel' = fine gravel. Absence of an entry means that data do not apply.)

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
28DY01:								
Dystrogelepts	Oe	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-4	fine sandy loam	0: 5: 50	gravel	15:50: 75	20:45: 80	1: 5: 10
	Bw	4-8	fine sandy loam	10:10: 50	gravel	15:50: 75	20:45: 80	1: 5: 10
	BC	8-23	gravelly sandy loam	16:30: 40	gravel	15:50: 50	40:45: 80	1: 5: 10
				0: 0: 10	cobbles			
	C	23-72	gravelly sandy loam	16:30: 40	gravel	15:50: 50	40:45: 80	1: 5: 10
				0: 0: 10	cobbles			
Gelorthents	A	0-6	very gravelly fine sandy loam	36:50: 60	gravel	55:65: 70	20:24: 35	3: 8: 10
				0: 0: 10	cobbles			
	C	6-72	very gravelly fine sandy loam	36:50: 60	gravel	55:65: 70	20:27: 35	3: 8: 10
				0: 0: 10	cobbles			
28HA01:								
Haplocryepts	Oe	0-4	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	silt loam	0: 0: 10	gravel	15:30: 65	30:65: 80	3: 5: 10
	Bw	6-31	silt loam	0: 0: 10	gravel	15:30: 65	30:65: 80	3: 5: 10
	2C	31-72	very gravelly sandy loam	16:40: 49	gravel	60:66: 80	25:29: 32	3: 5: 10
				0: 0: 10	cobbles			
28HA02:								
Haplocryepts	Oe	0-4	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	silt loam	0: 0: 10	gravel	15:30: 65	30:65: 80	3: 5: 10
	Bw	6-31	silt loam	0: 0: 10	gravel	15:30: 65	30:65: 80	3: 5: 10
	2C	31-72	very gravelly sandy loam	16:40: 49	gravel	60:66: 80	25:29: 32	3: 5: 10
				0: 0: 10	cobbles			
29BL01:								
Bolio	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oe	3-16	mucky peat	0: 0: 0	---	---	---	---
	Oef	16-72	permanently frozen material		---	---	---	---
29CR01:								
Typic Cryorthents, fill	C1	0-30	stratified gravelly loamy sand to gravelly fine sandy loam to gravelly silt loam	5: 7: 9 10:18: 25	f gravel m&c gravel	40:65: 86	10:30: 60	0: 5: 10
	2C2	30-63	stratified fine sand to silt loam	0: 0: 0	---	40:65: 86	10:30: 60	0: 5: 10
	3C3	63-72	very gravelly sand	10:15: 25 25:30: 50	f gravel m&c gravel	85:95:100	0: 4: 10	0: 1: 5
Urban land		---			---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29DN01:								
Donnelly	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	Bw	2-6	gravelly silt loam	2:14: 25	gravel	25:38: 45	55:60: 75	0: 2: 5
				0: 3: 6	cobbles			
				0: 2: 3	stones			
	BC	6-12	gravelly silt loam	11:18: 24	gravel	25:38: 65	35:60: 75	0: 2: 5
				3: 6: 9	cobbles			
				0: 2: 3	stones			
	2C	12-72	very gravelly sand	24:39: 54	gravel	90:96:100	0: 2: 5	0: 2: 5
				3: 6: 9	cobbles			
29DN02:								
Donnelly	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	Bw	2-6	gravelly silt loam	2:14: 25	gravel	25:38: 45	55:60: 75	0: 2: 5
				0: 3: 6	cobbles			
				0: 2: 3	stones			
	BC	6-12	gravelly silt loam	11:18: 24	gravel	25:38: 65	35:60: 75	0: 2: 5
				3: 6: 9	cobbles			
				0: 2: 3	stones			
	2C	12-72	very gravelly sand	24:39: 54	gravel	90:96:100	0: 2: 5	0: 2: 5
				3: 6: 9	cobbles			
29DN04:								
Donnelly	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	Bw	2-6	gravelly silt loam	2:14: 25	gravel	25:38: 45	55:60: 75	0: 2: 5
				0: 3: 6	cobbles			
				0: 2: 3	stones			
	BC	6-12	gravelly silt loam	11:18: 24	gravel	25:38: 65	35:60: 75	0: 2: 5
				3: 6: 9	cobbles			
				0: 2: 3	stones			
	2C	12-72	very gravelly sand	24:39: 54	gravel	90:96:100	0: 2: 5	0: 2: 5
				3: 6: 9	cobbles			
Lupine	Oe	0-3	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	42:42: 70	25:52: 67	1: 6: 8
	Bw	6-16	very fine sandy loam	0: 0: 0	---	50:56: 70	27:39: 47	1: 5: 10
	BC	16-20	very fine sandy loam	0: 0: 0	---	53:63: 70	25:31: 39	1: 6: 8
	2C	20-72	very gravelly sand	35:50: 64	gravel	80:90: 94	2: 6: 12	1: 4: 8
				0: 5: 11	cobbles			
29DU01:								
Dumps, landfill		---			---	---	---	---
29EL01:								
Eielson, occasional flooding	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	2-49	very fine sandy loam	0: 0: 0	---	50:65: 75	15:30: 45	3: 5: 10
	C2	49-71	stratified silt loam to fine sand	0: 2: 5	f gravel	45:65: 86	0:30: 50	0: 5: 10
	2C3	71-72	very gravelly sand	0:10: 20	f gravel	86:95:100	0: 4: 10	0: 1: 5
				10:20: 30	m&c gravel			
				9:15: 20	cobbles			

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29EL01:								
Piledriver, occasional flooding	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	3-15	very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	C2	15-33	stratified sand to fine sand to very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	2C3	33-72	very gravelly sand	2:15: 20 8:30: 35	f gravel m&c gravel	85:95:100	0: 4: 5	0: 1: 10
29EL02:								
Eielson, rare flooding	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	2-49	very fine sandy loam	0: 0: 0	---	50:65: 75	15:30: 45	3: 5: 10
	C2	49-71	stratified silt loam to fine sand	0: 2: 5	f gravel	45:65: 86	0:30: 50	0: 5: 10
	2C3	71-72	very gravelly sand	0:10: 20 10:20: 30 9:15: 20	f gravel m&c gravel cobbles	86:95:100	0: 4: 10	0: 1: 5
Tanana	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	mucky silt loam	0: 0: 0	---	10:34: 45	50:59: 80	5: 8: 10
	Bjjg	6-25	very fine sandy loam	0: 0: 0	---	45:60: 80	10:32: 50	5: 8: 10
	Cjjgf	25-72	permanently frozen material		---	---	---	---
29EL03:								
Eielson, rare flooding	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	2-49	very fine sandy loam	0: 0: 0	---	50:65: 75	15:30: 45	3: 5: 10
	C2	49-71	stratified silt loam to fine sand	0: 2: 5	f gravel	45:65: 86	0:30: 50	0: 5: 10
	2C3	71-72	very gravelly sand	0:10: 20 10:20: 30 9:15: 20	f gravel m&c gravel cobbles	86:95:100	0: 4: 10	0: 1: 5
29FA01:								
Faa	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 23	73:75: 80	4: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	10:17: 23	73:75: 80	4: 8: 14
	C	12-39	fine sandy loam	0: 0: 0	---	45:66: 80	14:26: 50	5: 8: 10
	2C	39-72	fine sand	0: 0: 0	---	85:96: 99	1: 3: 15	0: 0: 2
29FU01:								
Fubar, occasional flooding	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	2-10	stratified fine sand to silt loam	0: 3: 4 0: 2: 10	f gravel m&c gravel	45:65: 86	10:30: 45	3: 5: 10
	2C2	10-72	very gravelly coarse sand	2:15: 25 8:30: 50	f gravel m&c gravel	85:95:100	0: 4: 15	0: 1: 5

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29FU01:								
Piledriver, occasional flooding	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	3-15	very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	C2	15-33	stratified sand to fine sand to very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	2C3	33-72	very gravelly sand	2:15: 20 8:30: 35	f gravel m&c gravel	85:95:100	0: 4: 5	0: 1: 10
29GE01:								
Gerstle	O	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-10	very fine sandy loam	0: 0: 0	---	25:51: 70	25:43: 70	3: 6: 8
	Bw	10-20	very fine sandy loam	0: 0: 0	---	52:61: 70	25:34: 52	2: 5: 7
	BC	20-30	stratified loamy fine sand to silt loam	0: 0: 0	---	45:67: 73	20:28: 40	2: 5: 7
	C	30-51	stratified sand to fine sandy loam	0: 1: 4	gravel	61:70: 76	20:26: 35	1: 4: 6
	2C	51-72	sand	0: 7: 12	gravel	80:87: 90	7:10: 18	1: 3: 5
Moosehead	O	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-7	silt loam	0: 0: 0	---	35:40: 60	35:55: 60	3: 5: 10
	Bw	7-20	very fine sandy loam	0: 0: 0	---	40:51: 65	25:44: 55	3: 5: 10
	BC	20-26	stratified fine sandy loam to very fine sandy loam	0: 0: 10	gravel	45:65: 75	20:32: 55	1: 3: 5
	2C	26-72	gravelly sand	15:29: 65 0: 2: 10	gravel cobbles	65:90:100	0: 9: 30	0: 1: 5
29GE03:								
Donnelly	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	Bw	2-6	gravelly silt loam	2:14: 25 0: 3: 6 0: 2: 3	gravel cobbles stones	25:38: 45	55:60: 75	0: 2: 5
	BC	6-12	gravelly silt loam	11:18: 24 3: 6: 9 0: 2: 3	gravel cobbles stones	25:38: 65	35:60: 75	0: 2: 5
	2C	12-72	very gravelly sand	24:39: 54 3: 6: 9	gravel cobbles	90:96:100	0: 2: 5	0: 2: 5
Gerstle	O	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-10	very fine sandy loam	0: 0: 0	---	25:51: 70	25:43: 70	3: 6: 8
	Bw	10-20	very fine sandy loam	0: 0: 0	---	52:61: 70	25:34: 52	2: 5: 7
	BC	20-30	stratified loamy fine sand to silt loam	0: 0: 0	---	45:67: 73	20:28: 40	2: 5: 7
	C	30-51	stratified sand to fine sandy loam	0: 1: 4	gravel	61:70: 76	20:26: 35	1: 4: 6
	2C	51-72	sand	0: 7: 12	gravel	80:87: 90	7:10: 18	1: 3: 5

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29GE03:								
Moosehead	O	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-7	silt loam	0: 0: 0	---	35:40: 60	35:55: 60	3: 5: 10
	Bw	7-20	very fine sandy loam	0: 0: 0	---	40:51: 65	25:44: 55	3: 5: 10
	BC	20-26	stratified fine sandy loam to very fine sandy loam	0: 0: 10	gravel	45:65: 75	20:32: 55	1: 3: 5
	2C	26-72	gravelly sand	15:29: 65	gravel	65:90:100	0: 9: 30	0: 1: 5
				0: 2: 10	cobbles			
29HY01:								
Hydric Cryofibrists	Oi	0-30	peat	0: 0: 0	---	---	---	---
	W	30-43	water		---	---	---	---
	O'i	43-69	peat	0: 0: 0	---	---	---	---
	Cg	69-72	sand	0: 0: 0	---	45:90: 95	2: 7: 55	1: 3: 10
Liscum	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oa	3-11	muck	0: 0: 0	---	---	---	---
	A	11-15	mucky silt loam	0: 0: 0	---	10:22: 45	50:71: 80	5: 8: 10
	Bg	15-70	stratified silt loam to loamy fine sand	0: 0: 0	---	45:60: 80	10:35: 50	0: 5: 10
	C	70-72	fine sandy loam	0: 0: 19	f gravel	45:67: 75	20:31: 50	0: 2: 5
				0: 0: 40	m&c gravel			
29LS01:								
Terric Cryohemists	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oe	3-12	gravelly mucky peat	0: 0: 15	gravel	---	---	---
				0: 0: 5	cobbles			
	Oa	12-22	gravelly muck	0:20: 50	gravel	---	---	---
				0:13: 15	cobbles			
	Bg, Cg	22-72	extremely gravelly silt loam	0:60: 60	gravel	10:40: 70	25:55: 80	1: 5: 35
				0: 2: 5	cobbles			
Liscum	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oa	3-11	muck	0: 0: 0	---	---	---	---
	A	11-15	mucky silt loam	0: 0: 0	---	10:22: 45	50:71: 80	5: 8: 10
	Bg	15-70	stratified silt loam to loamy fine sand	0: 0: 0	---	45:60: 80	10:35: 50	0: 5: 10
	C	70-72	fine sandy loam	0: 0: 19	f gravel	45:67: 75	20:31: 50	0: 2: 5
				0: 0: 40	m&c gravel			
Bolio	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oe	3-16	mucky peat	0: 0: 0	---	---	---	---
	Oef	16-72	permanently frozen material		---	---	---	---
29LU01:								
Lupine	Oe	0-3	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	42:42: 70	25:52: 67	1: 6: 8
	Bw	6-16	very fine sandy loam	0: 0: 0	---	50:56: 70	27:39: 47	1: 5: 10
	BC	16-20	very fine sandy loam	0: 0: 0	---	53:63: 70	25:31: 39	1: 6: 8
	2C	20-72	very gravelly sand	35:50: 64	gravel	80:90: 94	2: 6: 12	1: 4: 8
				0: 5: 11	cobbles			

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29MS01:								
Mosquito	Oi	0-18	peat	0: 0: 0	---	---	---	---
	Cg	18-24	very fine sandy loam	0: 0: 0	---	40:65: 80	15:30: 55	3: 5: 10
	Cgf	24-72	permanently frozen material		---	---	---	---
29NE01:								
Nenana	Oe	0-3	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 2	gravel	25:38: 50	45:57: 70	3: 5: 10
	Bw	6-13	very fine sandy loam	0: 0: 2	gravel	25:50: 60	35:45: 70	3: 5: 10
	BC	13-20	gravelly very fine sandy loam	0:18: 25	gravel	42:61: 80	18:34: 60	2: 5: 10
	2C	20-72	very gravelly loamy sand	35:55: 70	gravel	80:85: 95	5:12: 20	0: 3: 5
				0: 0: 10	cobbles			
29NE02:								
Nenana	Oe	0-3	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 2	gravel	25:38: 50	45:57: 70	3: 5: 10
	Bw	6-13	very fine sandy loam	0: 0: 2	gravel	25:50: 60	35:45: 70	3: 5: 10
	BC	13-20	gravelly very fine sandy loam	0:18: 25	gravel	42:61: 80	18:34: 60	2: 5: 10
	2C	20-72	very gravelly loamy sand	35:55: 70	gravel	80:85: 95	5:12: 20	0: 3: 5
				0: 0: 10	cobbles			
Sawmill Creek	Oe	0-4	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	4-5	silt loam	0: 0: 0	---	30:42: 60	35:53: 60	2: 5: 10
	Bw	5-12	silt loam	0: 0: 1	gravel	30:42: 60	35:53: 60	2: 5: 10
	2BC	12-14	fine sandy loam	0: 0: 10	gravel	55:65: 70	25:30: 35	2: 5: 10
	3Ck	14-72	extremely gravelly loamy coarse sand	30:61: 70	gravel	70:82: 90	10:15: 25	0: 3: 5
				0: 1: 10	cobbles			
29NN01:								
Noonku	Oe	0-2	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	2-6	silt loam	0: 0: 0	---	15:30: 45	50:65: 80	3: 5: 10
	Cg1	6-47	stratified sand to fine sand to very fine sandy loam	0: 0: 0	---	45:65: 86	5:30: 45	0: 5: 10
	2Cg2	47-72	very gravelly sand	5:15: 22	f gravel	85:95:100	0: 4: 10	0: 1: 5
				10:30: 43	m&c gravel			
29PE01:								
Peede	Oe	0-5	moderately decomposed plant material	0: 0: 0	---	---	---	---
	Cg	5-59	silt loam	0: 0: 0	---	10:22: 47	47:71: 80	3: 7: 10
	2C	59-72	gravelly loamy sand	0: 5: 20	f gravel	75:80: 90	5:17: 20	0: 3: 5
				0:15: 50	m&c gravel			

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29PL01:								
Eielson, rare flooding	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	2-49	very fine sandy loam	0: 0: 0	---	50:65: 75	15:30: 45	3: 5: 10
	C2	49-71	stratified silt loam to fine sand	0: 2: 5	f gravel	45:65: 86	0:30: 50	0: 5: 10
	2C3	71-72	very gravelly sand	0:10: 20 10:20: 30 9:15: 20	f gravel m&c gravel cobbles	86:95:100	0: 4: 10	0: 1: 5
Piledriver, rare flooding	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	C1	3-15	very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	C2	15-33	stratified sand to fine sand to very fine sandy loam	0: 0: 0	---	45:65: 86	10:30: 50	0: 5: 10
	2C3	33-72	very gravelly sand	2:15: 20 8:30: 35	f gravel m&c gravel	85:95:100	0: 4: 5	0: 1: 10
29PT01:								
Pits, gravel		---			---	---	---	---
29SA01:								
Sawmill Creek	Oe	0-4	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	4-5	silt loam	0: 0: 0	---	30:42: 60	35:53: 60	2: 5: 10
	Bw	5-12	silt loam	0: 0: 1	gravel	30:42: 60	35:53: 60	2: 5: 10
	2BC	12-14	fine sandy loam	0: 0: 10	gravel	55:65: 70	25:30: 35	2: 5: 10
	3Ck	14-72	extremely gravelly loamy coarse sand	30:61: 70 0: 1: 10	gravel cobbles	70:82: 90	10:15: 25	0: 3: 5
29TA01:								
Tatlanika, very poorly drained	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-8	silty clay loam	0: 0: 0	---	1: 5: 9	45:68: 75	20:27: 50
	Bjg	8-23	silt loam	0: 0: 0	---	1: 7: 15	45:67: 75	20:26: 40
	Cf	23-72	permanently frozen material		---	---	---	---
Totatlanika, very poorly drained	Oi	0-4	peat	0: 0: 0	---	---	---	---
	Oa	4-9	muck	0: 0: 0	---	---	---	---
	A	9-11	mucky silty clay	0: 0: 0	---	1: 2: 15	40:47: 70	25:50: 52
	Bjg	11-28	silt loam	0: 0: 0	---	1: 7: 15	45:67: 75	20:26: 40
	Bjgf	28-72	permanently frozen material		---	---	---	---
29TC01:								
Tanacross	Oi	0-9	peat	0: 0: 0	---	---	---	---
	A	9-11	mucky silt loam	0: 0: 0	---	10:37: 50	50:58: 80	0: 5: 10
	Bjg	11-17	stratified fine sandy loam to silt loam	0: 0: 0	---	45:60: 80	10:35: 50	0: 5: 10
	Bjgf	17-72	permanently frozen material		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29TE01:								
Typic Cryaquents, frequent long ponding	Oe	0-6	moderately decomposed plant material	0: 0: 0	---	---	---	---
	Cg	6-72	silt loam	0: 0: 0	---	15:30: 35	50:65: 80	3: 5: 10
Liscum	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oa	3-11	muck	0: 0: 0	---	---	---	---
	A	11-15	mucky silt loam	0: 0: 0	---	10:22: 45	50:71: 80	5: 8: 10
	Bg	15-70	stratified silt loam to loamy fine sand	0: 0: 0	---	45:60: 80	10:35: 50	0: 5: 10
	C	70-72	fine sandy loam	0: 0: 19	f gravel	45:67: 75	20:31: 50	0: 2: 5
				0: 0: 40	m&c gravel			
Terric Cryohemists	Oi	0-3	peat	0: 0: 0	---	---	---	---
	Oe	3-12	gravelly mucky peat	0: 0: 15	gravel	---	---	---
				0: 0: 5	cobbles			
	Oa	12-22	gravelly muck	0:20: 50	gravel	---	---	---
				0:13: 15	cobbles			
	Bg, Cg	22-72	extremely gravelly silt loam	0:60: 60	gravel	10:40: 70	25:55: 80	1: 5: 35
				0: 2: 5	cobbles			
29TN01:								
Tanana	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	mucky silt loam	0: 0: 0	---	10:34: 45	50:59: 80	5: 8: 10
	Bjjg	6-25	very fine sandy loam	0: 0: 0	---	45:60: 80	10:32: 50	5: 8: 10
	Cjjgf	25-72	permanently frozen material		---	---	---	---
29TN02:								
Tanana	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	mucky silt loam	0: 0: 0	---	10:34: 45	50:59: 80	5: 8: 10
	Bjjg	6-25	very fine sandy loam	0: 0: 0	---	45:60: 80	10:32: 50	5: 8: 10
	Cjjgf	25-72	permanently frozen material		---	---	---	---
Mosquito	Oi	0-18	peat	0: 0: 0	---	---	---	---
	Cg	18-24	very fine sandy loam	0: 0: 0	---	40:65: 80	15:30: 55	3: 5: 10
	Cgf	24-72	permanently frozen material		---	---	---	---
29TT01:								
Totatlanika, poorly drained	Oi	0-4	peat	0: 0: 0	---	---	---	---
	Oa	4-9	muck	0: 0: 0	---	---	---	---
	A	9-11	mucky silty clay	0: 0: 0	---	1: 2: 15	40:47: 70	25:50: 52
	Bjjg	11-28	silt loam	0: 0: 0	---	1: 7: 15	45:67: 75	20:26: 40
	Bjjgf	28-72	permanently frozen material		---	---	---	---
Tatlanika, poorly drained	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-8	silty clay loam	0: 0: 0	---	1: 5: 9	45:68: 75	20:27: 50
	Bjjg	8-23	silt loam	0: 0: 0	---	1: 7: 15	45:67: 75	20:26: 40
	Cf	23-72	permanently frozen material		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
29TY01:								
Typic Haplocryepts, sandy	Oe	0-2	moderately decomposed plant material	0: 0: 0	---	---	---	---
	A	2-4	sandy loam	0: 0: 12 0: 0: 2	f gravel m&c gravel	40:65: 86	10:30: 55	3: 5: 10
	BC	4-9	loamy sand	0: 0: 30 0: 0: 10	f gravel m&c gravel	45:80: 86	10:15: 45	3: 5: 10
	C	9-72	gravelly coarse sand	12:15: 40 4: 5: 19	f gravel m&c gravel	85:95:100	0: 4: 15	0: 1: 5
29WI01:								
Windy Creek	Oi	0-5	peat	0: 0: 0	---	---	---	---
	Oe	5-9	mucky peat	0: 0: 0	---	---	---	---
	A	9-11	mucky silt	0: 0: 0	---	4: 6: 8	80:82: 85	5:11: 13
	Bjjg	11-24	silt	0: 0: 0	---	3: 4: 8	80:85: 87	5:11: 13
	Bgf	24-72	permanently frozen material		---	---	---	---
Browne	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	Oe	5-6	moderately decomposed plant material	0: 0: 0	---	---	---	---
	Bjjg	6-24	silt	0: 0: 0	---	3: 4: 12	75:85: 90	7:11: 13
	Bgf	24-72	permanently frozen material		---	---	---	---
31BR01:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55 5: 5: 50	channers gravel	50:65: 75	15:30: 45	1: 5: 14
	2Cr	20-72	weathered bedrock		---	---	---	---
Ester	Oi	0-9	peat	0: 0: 0	---	---	---	---
	ABjj	9-12	mucky silt loam	0: 0: 0	---	11:34: 45	50:59: 80	5: 8: 10
	2Cjjf	12-21	permanently frozen very channery silt loam	35:45: 55	channers	15:38: 50	50:60: 80	0: 2: 5
	2Crf	21-72	permanently frozen weathered bedrock		---	---	---	---
31BR02:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55 5: 5: 50	channers gravel	50:65: 75	15:30: 45	1: 5: 14
	2Cr	20-72	weathered bedrock		---	---	---	---
Ester	Oi	0-9	peat	0: 0: 0	---	---	---	---
	ABjj	9-12	mucky silt loam	0: 0: 0	---	11:34: 45	50:59: 80	5: 8: 10
	2Cjjf	12-21	permanently frozen very channery silt loam	35:45: 55	channers	15:38: 50	50:60: 80	0: 2: 5
	2Crf	21-72	permanently frozen weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31BR03:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55	channers	50:65: 75	15:30: 45	1: 5: 14
				5: 5: 50	gravel			
	2Cr	20-72	weathered bedrock		---	---	---	---
Manchu	Oi	0-7	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	7-9	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Bw	9-28	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 15
	2BC	28-39	very channery silt loam	0: 3: 6	channers	15:34: 50	35:58: 80	3: 8: 15
				12:15: 18	channers			
				17:20: 23	channers			
	2Cr	39-72	weathered bedrock		---	---	---	---
31BR04:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55	channers	50:65: 75	15:30: 45	1: 5: 14
				5: 5: 50	gravel			
	2Cr	20-72	weathered bedrock		---	---	---	---
Manchu	Oi	0-7	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	7-9	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Bw	9-28	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 15
	2BC	28-39	very channery silt loam	0: 3: 6	channers	15:34: 50	35:58: 80	3: 8: 15
				12:15: 18	channers			
				17:20: 23	channers			
	2Cr	39-72	weathered bedrock		---	---	---	---
31BR05:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55	channers	50:65: 75	15:30: 45	1: 5: 14
				5: 5: 50	gravel			
	2Cr	20-72	weathered bedrock		---	---	---	---
Manchu	Oi	0-7	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	7-9	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Bw	9-28	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 15
	2BC	28-39	very channery silt loam	0: 3: 6	channers	15:34: 50	35:58: 80	3: 8: 15
				12:15: 18	channers			
				17:20: 23	channers			
	2Cr	39-72	weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31BR06:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55	channers	50:65: 75	15:30: 45	1: 5: 14
				5: 5: 50	gravel			
	2Cr	20-72	weathered bedrock		---	---	---	---
Manchu	Oi	0-7	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	7-9	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Bw	9-28	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 15
	2BC	28-39	very channery silt loam	0: 3: 6	channers	15:34: 50	35:58: 80	3: 8: 15
				12:15: 18	channers			
				17:20: 23	channers			
	2Cr	39-72	weathered bedrock		---	---	---	---
31BR07:								
Brigadier	Oi	0-6	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	6-11	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	11-16	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2BC	16-20	very channery sandy loam	35:50: 55	channers	50:65: 75	15:30: 45	1: 5: 14
				5: 5: 50	gravel			
	2Cr	20-72	weathered bedrock		---	---	---	---
Manchu	Oi	0-7	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	7-9	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Bw	9-28	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 15
	2BC	28-39	very channery silt loam	0: 3: 6	channers	15:34: 50	35:58: 80	3: 8: 15
				12:15: 18	channers			
				17:20: 23	channers			
	2Cr	39-72	weathered bedrock		---	---	---	---
31CH01:								
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31CH02:								
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31CH03:								
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31CH04:								
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
Goldstream	Oi	0-9	mucky peat	0: 0: 0	---	---	---	---
	A	9-12	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bjjg	12-20	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	20-72	permanently frozen material		---	---	---	---
31DU01:								
Dumps, mine		---			---	---	---	---
31ES01:								
Ester	Oi	0-9	peat	0: 0: 0	---	---	---	---
	ABjj	9-12	mucky silt loam	0: 0: 0	---	11:34: 45	50:59: 80	5: 8: 10
	2Cjjf	12-21	permanently frozen very channery silt loam	35:45: 55	channers	15:38: 50	50:60: 80	0: 2: 5
	2Crf	21-72	permanently frozen weathered bedrock		---	---	---	---
31ES02:								
Ester	Oi	0-9	peat	0: 0: 0	---	---	---	---
	ABjj	9-12	mucky silt loam	0: 0: 0	---	11:34: 45	50:59: 80	5: 8: 10
	2Cjjf	12-21	permanently frozen very channery silt loam	35:45: 55	channers	15:38: 50	50:60: 80	0: 2: 5
	2Crf	21-72	permanently frozen weathered bedrock		---	---	---	---
31FA01:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA02:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA03:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA04:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA05:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31FA06:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA07:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
31FA08:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31FA09:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31FA10:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31FA11:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31FA12:								
Fairbanks	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A,Bw	3-30	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C	30-72	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31GD01:								
Goldstream	Oi	0-9	mucky peat	0: 0: 0	---	---	---	---
	A	9-12	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bjjg	12-20	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	20-72	permanently frozen material		---	---	---	---
31GD02:								
Goldstream	Oi	0-9	mucky peat	0: 0: 0	---	---	---	---
	A	9-12	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bjjg	12-20	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	20-72	permanently frozen material		---	---	---	---
31GD03:								
Goldstream	Oi	0-9	mucky peat	0: 0: 0	---	---	---	---
	A	9-12	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bjjg	12-20	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	20-72	permanently frozen material		---	---	---	---
Histels	Oi	0-12	peat	0: 0: 0	---	---	---	---
	Oe	12-17	mucky peat	0: 0: 0	---	---	---	---
	Oef	17-26	permanently frozen mucky peat	0: 0: 0	---	---	---	---
	Cgf	26-72	permanently frozen material		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31GL01:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:205: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31GL02:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31GL03:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31GL04:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31GL05:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31GL06:								
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31HA01:								
Happy	Oe	0-2	moderately decomposed plant material	0: 0: 0	---	---	---	---
	C/O	2-5	stratified silt loam to moderately decomposed plant material	0: 0: 0	---	5: 6: 17	70:88: 90	3: 6: 10
	C	5-20	silt loam	0: 0: 0	---	10:23: 27	70:70: 87	3: 7: 10
	C/O'	20-32	stratified silt loam to moderately decomposed plant material	0: 0: 0	---	10:10: 17	80:83: 87	3: 7: 10
	Cf	32-72	permanently frozen material		---	---	---	---
31HI01:								
Histels	Oi	0-12	peat	0: 0: 0	---	---	---	---
	Oe	12-17	mucky peat	0: 0: 0	---	---	---	---
	Oef	17-26	permanently frozen mucky peat	0: 0: 0	---	---	---	---
	Cgf	26-72	permanently frozen material		---	---	---	---
31MN01:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
31MN02:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
31MN03:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
31MN04:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31MN05:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31MN06:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31MN07:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31MN08:								
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
Chatanika	Oi	0-4	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	4-6	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	C/Ag	6-21	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31PT01:								
Pits, quarry		---			---	---	---	---
31RS01:								
Rosie	A	0-12	silt loam	0: 5: 7	channers	10:17: 18	71:75: 80	3: 8: 14
	Bk1	12-22	channery silt loam	15:30: 35	channers	6:12: 14	72:80: 85	3: 8: 14
	Bk2	22-28	very channery very fine sandy loam	25:30: 50 1: 5: 25	channers flagstones	15:55: 70	20:37: 80	3: 8: 10
	2Crk	28-72	weathered bedrock		---	---	---	---
31SA01:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31SA02:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31SA03:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31SA04:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
31SA05:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
31SA06:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31SA07:								
Saulich	Oi	0-16	peat	0: 0: 0	---	---	---	---
	Bg/A	16-21	mucky silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Cgf	21-72	permanently frozen material		---	---	---	---
Minto	Oi	0-5	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	5-9	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	9-16	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
	C	16-72	silt loam	0: 0: 0	---	6:12: 15	71:80: 85	3: 8: 14
31ST01:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31ST02:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31ST03:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31ST04:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31ST05:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31ST06:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
31ST07:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31ST08:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31ST09:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---

Table 7. Soil Texture and Particle Size Data—Continued

Map symbol and soil name	Horizon	Depth	Representative texture	Rock fragments >=2.0 mm		Fine earth fraction <2.0 mm		
				lo:rv: hi	Kind	Sand lo:rv: hi	Silt lo:rv: hi	Clay lo:rv: hi
		in		Pct.		Pct.	Pct.	Pct.
31ST10:								
Steese	Oi	0-2	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	2-5	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	5-27	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2C	27-33	very channery silt loam	35:50: 70	channers	15:38: 50	50:60: 80	0: 2: 5
	2Cr	33-72	weathered bedrock		---	---	---	---
Gilmore	Oi	0-3	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	3-6	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw	6-12	silt loam	0: 0: 0	---	6:12: 13	71:80: 85	3: 8: 14
	2BC	12-19	extremely channery silt loam	25:40: 40 20:20: 35	channers flagstones	15:37: 50	50:55: 80	3: 8: 10
	2Cr	19-72	weathered bedrock		---	---	---	---
31TE01:								
Typic Cryaquents, frequent long ponding	Oe	0-6	moderately decomposed plant material	0: 0: 0	---	---	---	---
	Cg	6-72	silt loam	0: 0: 0	---	15:30: 35	50:65: 80	3: 5: 10
Histic Cryaquepts	Oi	0-11	peat	0: 0: 0	---	---	---	---
	Bg	11-23	silt loam	0: 0: 0	---	10:22: 80	10:71: 80	0: 8: 10
	2Cg	23-72	very gravelly sandy loam	0:40: 50	gravel	25:60: 70	25:38: 75	0: 2: 5
Terric Cryofibrists	Oi	0-28	peat	0: 0: 0	---	---	---	---
	Oa	28-40	muck	0: 0: 0	---	---	---	---
	Cg	40-72	silty clay loam	0: 0: 0	---	0:10: 75	20:60: 90	5:30: 35
31TG01:								
Toghotthele	Oi	0-1	slightly decomposed plant material	0: 0: 0	---	---	---	---
	A	1-4	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	Bw, BC	4-51	silt loam	0: 0: 0	---	10:17: 18	71:75: 80	3: 8: 14
	2C	51-72	fine sand	0: 0: 0	---	93:96: 99	1: 3: 6	0: 0: 1
W:								
Water		---			---	---	---	---

Table 8. 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	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
28DY01:											
Dystrogelepts	0-2	0.05-0.18	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-4	1.10-1.40	0.6-2	0.18-0.22	0.0-2.9	2.0-8.0	.37	.37			
	4-8	1.10-1.40	0.6-2	0.12-0.18	0.0-2.9	1.0-5.0	.37	.43			
	8-23	1.20-1.40	0.6-20	0.05-0.10	0.0-2.9	1.0-5.0	.05	.43			
	23-72	1.20-1.40	0.6-20	0.05-0.10	0.0-2.9	0.0-3.0	.05	.43			
Gelorthents	0-6	1.40-1.70	6-20	0.05-0.09	0.0-2.9	3.0-7.0	.15	.28	1	3	86
	6-72	1.40-1.70	6-20	0.03-0.06	0.0-2.9	0.0-3.0	.15	.28			
28HA01:											
Haplocryepts	0-4	0.05-0.10	0.6-20	0.05-0.55	---	75-95	---	---	5	2	134
	4-6	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	6-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	31-72	1.10-1.30	6-20	0.10-0.20	0.0-2.9	1.0-3.0	.10	.24			
28HA02:											
Haplocryepts	0-4	0.05-0.10	0.6-20	0.05-0.55	---	75-95	---	---	5	2	134
	4-6	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	6-31	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	3.0-7.0	.37	.37			
	31-72	1.10-1.30	6-20	0.10-0.20	0.0-2.9	1.0-3.0	.10	.24			
29BL01:											
Bolio	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	3-16	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	16-72	---	0.000-0.001	---	---	75-90	---	---			
29CR01:											
Typic Cryorthents, fill	0-30	1.30-1.60	0.6-2	0.12-0.15	0.0-2.9	3.0-10	.24	.37	5	2	134
	30-63	1.10-1.30	0.6-2	0.06-0.22	0.0-2.9	1.0-3.0	.05	.28			
	63-72	1.30-1.50	6-20	0.05-0.06	0.0-2.9	0.0-1.0	.05	.28			
Urban land	---	---	---	---	---	---	---	---	-	---	---
29DN01:											
Donnelly	0-2	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	4	86
	2-6	1.20-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-4.0	.32	.49			
	6-12	1.20-1.30	2-6	0.12-0.18	0.0-2.9	0.0-1.0	.37	.64			
	12-72	1.40-1.50	6-20	0.02-0.04	0.0-2.9	0.0-0.0	.10	.10			
29DN02:											
Donnelly	0-2	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	4	86
	2-6	1.20-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-4.0	.32	.49			
	6-12	1.20-1.30	2-6	0.12-0.18	0.0-2.9	0.0-1.0	.37	.64			
	12-72	1.40-1.50	6-20	0.02-0.04	0.0-2.9	0.0-0.0	.10	.10			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
29DN04:											
Donnelly	0-2	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	4	86
	2-6	1.20-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-4.0	.32	.49			
	6-12	1.20-1.30	2-6	0.12-0.18	0.0-2.9	0.0-1.0	.37	.64			
	12-72	1.40-1.50	6-20	0.02-0.04	0.0-2.9	0.0-0.0	.10	.10			
Lupine	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-6	1.04-1.20	0.6-2	0.18-0.25	0.0-2.9	1.0-5.0	.43	.43			
	6-16	1.08-1.25	0.6-2	0.18-0.24	0.0-2.9	0.0-1.0	.55	.55			
	16-20	1.12-1.31	2-6	0.14-0.22	0.0-2.9	0.0-0.2	.37	.49			
	20-72	1.47-1.65	6-20	0.02-0.05	0.0-2.9	0.0-0.2	.05	.17			
29DU01:											
Dumps, landfill	---	---	---	---	---	---	---	---	-	---	---
29EL01:											
Eielson, occasional flooding	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Piledriver, occasional flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
29EL02:											
Eielson, rare flooding	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-12	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
29EL03:											
Eielson, rare flooding	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
29FA01:											
Faa	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-4.0	.37	.37			
	12-39	1.15-1.25	0.6-2	0.20-0.22	0.0-0.7	1.0-4.0	.28	.28			
	39-72	1.40-1.80	6-20	0.05-0.22	0.0-0.3	0.1-0.7	.17	.17			
29FU01:											
Fubar, occasional flooding	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-10	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	10-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
Piledriver, occasional flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
29GE01:											
Gerstle	0-4	0.10-0.40	4-18	0.15-0.40	---	24-93	---	---	4	3	86
	4-10	0.90-1.30	2-6	0.17-0.25	0.0-2.9	1.0-5.0	.49	.49			
	10-20	0.90-1.30	2-6	0.17-0.25	0.0-2.9	0.5-1.0	.43	.43			
	20-30	1.20-1.40	4-13	0.12-0.22	0.0-2.9	0.0-1.0	.37	.37			
	30-51	1.20-1.45	6-20	0.04-0.07	0.0-2.9	0.0-0.0	.32	.32			
	51-72	1.35-1.60	6-20	0.04-0.06	0.0-2.9	0.0-0.0	.20	.24			
Moosehead	0-5	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	3	86
	5-7	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	7-20	1.00-1.20	1-13	0.13-0.22	0.0-2.9	0.0-2.0	.49	.49			
	20-26	1.20-1.48	0.4-2	0.12-0.17	0.0-2.9	0.0-1.0	.43	.43			
	26-72	1.20-1.50	2-17	0.03-0.04	0.0-2.9	0.0-1.0	.10	.10			
29GE03:											
Donnelly	0-2	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	4	86
	2-6	1.20-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-4.0	.32	.49			
	6-12	1.20-1.30	2-6	0.12-0.18	0.0-2.9	0.0-1.0	.37	.64			
	12-72	1.40-1.50	6-20	0.02-0.04	0.0-2.9	0.0-0.0	.10	.10			
Gerstle	0-4	0.10-0.40	4-18	0.15-0.40	---	24-93	---	---	4	3	86
	4-10	0.90-1.30	2-6	0.17-0.25	0.0-2.9	1.0-5.0	.49	.49			
	10-20	0.90-1.30	2-6	0.17-0.25	0.0-2.9	0.5-1.0	.43	.43			
	20-30	1.20-1.40	4-13	0.12-0.22	0.0-2.9	0.0-1.0	.37	.37			
	30-51	1.20-1.45	6-20	0.04-0.07	0.0-2.9	0.0-0.0	.32	.32			
	51-72	1.35-1.60	6-20	0.04-0.06	0.0-2.9	0.0-0.0	.20	.24			
Moosehead	0-5	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	3	86
	5-7	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-8.0	.37	.37			
	7-20	1.00-1.20	1-13	0.13-0.22	0.0-2.9	0.0-2.0	.49	.49			
	20-26	1.20-1.48	0.4-2	0.12-0.17	0.0-2.9	0.0-1.0	.43	.43			
	26-72	1.20-1.50	2-17	0.03-0.04	0.0-2.9	0.0-1.0	.10	.10			
29HY01:											
Hydric Cryofibrists	0-30	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	30-43	---	---	---	---	---	---	---			
	43-69	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---			
	69-72	1.10-1.20	0.6-2	0.03-0.10	0.0-2.9	1.0-12	.43	.43			
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	8.0-12	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
29LS01:											
Terric Cryohemists	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	3-12	0.05-0.10	0.6-2	0.30-0.50	---	85-95	---	---			
	12-22	0.05-0.10	0.01-0.06	0.35-0.60	---	85-95	---	---			
	22-72	1.10-1.20	0.01-20	0.03-0.35	0.0-2.9	1.0-12	.43	.43			
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	8.0-12	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
Bolio	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	3-16	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	16-72	---	0.000-0.001	---	---	75-90	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
29LU01:											
Lupine	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-6	1.04-1.20	0.6-2	0.18-0.25	0.0-2.9	1.0-5.0	.43	.43			
	6-16	1.08-1.25	0.6-2	0.18-0.24	0.0-2.9	0.0-1.0	.55	.55			
	16-20	1.12-1.31	2-6	0.14-0.22	0.0-2.9	0.0-0.2	.37	.49			
	20-72	1.47-1.65	6-20	0.02-0.05	0.0-2.9	0.0-0.2	.05	.17			
29MS01:											
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			
29NE01:											
Nenana	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	3	86
	3-6	1.05-1.20	0.6-2	0.20-0.24	0.0-2.9	3.0-6.0	.49	.49			
	6-13	1.05-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-4.0	.49	.49			
	13-20	1.13-1.36	0.6-20	0.12-0.22	0.0-2.9	0.0-1.0	.43	.64			
	20-72	1.45-1.65	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.10	.10			
29NE02:											
Nenana	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	3	86
	3-6	1.05-1.20	0.6-2	0.20-0.24	0.0-2.9	3.0-6.0	.49	.49			
	6-13	1.05-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-4.0	.49	.49			
	13-20	1.13-1.36	0.6-20	0.12-0.22	0.0-2.9	0.0-1.0	.43	.64			
	20-72	1.45-1.65	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.10	.10			
Sawmill Creek	0-4	0.05-0.18	0.6-20	0.25-0.50	---	80-95	---	---	2	3	86
	4-5	0.95-1.16	0.1-1	0.20-0.23	1.0-2.9	2.0-6.0	.49	.49			
	5-12	1.02-1.19	0.1-0.7	0.20-0.23	1.0-2.9	1.0-3.0	.64	.64			
	12-14	1.30-1.65	0.3-3	0.15-0.20	1.0-2.9	0.0-1.0	.37	.37			
	14-72	1.43-1.68	2-6	0.02-0.03	0.0-2.9	0.0-0.0	.10	.24			
29NN01:											
Noonku	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-6.0	.37	.37			
	6-47	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	47-72	1.40-1.70	6-20	0.03-0.04	0.0-2.9	0.0-1.0	.05	.28			
29PE01:											
Peede	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	5-59	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	1.0-5.0	.37	.37			
	59-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
29PL01:											
Eielson, rare flooding	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	2-49	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-6.0	.37	.37			
	49-71	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	71-72	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-1.0	.05	.28			
Piledriver, rare flooding	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-15	1.10-1.20	0.6-2	0.19-0.22	0.0-2.9	3.0-6.0	.37	.37			
	15-33	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	1.0-5.0	.32	.32			
	33-72	1.60-1.70	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.28			
29PT01:											
Pits, gravel	---	---	---	---	---	---	---	---	-	---	---

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
29SA01:											
Sawmill Creek	0-4	0.05-0.18	0.6-20	0.25-0.50	---	80-95	---	---	2	3	86
	4-5	0.95-1.16	0.1-1	0.20-0.23	1.0-2.9	2.0-6.0	.49	.49			
	5-12	1.02-1.19	0.1-0.7	0.20-0.23	1.0-2.9	1.0-3.0	.64	.64			
	12-14	1.30-1.65	0.3-3	0.15-0.20	1.0-2.9	0.0-1.0	.37	.37			
	14-72	1.43-1.68	2-6	0.02-0.03	0.0-2.9	0.0-0.0	.10	.24			
29TA01:											
Tatlanika, very poorly drained	0-5	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	2	8	0
	5-8	0.50-0.80	0.06-0.2	0.30-0.50	6.0-8.0	4.0-8.0	.37	.37			
	8-23	1.20-1.50	0.06-0.2	0.30-0.50	1.0-2.0	0.5-2.0	.37	.37			
	23-72	---	0.000-0.001	---	---	---	---	---			
Totatlanika, very poorly drained	0-4	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	1	8	0
	4-9	0.10-0.50	0.01-0.06	0.25-0.60	---	60-85	---	---			
	9-11	0.20-0.60	0.01-0.06	0.25-0.60	6.0-8.0	10-15	.32	.32			
	11-28	1.20-1.50	0.06-0.2	0.30-0.50	1.0-2.0	0.5-2.0	.37	.37			
	28-72	---	0.000-0.001	---	---	---	---	---			
29TC01:											
Tanacross	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-11	0.80-1.20	0.6-2	0.20-0.22	0.0-2.9	5.0-10	.37	.37			
	11-17	1.20-1.40	0.6-6	0.17-0.22	0.0-2.9	0.0-1.0	.43	.43			
	17-72	---	0.000-0.001	---	---	---	---	---			
29TE01:											
Typic Cryaquents, frequent long ponding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Liscum	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	3-11	0.20-0.30	0.001-0.06	0.25-0.30	---	60-85	---	---			
	11-15	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	8.0-12	.37	.37			
	15-70	1.20-1.60	0.6-2	0.15-0.22	0.0-2.9	1.0-5.0	.43	.43			
	70-72	1.30-1.50	2-6	0.10-0.14	0.0-2.9	1.0-3.0	.20	.37			
Terric Cryohemists	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	3-12	0.05-0.10	0.6-2	0.30-0.50	---	85-95	---	---			
	12-22	0.05-0.10	0.01-0.06	0.35-0.60	---	85-95	---	---			
	22-72	1.10-1.20	0.01-20	0.03-0.35	0.0-2.9	1.0-12	.43	.43			
29TN01:											
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-12	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
29TN02:											
Tanana	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-6	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	2.0-12	.37	.37			
	6-25	1.10-1.20	0.6-2	0.20-0.23	0.0-2.9	0.0-2.0	.43	.43			
	25-72	---	0.000-0.001	---	---	---	---	---			
Mosquito	0-18	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	18-24	0.80-1.40	0.6-2	0.24-0.28	0.0-2.9	5.0-9.0	.37	.37			
	24-72	---	0.000-0.001	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
29TT01:											
Totatlanika, poorly drained	0-4	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	1	8	0
	4-9	0.10-0.50	0.01-0.06	0.25-0.60	---	60-85	---	---			
	9-11	0.20-0.60	0.01-0.06	0.25-0.60	6.0-8.0	10-15	.32	.32			
	11-28	1.20-1.50	0.06-0.2	0.30-0.50	1.0-2.0	0.5-2.0	.37	.37			
	28-72	---	0.000-0.001	---	---	---	---	---			
Tatlanika, poorly drained	0-5	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	2	8	0
	5-8	0.50-0.80	0.06-0.2	0.30-0.50	6.0-8.0	4.0-8.0	.37	.37			
	8-23	1.20-1.50	0.06-0.2	0.30-0.50	1.0-2.0	0.5-2.0	.37	.37			
	23-72	---	0.000-0.001	---	---	---	---	---			
29TY01:											
Typic Haplocryepts, sandy	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-4	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-4.0	.32	.32			
	4-9	1.20-1.30	2-6	0.20-0.22	0.0-2.9	1.0-3.0	.32	.32			
	9-72	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-1.0	.05	.28			
29WI01:											
Windy Creek	0-5	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	2	8	0
	5-9	0.10-0.40	0.6-2	0.20-0.31	---	75-90	---	---			
	9-11	0.50-0.85	0.6-2	0.28-0.50	6.0-8.0	4.0-14	.32	.32			
	11-24	1.30-1.50	0.6-2	0.20-0.24	0.5-1.5	0.0-5.0	.43	.43			
	24-72	---	0.000-0.001	---	---	---	---	---			
Browne	0-5	0.10-0.35	6-20	0.20-0.30	---	85-95	---	---	2	8	0
	5-6	0.10-0.40	0.6-2	0.20-0.31	---	75-90	---	---			
	6-24	1.30-1.50	0.6-2	0.20-0.24	0.5-1.5	0.0-5.0	.43	.43			
	24-72	---	0.000-0.001	---	---	---	---	---			
31BR01:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
31BR02:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31BR03:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.1-6	---	---	---	---	---			
31BR04:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.1-6	---	---	---	---	---			
31BR05:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.1-6	---	---	---	---	---			
31BR06:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.1-6	---	---	---	---	---			
31BR07:											
Brigadier	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	6-11	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	3.0-10	.37	.37			
	11-16	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	16-20	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	20-72	---	0.1-6	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31BR07:											
Manchu	0-7	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	2	2	134
	7-9	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-10	.37	.37			
	9-28	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	28-39	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	39-72	---	0.1-6	---	---	---	---	---			
31CH01:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31CH02:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31CH03:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31CH04:											
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
31DU01:											
Dumps, mine	---	---	---	---	---	---	---	---	-	---	---
31ES01:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
31ES02:											
Ester	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	9-12	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	7.0-12	.15	.15			
	12-21	---	0.000-0.001	---	---	1.0-5.0	---	---			
	21-72	---	0.000-0.001	---	---	---	---	---			
31FA01:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31FA02:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA03:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA04:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA05:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA06:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA07:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
31FA08:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31FA09:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31FA10:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31FA11:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31FA12:											
Fairbanks	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	3-30	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	30-72	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31GD01:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
31GD02:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
31GD03:											
Goldstream	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-12	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	4.0-12	.37	.37			
	12-20	1.00-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-5.0	.55	.55			
	20-72	---	0.000-0.001	---	---	---	---	---			
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31GL01:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31GL02:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31GL03:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31GL04:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31GL05:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31GL06:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31HA01:											
Happy	0-2	0.10-0.40	0.6-2	0.20-0.31	---	75-90	---	---	2	2	134
	2-5	0.80-1.15	0.6-2	0.20-0.31	0.1-0.7	5.0-18	.43	.43			
	5-20	1.20-1.40	0.6-2	0.20-0.31	0.1-1.0	1.0-4.0	.37	.37			
	20-32	0.80-1.15	0.6-2	0.20-0.31	0.1-0.7	5.0-18	.43	.43			
	32-72	---	0.000-0.001	---	---	---	---	---			
31HI01:											
Histels	0-12	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	12-17	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---			
	17-26	---	0.000-0.001	---	---	---	---	---			
	26-72	---	0.000-0.001	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31MN01:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31MN02:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31MN03:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31MN04:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31MN05:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31MN06:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31MN07:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31MN08:											
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
Chatanika	0-4	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	4	2	134
	4-6	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	7.0-12	.37	.37			
	6-21	1.00-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	21-72	---	0.000-0.001	---	---	---	---	---			
31PT01:											
Pits, quarry	---	---	---	---	---	---	---	---	-	---	---
31RS01:											
Rosie	0-12	1.10-1.20	0.6-2	0.20-0.22	0.0-1.5	2.0-8.0	.37	.37	1	2	134
	12-22	1.10-1.20	0.6-2	0.20-0.22	0.0-1.5	1.0-5.0	.43	.43			
	22-28	1.40-1.50	2-6	0.05-0.10	0.0-1.5	0.0-1.0	.10	.43			
	28-72	---	2-6	---	---	---	---	---			
31SA01:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
31SA02:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
31SA03:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
31SA04:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
31SA05:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31SA06:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31SA07:											
Saulich	0-16	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	16-21	1.10-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-13	.37	.37			
	21-72	---	0.000-0.001	---	---	---	---	---			
Minto	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	5-9	1.10-1.20	0.6-2	0.20-0.24	0.0-2.9	2.0-8.0	.37	.37			
	9-16	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
	16-72	1.10-1.20	0.6-2	0.21-0.23	0.0-2.9	1.0-5.0	.43	.43			
31ST01:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST02:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST03:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST04:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST05:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST06:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
31ST07:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31ST07:											
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31ST08:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31ST09:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31ST10:											
Steese	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-5	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	5-27	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	27-33	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.15	.55			
	33-72	---	0.1-6	---	---	---	---	---			
Gilmore	0-3	0.05-0.10	6-20	0.05-0.35	0.0-2.9	85-95	---	---	1	2	134
	3-6	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-8.0	.37	.37			
	6-12	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-5.0	.43	.43			
	12-19	1.40-1.50	2-6	0.05-0.10	0.0-2.9	0.0-1.0	.10	.43			
	19-72	---	0.1-6	---	---	---	---	---			
31TE01:											
Typic Cryaquents, frequent long ponding	0-6	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	8	0
	6-72	1.10-1.30	0.2-2	0.20-0.22	0.0-2.9	1.0-5.0	.37	.37			
Histic Cryaquepts	0-11	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
Terric Cryofibrists	0-28	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	28-40	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---			
	40-72	1.30-1.45	0.2-0.6	0.20-0.27	0.0-2.9	5.0-10	.37	.37			

Table 8. Physical Properties of the Soil—Contnued

Map symbol and soil name	Depth	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
31TG01:											
Toghotthele	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	2	134
	1-4	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	2.0-6.0	.37	.37			
	4-51	1.10-1.20	0.6-2	0.20-0.22	0.0-2.9	1.0-4.0	.37	.37			
	51-72	1.40-1.80	6-20	0.05-0.22	0.0-0.3	0.1-0.7	.17	.17			
W:											
Water	---	---	---	---	---	---	---	---	-	---	---

Table 9. Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
28DY01:					
Dystrogelepts	0-2	---	33-56	4.6-5.4	0
	2-4	---	1.1-7.7	4.6-5.4	0
	4-8	---	1.1-8.8	5.2-6.2	0
	8-23	---	1.1-9.3	5.2-6.4	0
	23-72	1.0-9.0	---	5.2-6.4	0
Gelorthents	0-6	3.0-9.1	---	5.1-6.3	0
	6-72	2.0-8.5	---	5.6-6.5	0
28HA01:					
Haplocryepts	0-4	---	20-50	5.1-5.8	0
	4-6	3.3-9.5	---	5.1-5.8	0
	6-31	3.3-9.5	---	5.1-7.0	0
	31-72	2.8-8.5	---	5.1-7.0	0
28HA02:					
Haplocryepts	0-4	---	20-50	5.1-5.8	0
	4-6	3.3-9.5	---	5.1-5.8	0
	6-31	3.3-9.5	---	5.1-7.0	0
	31-72	2.8-8.5	---	5.1-7.0	0
29BL01:					
Bolio	0-3	---	115-155	3.5-5.8	0
	3-16	---	120-210	3.5-5.8	0
	16-72	---	---	3.5-5.8	0
29CR01:					
Typic Cryorthents, fill	0-30	5.0-15	---	6.1-7.3	0
	30-63	5.0-15	---	6.1-7.8	0-1
	63-72	5.0-10	---	6.1-7.8	0-1
Urban land	---	---	---	---	---
29DN01:					
Donnelly	0-2	---	15-50	3.5-5.4	0
	2-6	4.0-11	---	5.1-6.0	0
	6-12	2.0-5.0	---	5.6-6.0	0
	12-72	0.0-3.0	---	6.1-7.3	0
29DN02:					
Donnelly	0-2	---	15-50	3.5-5.4	0
	2-6	4.0-11	---	5.1-6.0	0
	6-12	2.0-5.0	---	5.6-6.0	0
	12-72	0.0-3.0	---	6.1-7.3	0

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
29DN04:					
Donnelly	0-2	---	15-50	3.5-5.4	0
	2-6	4.0-11	---	5.1-6.0	0
	6-12	2.0-5.0	---	5.6-6.0	0
	12-72	0.0-3.0	---	6.1-7.3	0
Lupine	0-3	40-110	---	4.8-5.7	0
	3-6	15-34	---	5.4-6.6	0
	6-16	10-29	---	5.6-6.4	0
	16-20	8.0-25	---	5.8-6.4	0
	20-72	3.0-10	---	5.9-6.6	0
29DU01:					
Dumps, landfill	---	---	---	---	---
29EL01:					
Eielson, occasional flooding	0-2	115-155	---	5.1-7.1	0
	2-49	15-30	---	5.6-7.1	0-1
	49-71	1.0-5.0	---	6.1-7.6	0-1
	71-72	1.0-5.0	---	6.1-7.6	0-1
Piledriver, occasional flooding	0-3	115-155	---	5.6-6.6	0
	3-15	15-30	---	5.1-6.5	0
	15-33	5.0-15	---	5.6-7.3	0-1
	33-72	1.0-5.0	---	5.6-7.3	0-1
29EL02:					
Eielson, rare flooding	0-2	115-155	---	5.1-7.1	0
	2-49	15-30	---	5.6-7.1	0-1
	49-71	1.0-5.0	---	6.1-7.6	0-1
	71-72	1.0-5.0	---	6.1-7.6	0-1
Tanana	0-3	---	115-155	4.5-5.0	0
	3-6	15-30	---	5.1-6.0	0
	6-25	5.0-20	---	5.6-7.3	0-1
	25-72	---	---	6.6-7.3	---
29EL03:					
Eielson, rare flooding	0-2	115-155	---	5.1-7.1	0
	2-49	15-30	---	5.6-7.1	0-1
	49-71	1.0-5.0	---	6.1-7.6	0-1
	71-72	1.0-5.0	---	6.1-7.6	0-1
29FA01:					
Faa	0-3	92-100	---	5.8-6.7	0
	3-6	3.1-13	---	5.8-6.7	0
	6-12	3.0-13	---	5.8-6.7	0
	12-39	4.8-9.4	---	6.0-7.4	0-2
	39-72	0.1-0.5	---	7.2-8.2	1-5

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
29FU01:					
Fubar, occasional flooding	0-2	115-155	---	5.1-6.1	0
	2-10	5.0-10	---	5.6-6.5	0
	10-72	1.0-5.0	---	5.6-7.3	0-1
Piledriver, occasional flooding	0-3	115-155	---	5.6-6.6	0
	3-15	15-30	---	5.1-6.5	0
	15-33	5.0-15	---	5.6-7.3	0-1
	33-72	1.0-5.0	---	5.6-7.3	0-1
29GE01:					
Moosehead	0-5	43-103	---	3.5-6.0	0
	5-7	20-40	---	5.6-6.5	0
	7-20	8.0-20	---	5.6-6.4	0
	20-26	6.0-22	---	5.6-7.3	0
	26-72	2.0-8.0	---	5.6-7.3	0
Gerstle	0-4	115-155	---	4.6-7.0	0
	4-10	14-33	---	4.8-6.8	0
	10-20	9.0-27	---	5.6-6.8	0
	20-30	6.0-20	---	5.7-6.8	0
	30-51	4.0-16	---	5.8-7.4	0
	51-72	3.0-11	---	5.8-7.4	0
29GE03:					
Donnelly	0-2	---	15-50	3.5-5.4	0
	2-6	4.0-11	---	5.1-6.0	0
	6-12	2.0-5.0	---	5.6-6.0	0
	12-72	0.0-3.0	---	6.1-7.3	0
Gerstle	0-4	115-155	---	4.6-7.0	0
	4-10	14-33	---	4.8-6.8	0
	10-20	9.0-27	---	5.6-6.8	0
	20-30	6.0-20	---	5.7-6.8	0
	30-51	4.0-16	---	5.8-7.4	0
	51-72	3.0-11	---	5.8-7.4	0
Moosehead	0-5	43-103	---	3.5-6.0	0
	5-7	20-40	---	5.6-6.5	0
	7-20	8.0-20	---	5.6-6.4	0
	20-26	6.0-22	---	5.6-7.3	0
	26-72	2.0-8.0	---	5.6-7.3	0
29HY01:					
Hydric Cryofibrists	0-30	115-155	---	5.7-6.5	0
	30-43	---	---	5.7-6.5	---
	43-69	115-155	---	5.7-6.5	0
	69-72	2.5-17	---	5.7-6.5	0
Liscum	0-3	115-155	---	6.1-7.3	0
	3-11	120-240	---	6.1-7.3	0
	11-15	---	15-30	4.5-5.5	0-1
	15-70	5.0-25	---	6.1-7.3	0-1
	70-72	5.0-10	---	6.1-7.3	0-1

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
29LS01:					
Terric Cryohemists	0-3	---	13-50	4.0-6.3	0
	3-12	---	13-50	5.1-6.5	0
	12-22	115-155	---	5.6-7.0	0
	22-72	2.5-17	---	6.1-7.2	0
Liscum	0-3	115-155	---	6.1-7.3	0
	3-11	120-240	---	6.1-7.3	0
	11-15	---	15-30	4.5-5.5	0-1
	15-70	5.0-25	---	6.1-7.3	0-1
	70-72	5.0-10	---	6.1-7.3	0-1
Bolio	0-3	---	115-155	3.5-5.8	0
	3-16	---	120-210	3.5-5.8	0
	16-72	---	---	3.5-5.8	0
29LU01:					
Lupine	0-3	40-110	---	4.8-5.7	0
	3-6	15-34	---	5.4-6.6	0
	6-16	10-29	---	5.6-6.4	0
	16-20	8.0-25	---	5.8-6.4	0
	20-72	3.0-10	---	5.9-6.6	0
29MS01:					
Mosquito	0-18	115-155	---	5.1-6.6	0
	18-24	30-50	---	5.6-6.6	0
	24-72	---	---	5.6-6.6	---
29NE01:					
Nenana	0-3	38-89	---	5.0-6.8	0
	3-6	15-34	---	5.5-6.6	0
	6-13	10-30	---	5.5-6.6	0
	13-20	7.0-22	---	5.5-6.6	0
	20-72	3.0-11	---	5.5-6.6	0
29NE02:					
Nenana	0-3	38-89	---	5.0-6.8	0
	3-6	15-34	---	5.5-6.6	0
	6-13	10-30	---	5.5-6.6	0
	13-20	7.0-22	---	5.5-6.6	0
	20-72	3.0-11	---	5.5-6.6	0
Sawmill Creek	0-4	40-110	---	5.2-5.6	0
	4-5	13-32	---	5.9-6.5	0
	5-12	10-30	---	6.1-6.8	0
	12-14	5.0-20	---	7.5-7.5	0
	14-72	4.0-13	---	6.5-8.0	0-10
29NN01:					
Noonku	0-2	120-210	---	6.1-7.3	0
	2-6	5.0-30	---	6.1-7.3	0-1
	6-47	5.0-10	---	6.1-7.5	0-1
	47-72	1.0-5.0	---	6.1-7.5	0-1
29PE01:					
Peede	0-5	105-126	---	6.1-7.3	0
	5-59	3.0-9.5	---	6.1-7.3	0
	59-72	5.0-10	---	6.1-7.3	0

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
29PL01:					
Eielson, rare flooding	0-2	115-155	---	5.1-7.1	0
	2-49	15-30	---	5.6-7.1	0-1
	49-71	1.0-5.0	---	6.1-7.6	0-1
	71-72	1.0-5.0	---	6.1-7.6	0-1
Piledriver, rare flooding	0-3	115-155	---	5.6-6.6	0
	3-15	15-30	---	5.1-6.5	0
	15-33	5.0-15	---	5.6-7.3	0-1
	33-72	1.0-5.0	---	5.6-7.3	0-1
29PT01:					
Pits, gravel	---	---	---	---	---
29SA01:					
Sawmill Creek	0-4	40-110	---	5.2-5.6	0
	4-5	13-32	---	5.9-6.5	0
	5-12	10-30	---	6.1-6.8	0
	12-14	5.0-20	---	7.5-7.5	0
	14-72	4.0-13	---	6.5-8.0	0-10
29TA01:					
Tatlanika, very poorly drained	0-5	---	42-60	5.0-6.0	0
	5-8	11-28	---	6.0-6.8	0
	8-23	11-27	---	6.0-7.2	0
	23-72	---	---	---	---
Totatlanika, very poorly drained	0-4	---	42-60	5.0-6.0	0
	4-9	113-154	---	5.5-6.5	0
	9-11	14-29	---	5.7-6.7	0
	11-28	11-27	---	6.0-7.2	0
	28-72	---	---	---	---
29TC01:					
Tanacross	0-9	---	30-80	3.5-5.0	0
	9-11	20-40	---	5.1-6.0	0
	11-17	5.0-20	---	5.1-6.0	0
	17-72	---	---	5.1-6.0	0
29TE01:					
Typic Cryaquents, frequent long ponding	0-6	120-210	---	5.6-7.3	0
	6-72	15-30	---	6.1-7.3	0
Liscum	0-3	115-155	---	6.1-7.3	0
	3-11	120-240	---	6.1-7.3	0
	11-15	---	15-30	4.5-5.5	0-1
	15-70	5.0-25	---	6.1-7.3	0-1
	70-72	5.0-10	---	6.1-7.3	0-1
Terric Cryohemists	0-3	---	13-50	4.0-6.3	0
	3-12	---	13-50	5.1-6.5	0
	12-22	115-155	---	5.6-7.0	0
	22-72	2.5-17	---	6.1-7.2	0

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
29TN01:					
Tanana	0-3	---	115-155	4.5-5.0	0
	3-6	15-30	---	5.1-6.0	0
	6-25	5.0-20	---	5.6-7.3	0-1
	25-72	---	---	6.6-7.3	---
29TN02:					
Tanana	0-3	---	115-155	4.5-5.0	0
	3-6	15-30	---	5.1-6.0	0
	6-25	5.0-20	---	5.6-7.3	0-1
	25-72	---	---	6.6-7.3	---
Mosquito	0-18	115-155	---	5.1-6.6	0
	18-24	30-50	---	5.6-6.6	0
	24-72	---	---	5.6-6.6	---
29TT01:					
Totatlanika, poorly drained	0-4	---	42-60	5.0-6.0	0
	4-9	113-154	---	5.5-6.5	0
	9-11	14-29	---	5.7-6.7	0
	11-28	11-27	---	6.0-7.2	0
	28-72	---	---	---	---
Tatlanika, poorly drained	0-5	---	42-60	5.0-6.0	0
	5-8	11-28	---	6.0-6.8	0
	8-23	11-27	---	6.0-7.2	0
	23-72	---	---	---	---
29TY01:					
Typic Haplocryepts, sandy	0-2	---	35-56	4.7-5.4	0
	2-4	---	2.1-7.0	4.7-5.7	0
	4-9	2.8-8.5	---	5.2-5.9	0
	9-72	0.0-4.2	---	5.2-5.9	0
29WI01:					
Browne	0-5	---	13-50	4.2-5.8	0
	5-6	50-151	---	5.0-6.2	0
	6-24	10-20	---	5.6-6.7	0
	24-72	---	---	---	---
Windy Creek	0-5	---	13-50	4.2-5.8	0
	5-9	---	13-51	4.8-6.0	0
	9-11	---	10-25	5.2-5.8	0
	11-24	10-20	---	5.6-6.7	0
	24-72	---	---	---	---
31BR01:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Ester	0-9	---	115-155	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-21	---	10-25	4.6-5.8	0
	21-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31BR02:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Ester	0-9	---	115-155	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-21	---	10-25	4.6-5.8	0
	21-72	---	---	---	---
31BR03:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Manchu	0-7	---	115-155	3.8-4.6	0
	7-9	---	15-30	4.3-5.4	0
	9-28	1.0-5.0	---	5.1-6.0	0
	28-39	1.0-5.0	---	5.6-6.5	0
	39-72	---	---	6.1-6.5	---
31BR04:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Manchu	0-7	---	115-155	3.8-4.6	0
	7-9	---	15-30	4.3-5.4	0
	9-28	1.0-5.0	---	5.1-6.0	0
	28-39	1.0-5.0	---	5.6-6.5	0
	39-72	---	---	6.1-6.5	---
31BR05:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Manchu	0-7	---	115-155	3.8-4.6	0
	7-9	---	15-30	4.3-5.4	0
	9-28	1.0-5.0	---	5.1-6.0	0
	28-39	1.0-5.0	---	5.6-6.5	0
	39-72	---	---	6.1-6.5	---
31BR06:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31BR06:					
Manchu	0-7	---	115-155	3.8-4.6	0
	7-9	---	15-30	4.3-5.4	0
	9-28	1.0-5.0	---	5.1-6.0	0
	28-39	1.0-5.0	---	5.6-6.5	0
	39-72	---	---	6.1-6.5	---
31BR07:					
Brigadier	0-6	---	115-155	3.8-4.6	0
	6-11	---	15-30	4.3-5.3	0
	11-16	1.0-5.0	---	5.2-5.7	0
	16-20	1.0-5.0	---	5.2-5.7	0
	20-72	---	---	---	---
Manchu	0-7	---	115-155	3.8-4.6	0
	7-9	---	15-30	4.3-5.4	0
	9-28	1.0-5.0	---	5.1-6.0	0
	28-39	1.0-5.0	---	5.6-6.5	0
	39-72	---	---	6.1-6.5	---
31CH01:					
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31CH02:					
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31CH03:					
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31CH04:					
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
Goldstream	0-9	---	70-120	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-20	---	5.0-15	4.5-5.5	0
	20-72	---	---	4.5-5.5	---
31DU01:					
Dumps, mine	---	---	---	---	---
31ES01:					
Ester	0-9	---	115-155	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-21	---	10-25	4.6-5.8	0
	21-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31ES02:					
Ester	0-9	---	115-155	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-21	---	10-25	4.6-5.8	0
	21-72	---	---	---	---
31FA01:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA02:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA03:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA04:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA05:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA06:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA07:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
31FA08:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31FA09:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31FA10:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31FA11:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31FA12:					
Fairbanks	0-3	115-155	---	5.6-6.0	0
	3-30	15-30	---	5.6-6.0	0
	30-72	5.0-15	---	6.1-7.3	0-1
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31GD01:					
Goldstream	0-9	---	70-120	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-20	---	5.0-15	4.5-5.5	0
	20-72	---	---	4.5-5.5	---
31GD02:					
Goldstream	0-9	---	70-120	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-20	---	5.0-15	4.5-5.5	0
	20-72	---	---	4.5-5.5	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31GD03:					
Goldstream	0-9	---	70-120	3.6-4.5	0
	9-12	---	15-30	4.5-5.5	0
	12-20	---	5.0-15	4.5-5.5	0
	20-72	---	---	4.5-5.5	---
Histels	0-12	---	115-155	3.6-4.5	0
	12-17	---	120-210	3.6-5.0	0
	17-26	---	---	3.6-5.0	0
	26-72	---	---	5.1-6.0	---
31GL01:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31GL02:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31GL03:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31GL04:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31GL05:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31GL06:					
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31HA01:					
Happy	0-2	50-151	---	5.4-6.0	0
	2-5	---	2.0-11	5.0-6.0	0
	5-20	3.0-11	---	5.8-6.5	0
	20-32	3.2-20	---	5.8-6.5	0
	32-72	---	---	---	---
31HI01:					
Histels	0-12	---	115-155	3.6-4.5	0
	12-17	---	120-210	3.6-5.0	0
	17-26	---	---	3.6-5.0	0
	26-72	---	---	5.1-6.0	---
31MN01:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31MN02:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31MN03:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31MN04:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31MN05:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31MN06:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31MN07:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31MN08:					
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
Chatanika	0-4	---	115-155	4.5-6.1	0
	4-6	---	15-30	4.5-5.5	0
	6-21	5.0-15	---	4.5-6.1	0
	21-72	---	---	5.6-6.5	0
31PT01:					
Pits, quarry	---	---	---	---	---
31RS01:					
Rosie	0-12	3.1-13	---	6.8-8.2	0-1
	12-22	3.0-13	---	7.5-8.2	2-6
	22-28	2.6-8.9	---	7.5-8.2	4-9
	28-72	---	---	---	---
31SA01:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
31SA02:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
31SA03:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
31SA04:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31SA05:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31SA06:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31SA07:					
Saulich	0-16	---	115-155	4.5-5.5	0
	16-21	15-30	---	5.1-6.6	0
	21-72	---	---	6.1-7.3	---
Minto	0-5	---	115-155	4.5-5.0	0
	5-9	15-30	---	5.6-6.5	0
	9-16	5.0-15	---	5.6-6.0	0
	16-72	5.0-15	---	6.1-6.5	0
31ST01:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31ST02:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31ST03:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31ST04:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31ST05:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31ST06:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
31ST07:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31ST08:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31ST09:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---

Table 9. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate
	In.	meq/100 g	meq/100 g	pH	Pct.
31ST10:					
Steese	0-2	115-155	---	5.1-6.5	0
	2-5	---	15-30	5.1-6.0	0
	5-27	5.0-15	---	5.1-6.0	0
	27-33	5.0-10	---	6.1-6.5	0
	33-72	---	---	---	---
Gilmore	0-3	115-155	---	5.1-6.0	0
	3-6	15-30	---	5.6-6.0	0
	6-12	1.0-5.0	---	5.6-6.0	0
	12-19	1.0-5.0	---	6.1-6.5	0
	19-72	---	---	---	---
31TE01:					
Typic Cryaquents, frequent long ponding	0-6	120-210	---	5.6-7.3	0
	6-72	15-30	---	6.1-7.3	0
Histic Cryaquepts	0-11	---	115-155	4.0-6.0	0
	11-23	5.0-15	---	5.1-6.0	0
	23-72	2.0-5.0	---	5.6-6.0	0
Terric Cryofibrists	0-28	115-155	---	5.0-6.0	0
	28-40	120-240	---	5.6-6.6	0
	40-72	30-50	---	5.6-6.6	0
31TG01:					
Toghotthele	0-1	92-100	---	5.8-6.7	0
	1-4	3.1-13	---	5.8-6.7	0
	4-51	3.0-13	---	5.8-6.7	0
	51-72	0.1-0.5	---	7.4-8.2	1-5
W:					
Water	---	---	---	---	---

Table 10. Water Features

(See text for definitions of terms used in this table. Ponding depth is the estimated range in the depth of water on the surface. Soil moisture status depth is the upper and lower depth below the soil surface.)

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
28DY01:									
Dystrogelepts	B	Apr-May	None	---	None	---	---	0-72	Moist, frozen
		Jun	None	---	None	---	---	0-28	Moist
								28-72	Moist, frozen
		Jul-Sep	None	---	None	---	---	0-72	Moist
Gelorthents	A	Apr-May	None	---	None	---	---	0-72	Moist, frozen
		Jun	None	---	None	---	---	0-28	Moist
								28-72	Moist, frozen
		Jul-Sep	None	---	None	---	---	0-72	Moist
28HA01:									
Haplocryepts	B	Apr-Sep	None	---	None	---	---	0-72	Moist
28HA02:									
Haplocryepts	B	Apr-Sep	None	---	None	---	---	0-72	Moist
29BL01:									
Bolio	D	Apr-Jun	Rare	Brief	Frequent	Long	12-0	0- 8	Wet
								8-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0- 5	Moist
								5-16	Wet
								16-72	Wet, frozen
29CR01:									
Typic Cryorthents, fill	B	Apr-Sep	Rare	Brief	None	---	---	0-72	Dry to moist
Urban land		Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist, frozen
								47-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-18	Wet
								18-47	Moist, frozen
								47-72	Wet, frozen
		Jun-Sep	Rare	Brief	---	---	---	0-47	Moist
								47-72	Wet
29DN01:									
Donnelly	A	Apr-Sep	None	---	None	---	---	0-72	Moist
29DN02:									
Donnelly	A	Apr-Sep	None	---	None	---	---	0-72	Moist
29DN04:									
Donnelly	A	Apr-Sep	None	---	None	---	---	0-72	Moist
Lupine	B	Apr	None	---	Frequent	Long	4-0	0- 8	Wet
								8-72	Moist, frozen
		May-Sep	None	---	---	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29EL01:									
Eielson, occasional flooding	B	Apr	Occasional	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist, frozen
								47-72	Wet, frozen
		May	Occasional	Brief	Frequent	Long	6-0	0-18	Wet
								18-47	Moist, frozen
								47-72	Wet, frozen
		Jun-Sep	Occasional	Brief	---	---	---	0-47	Moist
								47-72	Wet
Piledriver, occasional flooding	B	Apr	Occasional	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist
								47-72	Wet
		May	Occasional	Brief	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-47	Moist
								47-72	Wet
		Jun-Sep	Occasional	Brief	---	---	---	0-47	Dry to moist
								47-72	Wet
29EL02:									
Eielson, rare flooding	B	Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist, frozen
								47-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-18	Wet
								18-47	Moist, frozen
								47-72	Wet, frozen
		Jun-Sep	Rare	Brief	---	---	---	0-47	Moist
								47-72	Wet
Tanana	D	Apr-May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0- 6	Moist
								6-18	Wet
								18-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0-12	Moist
								12-25	Wet
								25-72	Wet, frozen
29EL03:									
Eielson, rare flooding	B	Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist, frozen
								47-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-18	Wet
								18-47	Moist, frozen
								47-72	Wet, frozen
		Jun-Sep	Rare	Brief	---	---	---	0-47	Moist
								47-72	Wet
29FA01:									
Faa	B	Apr-May	None	---	None	---	---	0-12	Moist
								12-39	Wet
								39-72	Moist
		Jun-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29FU01:									
Fubar, occasional flooding	B	Apr-Sep	Occasional	Brief	None	---	---	0-54	Moist
								54-72	Wet
Piledriver, occasional flooding	B	Apr	Occasional	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist
								47-72	Wet
		May	Occasional	Brief	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-47	Moist
								47-72	Wet
		Jun-Sep	Occasional	Brief	---	---	---	0-47	Dry to moist
								47-72	Wet
29GE01:									
Moosehead	B	Apr	None	---	Frequent	Long	6-0	0- 2	Wet
								2-72	Moist, frozen
		May	None	---	---	---	---	0-10	Moist
								10-72	Moist, frozen
		Jun-Sep	None	---	---	---	---	0-72	Moist
Gerstle	B	Apr	None	---	Frequent	Long	6-0	0- 2	Wet
								2-72	Moist, frozen
		May	None	---	---	---	---	0-10	Moist
								10-72	Moist, frozen
		Jun-Sep	None	---	---	---	---	0-72	Moist
29GE03:									
Donnelly	A	Apr-Sep	None	---	None	---	---	0-72	Moist
Gerstle	B	Apr	None	---	Frequent	Long	6-0	0- 2	Wet
								2-72	Moist, frozen
		May	None	---	---	---	---	0-10	Moist
								10-72	Moist, frozen
		Jun-Sep	None	---	---	---	---	0-72	Moist
Moosehead	B	Apr	None	---	Frequent	Long	6-0	0- 2	Wet
								2-72	Moist, frozen
		May	None	---	---	---	---	0-10	Moist
								10-72	Moist, frozen
		Jun-Sep	None	---	---	---	---	0-72	Moist
29HY01:									
Hydric Cryofibrists	D	Apr	---	---	---	---	---	0-72	Wet, frozen
		May	---	---	Frequent	Very long	12-0	0- 8	Wet
								8-72	Wet, frozen
		Jun	Rare	Brief	Frequent	Very long	12-0	0-24	Wet
								24-72	Wet, frozen
		Jul-Aug	Rare	Brief	Frequent	Very long	12-0	0-72	Wet
		Sep	---	---	Frequent	Very long	12-0	0-72	Wet

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29HY01:									
Liscum	D	Apr	Rare	Brief	Frequent	Long	12-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	Rare	Brief	Frequent	Long	12-0	4-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	Rare	Brief	Frequent	Long	12-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	Rare	Brief	---	---	---	0- 4	Moist
								4-72	Wet
29LS01:									
Terric Cryohemists	D	Apr	---	---	---	---	---	0-72	Wet, frozen
		May	---	---	Frequent	Very long	12-0	0- 8	Wet
								8-72	Wet, frozen
		Jun	Rare	Brief	Frequent	Very long	12-0	0-24	Wet
								24-72	Wet, frozen
		Jul-Aug	Rare	Brief	Frequent	Very long	12-0	0-72	Wet
		Sep	---	---	Frequent	Very long	12-0	0-72	Wet
Liscum	D	Apr	Rare	Brief	Frequent	Long	12-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	Rare	Brief	Frequent	Long	12-0	4-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	Rare	Brief	Frequent	Long	12-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	Rare	Brief	---	---	---	0- 4	Moist
								4-72	Wet
Bolio	D	Apr-Jun	Rare	Brief	Frequent	Long	12-0	0- 8	Wet
								8-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0- 5	Moist
								5-16	Wet
								16-72	Wet, frozen
29LU01:									
Lupine	B	Apr	None	---	Frequent	Long	4-0	0- 8	Wet
								8-72	Moist, frozen
		May-Sep	None	---	---	---	---	0-72	Moist
29MS01:									
Mosquito	D	Apr	Rare	Brief	Frequent	Long	12-0	0- 6	Wet
								6-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jun	Rare	Brief	Frequent	Long	12-0	0-12	Wet
								12-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0-24	Wet
								24-72	Wet, frozen
29NE01:									
Nenana	B	Apr	None	---	Occasional	Long	4-0	0- 6	Wet
								6-72	Wet, frozen
		May-Sep	None	---	---	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29NE02:									
Nenana	B	Apr	None	---	Occasional	Long	4-0	0- 6	Wet
								6-72	Wet, frozen
		May-Sep	None	---	---	---	---	0-72	Moist
Sawmill Creek	B	Apr	None	---	Frequent	Long	6-0	0-10	Wet
								10-72	Wet, frozen
		May-Sep	None	---	---	---	---	0-72	Moist
29NN01:									
Noonku	D	Apr	Occasional	Brief	Frequent	Long	12-0	0- 4	Wet
								4-72	Wet, frozen
		May	Occasional	Brief	Frequent	Long	12-0	0-16	Wet
								16-72	Wet, frozen
		Jun	Occasional	Brief	Frequent	Long	12-0	0-31	Wet
								31-72	Wet, frozen
		Jul-Sep	Occasional	Brief	---	---	---	0- 8	Moist
								8-72	Wet
29PE01:									
Peede	D	Apr	Occasional	Brief	Frequent	Long	12-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	Occasional	Brief	Frequent	Long	12-0	4-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	Occasional	Brief	Frequent	Long	12-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	Occasional	Brief	---	---	---	0- 8	Moist
								8-72	Wet
29PL01:									
Eielson, rare flooding	B	Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist, frozen
								47-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-18	Wet
								18-47	Moist, frozen
								47-72	Wet, frozen
		Jun-Sep	Rare	Brief	---	---	---	0-47	Moist
								47-72	Wet
Piledriver, rare flooding	B	Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist
								47-72	Wet
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-47	Moist
								47-72	Wet
		Jun-Sep	Rare	Brief	---	---	---	0-47	Dry to moist
								47-72	Wet

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29PT01:									
Pits, gravel		Apr	Rare	Brief	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-47	Moist
								47-72	Wet
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-47	Moist
								47-72	Wet
		Jun-Sep	Rare	Brief	---	---	---	0-47	Dry to moist
								47-72	Wet
29SA01:									
Sawmill Creek	B	Apr	None	---	Frequent	Long	6-0	0-10	Wet
								10-72	Wet, frozen
		May-Sep	None	---	---	---	---	0-72	Moist
29TA01:									
Tatlanika, very poorly drained	D	Apr	Rare	Brief	Frequent	Long	6-0	0-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	---	---	---	---	0-18	Wet
								18-72	Wet, frozen
		Jul-Sep	Rare	---	---	---	---	0-23	Wet
								23-72	Wet, frozen
Totatlanika, very poorly drained	D	Apr	Rare	Brief	Frequent	Long	6-0	0-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0-16	Wet
								16-72	Wet, frozen
		Jul-Aug	Rare	Brief	---	---	---	0-28	Wet
								28-72	Wet, frozen
		Sep	Rare	Brief	---	---	---	0-20	Wet
								20-72	Wet, frozen
29TC01:									
Tanacross	D	Apr-May	Rare	Brief	Frequent	Long	6-0	0- 8	Wet
								8-72	Wet, frozen
		Jun-Sep	Rare	Brief	---	---	---	0-17	Wet
								17-72	Wet, frozen
29TE01:									
Typic Cryaquents, frequent long ponding	D	Apr	None	---	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	None	---	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	None	---	Frequent	Long	6-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	None	---	Frequent	Long	6-0	0-72	Wet

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29TE01:									
Liscum	D	Apr	Rare	Brief	Frequent	Long	12-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	Rare	Brief	Frequent	Long	12-0	4-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	Rare	Brief	Frequent	Long	12-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	Rare	Brief	---	---	---	0- 4	Moist
								4-72	Wet
Terric Cryohemists	D	Apr	---	---	---	---	---	0-72	Wet, frozen
		May	---	---	Frequent	Very long	12-0	0- 8	Wet
								8-72	Wet, frozen
		Jun	Rare	Brief	Frequent	Very long	12-0	0-24	Wet
								24-72	Wet, frozen
		Jul-Aug	Rare	Brief	Frequent	Very long	12-0	0-72	Wet
		Sep	---	---	Frequent	Very long	12-0	0-72	Wet
29TN01:									
Tanana	D	Apr-May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0- 6	Moist
								6-18	Wet
								18-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0-12	Moist
								12-25	Wet
								25-72	Wet, frozen
29TN02:									
Tanana	D	Apr-May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0- 6	Moist
								6-18	Wet
								18-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0-12	Moist
								12-25	Wet
								25-72	Wet, frozen
Mosquito	D	Apr	Rare	Brief	Frequent	Long	12-0	0- 6	Wet
								6-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jun	Rare	Brief	Frequent	Long	12-0	0-12	Wet
								12-72	Wet, frozen
		Jul-Sep	Rare	Brief	---	---	---	0-24	Wet
								24-72	Wet, frozen

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
29TT01:									
Totatlanika, poorly drained	D	Apr	Rare	Brief	Frequent	Long	6-0	0-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0-16	Wet
								16-72	Wet, frozen
		Jul-Aug	Rare	Brief	---	---	---	0-28	Wet
								28-72	Wet, frozen
		Sep	Rare	Brief	---	---	---	0-20	Wet
								20-72	Wet, frozen
Tatlanika, poorly drained	D	Apr	Rare	Brief	Frequent	Long	6-0	0-72	Wet, frozen
		May	Rare	Brief	Frequent	Long	6-0	0-12	Wet
								12-72	Wet, frozen
		Jun	Rare	Brief	---	---	---	0-18	Moist
								18-26	Moist, frozen
								26-72	Wet, frozen
		Jul-Aug	Rare	Brief	---	---	---	0-23	Moist
								30-72	Wet, frozen
		Sep	Rare	Brief	---	---	---	0-23	Moist
								23-26	Moist, frozen
								26-72	Wet, frozen
29TY01:									
Typic Haplocryepts, sandy	B	Apr-Sep	None	---	None	---	---	0-72	Moist
29WI01:									
Browne	D	Apr-May	None	---	Frequent	Long	6-0	0- 8	Wet
								8-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0-24	Wet
								24-72	Wet, frozen
Windy Creek	D	Apr-May	None	---	Frequent	Long	6-0	0- 8	Wet
								8-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0-24	Wet
								24-72	Wet, frozen
31BR01:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Ester	D	Apr-Jun	None	---	None	---	---	0- 4	Moist
								4- 9	Wet
								9-72	Wet, frozen
		Jul-Sep	None	---	None	---	---	0- 4	Moist
								4-12	Wet
								12-72	Wet, frozen
31BR02:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Ester	D	Apr-Jun	None	---	None	---	---	0- 4	Moist
								4- 9	Wet
								9-72	Wet, frozen
		Jul-Sep	None	---	None	---	---	0- 4	Moist
								4-12	Wet
								12-72	Wet, frozen

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31BR03:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Manchu	B	Apr	None	---	None	---	---	0- 7	Moist
								7-72	Wet, frozen
		May	None	---	None	---	---	0- 7	Moist
								7- 8	Moist, frozen
								8-72	Wet, frozen
		Jun	None	---	None	---	---	0-14	Moist
								14-72	Wet
		Jul-Sep	None	---	None	---	---	0-72	Moist
31BR04:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Manchu	B	Apr	None	---	None	---	---	0- 7	Moist
								7-72	Wet, frozen
		May	None	---	None	---	---	0- 7	Moist
								7- 8	Moist, frozen
								8-72	Wet, frozen
		Jun	None	---	None	---	---	0-14	Moist
								14-72	Wet
		Jul-Sep	None	---	None	---	---	0-72	Moist
31BR05:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Manchu	B	Apr	None	---	None	---	---	0- 7	Moist
								7-72	Wet, frozen
		May	None	---	None	---	---	0- 7	Moist
								7- 8	Moist, frozen
								8-72	Wet, frozen
		Jun	None	---	None	---	---	0-14	Moist
								14-72	Wet
		Jul-Sep	None	---	None	---	---	0-72	Moist
31BR06:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Manchu	B	Apr	None	---	None	---	---	0- 7	Moist
								7-72	Wet, frozen
		May	None	---	None	---	---	0- 7	Moist
								7- 8	Moist, frozen
								8-72	Wet, frozen
		Jun	None	---	None	---	---	0-14	Moist
								14-72	Wet
		Jul-Sep	None	---	None	---	---	0-72	Moist
31BR07:									
Brigadier	D	Apr-Sep	None	---	None	---	---	0-72	Moist
Manchu	B	Apr	None	---	None	---	---	0- 7	Moist
								7-72	Wet, frozen
		May	None	---	None	---	---	0- 7	Moist
								7- 8	Moist, frozen
								8-72	Wet, frozen
		Jun	None	---	None	---	---	0-14	Moist
								14-72	Wet
		Jul-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31CH01:									
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31CH02:									
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31CH03:									
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31CH04:									
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
Goldstream	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0- 8	Moist
								8-20	Wet
								20-72	Wet, frozen
31ES01:									
Ester	D	Apr-Jun	None	---	None	---	---	0- 4	Moist
								4- 9	Wet
								9-72	Wet, frozen
		Jul-Sep	None	---	None	---	---	0- 4	Moist
								4-12	Wet
								12-72	Wet, frozen
31ES02:									
Ester	D	Apr-Jun	None	---	None	---	---	0- 4	Moist
								4- 9	Wet
								9-72	Wet, frozen
		Jul-Sep	None	---	None	---	---	0- 4	Moist
								4-12	Wet
								12-72	Wet, frozen
31FA01:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA02:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA03:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31FA04:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA05:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA06:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA07:									
Fairbanks	B	Apr	None	---	None	---	---	0-72	Moist
31FA08:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA09:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA10:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA11:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31FA12:									
Fairbanks	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31GD01:									
Goldstream	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0- 8	Moist
								8-20	Wet
								20-72	Wet, frozen
31GD02:									
Goldstream	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0- 8	Moist
								8-20	Wet
								20-72	Wet, frozen

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31GD03:									
Goldstream	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0- 8	Moist
								8-20	Wet
								20-72	Wet, frozen
Histels	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0-17	Wet
								17-72	Wet, frozen
31GL01:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31GL02:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31GL03:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31GL04:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31GL05:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31GL06:									
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31HA01:									
Happy	D	Apr	Occasional	Very long	Frequent	Long	6-0	0- 8	Wet
								8-72	Wet, frozen
		May	---	---	Frequent	Long	6-0	0- 8	Moist
								8-16	Moist, frozen
								16-72	Wet, frozen
		Jun	---	---	---	---	---	0-24	Moist
								24-28	Moist, frozen
								28-72	Wet, frozen
		Jul-Sep	---	---	---	---	---	0-28	Moist
								28-32	Wet
								32-72	Wet, frozen
31HI01:									
Histels	D	Apr-Jun	None	---	Frequent	Long	12-0	0-10	Wet
								10-72	Wet, frozen
		Jul-Sep	None	---	---	---	---	0-17	Wet
								17-72	Wet, frozen
31MN01:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31MN02:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
31MN03:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
31MN04:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
31MN05:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31MN06:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31MN06:									
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31MN07:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31MN08:									
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
Chatanika	D	Apr-May	None	---	Frequent	Long	4-0	0-12	Wet
								12-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31PT01:									
Pits, quarry		Apr-Sep	None	---	None	---	---	0-72	Moist
31RS01:									
Rosie	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31SA01:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31SA02:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31SA03:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31SA04:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
31SA05:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
31SA06:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31SA07:									
Saulich	D	Apr-May	None	---	Frequent	Long	4-0	0-10	Wet
								10-72	Wet, frozen
		Jun-Sep	None	---	---	---	---	0- 8	Moist
								8-21	Wet
								21-72	Wet, frozen
Minto	B	Apr	None	---	None	---	---	0- 4	Moist
								4-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		May	None	---	None	---	---	0- 8	Moist
								8-20	Wet
								20-30	Wet, frozen
								30-72	Moist, frozen
		Jun-Sep	None	---	None	---	---	0-72	Moist
31ST01:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST02:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST03:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST04:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST05:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST06:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST07:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST08:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST09:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist
31ST10:									
Steese	B	Apr-Sep	None	---	None	---	---	0-72	Moist
Gilmore	D	Apr-Sep	None	---	None	---	---	0-72	Moist

Table 10. Water Features—Continued

Map symbol and soil name	Hydrologic group	Month	Flooding		Ponding		Soil Moisture Status		
			Frequency	Duration	Frequency	Duration	Depth	Depth	Status
							In.	In.	
31TE01:									
Typic Cryaquents, frequent long ponding	D	Apr	None	---	Frequent	Long	6-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	None	---	Frequent	Long	6-0	0-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	None	---	Frequent	Long	6-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	None	---	Frequent	Long	6-0	0-72	Wet
Histic Cryaquepts	D	Apr	None	---	Frequent	Long	12-0	0- 4	Wet
								4-72	Wet, frozen
		May	None	---	Frequent	Long	12-0	0-26	Wet
								26-72	Wet, frozen
		Jun	None	---	Frequent	Long	12-0	0-72	Wet
		Jul-Sep	None	---	---	---	---	0-16	Moist
								16-72	Wet
Terric Cryofibrists	D	Apr	None	---	Frequent	Long	12-0	0- 4	Wet
								4-14	Wet, frozen
								14-72	Wet
		May	None	---	Frequent	Long	12-0	4-12	Wet
								12-22	Wet, frozen
								22-72	Wet
		Jun	None	---	Frequent	Long	12-0	0-18	Wet
								18-20	Wet, frozen
								20-72	Wet
		Jul-Sep	None	---	Frequent	Long	12-0	0-72	Wet
31TG01:									
Toghotthele	B	Apr-Sep	None	---	None	---	---	0-72	Moist

Table 11. 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			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
28DY01:								
Dystrogelepts	Paralithic bedrock	30-72	Strongly cemented	0	0	Moderate	Moderate	Moderate
Gelorthents	Paralithic bedrock	30-72	Strongly cemented	0	0	Low	Low	Low
28HA01:								
Haplocryepts	none	---	---	0	0	High	Moderate	Moderate
28HA02:								
Haplocryepts	none	---	---	0	0	High	Moderate	Moderate
29BL01:								
Bolio	Permafrost	6-39	Strongly cemented	28-55	39-79	High	High	High
29CR01:								
Typic Cryorthents, fill	none	---	---	0	0	Moderate	Moderate	Moderate
Urban land	none	---	---	---	---	---	---	---
29DN01:								
Donnelly	none	---	---	0	0	Moderate	Moderate	Moderate
29DN02:								
Donnelly	none	---	---	0	0	Moderate	Moderate	Moderate
29DN04:								
Donnelly	none	---	---	0	0	Moderate	Moderate	Moderate
Lupine	none	---	---	0	0	Low	Low	Moderate
29DU01:								
Dumps, landfill	none	---	---	---	---	---	---	---
29EL01:								
Eielson, occasional flooding	none	---	---	0	0	High	Moderate	Moderate
Piledriver, occasional flooding	none	---	---	0	0	High	Moderate	Moderate
29EL02:								
Eielson, rare flooding	none	---	---	0	0	High	Moderate	Moderate
Tanana	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
29EL03:								
Eielson, rare flooding	none	---	---	0	0	High	Moderate	Moderate
29FA01:								
Faa	none	---	---	0	0	High	Moderate	Moderate
29FU01:								
Fubar, occasional flooding	none	---	---	0	0	Low	Moderate	Moderate
Piledriver, occasional flooding	none	---	---	0	0	High	Moderate	Moderate

Table 11. 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.			
29GE01:								
Moosehead	none	---	---	0	0	Moderate	Moderate	Moderate
Gerstle	none	---	---	0	0	Moderate	Moderate	Moderate
29GE03:								
Donnelly	none	---	---	0	0	Moderate	Moderate	Moderate
Gerstle	none	---	---	0	0	Moderate	Moderate	Moderate
Moosehead	none	---	---	0	0	Moderate	Moderate	Moderate
29HY01:								
Hydric Cryofibrists	none	---	---	28-41	39-72	High	High	High
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
29LS01:								
Terric Cryohemists	none	---	---	28-41	39-72	High	High	High
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
Bolio	Permafrost	6-39	Strongly cemented	28-55	39-79	High	High	High
29LU01:								
Lupine	none	---	---	0	0	Low	Low	Moderate
29MS01:								
Mosquito	Permafrost	14-31	Strongly cemented	24-41	35-59	High	Moderate	Moderate
29NE01:								
Nenana	none	---	---	0	0	High	Moderate	Moderate
29NE02:								
Nenana	none	---	---	0	0	High	Moderate	Moderate
Sawmill Creek	none	---	---	0	0	Moderate	Moderate	Moderate
29NN01:								
Noonku	none	---	---	0	0	High	Moderate	Moderate
29PE01:								
Peede	none	---	---	0	0	High	Moderate	Moderate
29PL01:								
Eielson, rare flooding	none	---	---	0	0	High	Moderate	Moderate
Piledriver, rare flooding	none	---	---	0	0	High	Moderate	Moderate
29PT01:								
Pits, gravel	none	---	---	---	---	---	---	---
29SA01:								
Sawmill Creek	none	---	---	0	0	Moderate	Moderate	Moderate
29TA01:								
Tatlanika, very poorly drained	Permafrost	20-39	Strongly cemented	24-41	35-59	High	High	High
Totatlanika, very poorly drained	Permafrost	17-39	Strongly cemented	24-41	35-59	High	High	High

Table 11. 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.			
29TC01:								
Tanacross	Permafrost	10-28	Strongly cemented	1-41	35-59	High	High	High
29TE01:								
Typic Cryaquents, frequent long ponding	none	---	---	0	0	High	Moderate	Moderate
Liscum	none	---	---	1-6	6-12	High	Moderate	Moderate
Terric Cryohemists	none	---	---	28-41	39-72	High	High	High
29TN01:								
Tanana	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
29TN02:								
Tanana	Permafrost	16-47	Strongly cemented	4-16	4-24	High	Moderate	Moderate
Mosquito	Permafrost	14-31	Strongly cemented	24-41	35-59	High	Moderate	Moderate
29TT01:								
Totatlanika, poorly drained	Permafrost	17-39	Strongly cemented	24-41	35-59	High	High	High
Tatlanika, poorly drained	Permafrost	20-39	Strongly cemented	24-41	35-59	High	High	High
29TY01:								
Typic Haplocryepts, sandy	none	---	---	0	0	Low	Moderate	Moderate
29WI01:								
Browne	Permafrost	14-30	Strongly cemented	16-33	24-47	High	High	High
Windy Creek	Permafrost	12-35	Strongly cemented	16-33	24-47	High	High	High
31BR01:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Paralithic bedrock	14-39	Strongly cemented					
31BR02:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Paralithic bedrock	14-39	Strongly cemented					
31BR03:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Paralithic bedrock	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
31BR04:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Paralithic bedrock	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate

Table 11. 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.			
31BR05:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Paralithic bedrock	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
31BR06:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Paralithic bedrock	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
31BR07:								
Brigadier	Paralithic bedrock	12-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
Manchu	Paralithic bedrock	24-47	Moderately cemented	0	0	Moderate	Moderate	Moderate
31CH01:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31CH02:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31CH03:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31CH04:								
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31DU01:								
Dumps, mine	none	---	---	---	---	---	---	---
31ES01:								
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Paralithic bedrock	14-39	Strongly cemented					
31ES02:								
Ester	Permafrost	7-30	Strongly cemented	4-20	6-28	High	High	High
	Paralithic bedrock	14-39	Strongly cemented					
31FA01:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA02:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA03:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA04:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate

Table 11. 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.			
31FA05:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA06:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA07:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
31FA08:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31FA09:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31FA10:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31FA11:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31FA12:								
Fairbanks	none	---	---	0	0	High	Moderate	Moderate
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31GD01:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31GD02:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31GD03:								
Goldstream	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
Histels	Permafrost	24-31	Strongly cemented	28-55	39-79	High	High	High
31GL01:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31GL02:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate

Table 11. 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.			
31GL03:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31GL04:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31GL05:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31GL06:								
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31HA01:								
Happy	Permafrost	23-39	Strongly cemented	16-33	24-47	High	High	High
31HI01:								
Histels	Permafrost	24-31	Strongly cemented	28-55	39-79	High	High	High
31MN01:								
Minto	none	---	---	28-55	39-79	High	High	High
31MN02:								
Minto	none	---	---	28-55	39-79	High	High	High
31MN03:								
Minto	none	---	---	28-55	39-79	High	High	High
31MN04:								
Minto	none	---	---	28-55	39-79	High	High	High
31MN05:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31MN06:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31MN07:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31MN08:								
Minto	none	---	---	28-55	39-79	High	High	High
Chatanika	Permafrost	12-39	Strongly cemented	28-55	39-79	High	Moderate	Moderate
31PT01:								
Pits, quarry	none	---	---	---	---	---	---	---

Table 11. 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.			
31RS01:								
Rosie	Paralithic bedrock	14-37	Moderately cemented	0	0	Moderate	Moderate	Moderate
31SA01:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31SA02:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31SA03:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31SA04:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
31SA05:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
Minto	none	---	---	28-55	39-79	High	High	High
31SA06:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
Minto	none	---	---	28-55	39-79	High	High	High
31SA07:								
Saulich	Permafrost	14-24	Strongly cemented	28-55	39-79	High	High	High
Minto	none	---	---	28-55	39-79	High	High	High
31ST01:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST02:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST03:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST04:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST05:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST06:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate

Table 11. 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.			
31ST07:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST08:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST09:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31ST10:								
Steese	Paralithic bedrock	20-40	Moderately cemented	0	0	Moderate	Moderate	Moderate
Gilmore	Paralithic bedrock	13-24	Moderately cemented	0	0	Moderate	Moderate	Moderate
31TE01:								
Typic Cryaquents, frequent long ponding	none	---	---	0	0	High	Moderate	Moderate
Histic Cryaquepts	none	---	---	2-3	3-6	High	High	High
Terric Cryofibrists	none	---	---	12-28	16-35	High	Moderate	Moderate
31TG01:								
Toghotthele	none	---	---	0	0	High	Moderate	Moderate
W:								
Water	none	---	---	---	---	---	---	---

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28DY01:							
Dystrogelepts	60	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gelorthents	30	Very limited:		Very limited:		Not limited	
		Slope	1.00	Slope	1.00		
		Gravel content	1.00	Gravel content	1.00		
28HA01:							
Haplocryepts	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
28HA02:							
Haplocryepts	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
29BL01:							
Bolio	83	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00			Excess surface organic matter	1.00
		Ponding	1.00			Ponding	1.00
		Excess surface organic matter	1.00				
29CR01:							
Typic Cryorthents, fill	40	Very limited:		Somewhat limited:		Somewhat limited:	
		Flooding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Sandy surface layer easily displaced	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	Gravel content	0.08	Silty surface layer dusty when dry and slippery when wet	0.50
		Sandy surface layer easily displaced	0.50				
		Gravel content	0.08				
Urban land	40	Not rated		Not rated		Not rated	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29DN01:							
Donnelly	90	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
29DN02:							
Donnelly	90	Very limited:		Very limited:		Somewhat limited:	
		Slope	1.00	Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50		
29DN04:							
Donnelly	50	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Lupine	20	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
29DU01:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
29EL01:							
Eielson, occasional flooding	60	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	Ponding	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
Piledriver, occasional flooding	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
29EL02:							
Eielson, rare flooding	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29EL02:							
Tanana	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Depth to permafrost	0.86
		Depth to permafrost	0.86	dusty when dry and		Silty surface layer	0.50
		Silty surface layer	0.50	slippery when wet		dusty when dry and	
		dusty when dry and				slippery when wet	
		slippery when wet					
29EL03:							
Eielson, rare flooding	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer	0.50	dusty when dry and		dusty when dry and	
		dusty when dry and		slippery when wet		slippery when wet	
		slippery when wet					
29FA01:							
Faa	90	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	
29FU01:							
Fubar, occasional flooding	50	Very limited:		Somewhat limited:		Somewhat limited:	
		Flooding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer	0.50	dusty when dry and		dusty when dry and	
		dusty when dry and		slippery when wet		slippery when wet	
		slippery when wet					
Piledriver, occasional flooding	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer	0.50	dusty when dry and		dusty when dry and	
		dusty when dry and		slippery when wet		slippery when wet	
		slippery when wet					
29GE01:							
Gerstle	45	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	
Moosehead	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29GE03:							
Donnelly	35	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gerstle	25	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.01	Slope	0.01		
Moosehead	25	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
29HY01:							
Hydric Cryofibrists	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Ponding	1.00			Ponding	1.00
		Excess surface organic matter	1.00				
Liscum	20	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	Excess surface organic matter	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Excess surface organic matter	1.00			Silty surface layer dusty when dry and slippery when wet	0.50
		Slow water movement	1.00				
29LS01:							
Terric Cryohemists	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Excess surface organic matter	1.00			Sandy surface layer easily displaced	0.50
		Slow water movement	1.00			Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29LS01:							
Liscum	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Excess surface	1.00
		Ponding	1.00	Silty surface layer	0.50	organic matter	
		Excess surface	1.00	dusty when dry and		Ponding	1.00
		organic matter		slippery when wet		Silty surface layer	0.50
		Slow water movement	1.00			dusty when dry and	
						slippery when wet	
Bolio	20	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00			Excess surface	1.00
		Ponding	1.00			organic matter	
		Excess surface	1.00			Ponding	1.00
		organic matter					
29LU01:							
Lupine	70	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	
29MS01:							
Mosquito	70	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	Excess surface	1.00
		Ponding	1.00	Silty surface layer	0.50	organic matter	
		Excess surface	1.00	dusty when dry and		Ponding	1.00
		organic matter		slippery when wet		Depth to permafrost	0.92
		Depth to permafrost	0.92			Silty surface layer	0.50
						dusty when dry and	
						slippery when wet	
29NE01:							
Nenana	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	
29NE02:							
Nenana	45	Very limited:		Very limited:		Very limited:	
		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
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29NE02:							
Sawmill Creek	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Slow water movement	0.60	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	
29NN01:							
Noonku	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	
29PE01:							
Peede	85	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	
29PL01:							
Eielson, rare flooding	55	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	
Piledriver, rare flooding	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	
29PT01:							
Pits, gravel	100	Not rated		Not rated		Not rated	
29SA01:							
Sawmill Creek	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Slow water movement	0.60	Silty surface layer	0.50	Silty surface layer	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		dusty when dry and slippery when wet	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TA01:							
Tatlanika, very poorly drained	50	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Depth to permafrost	0.95
		Slow water movement	0.96	dusty when dry and		Silty surface layer	0.50
		Depth to permafrost	0.95	slippery when wet		dusty when dry and slippery when wet	
Totatlanika, very poorly drained	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Ponding	1.00	Silty surface layer	0.50	Ponding	1.00
		Excess surface organic matter	1.00	dusty when dry and slippery when wet		Depth to permafrost	0.65
		Slow water movement	1.00			Silty surface layer	0.50
						dusty when dry and slippery when wet	
29TC01:							
Tanacross	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Silty surface layer	0.50	Excess surface organic matter	1.00
		Ponding	1.00	dusty when dry and slippery when wet		Ponding	1.00
		Excess surface organic matter	1.00			Silty surface layer	0.50
						dusty when dry and slippery when wet	
29TE01:							
Typic Cryaquents, frequent long ponding	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and slippery when wet		dusty when dry and slippery when wet		dusty when dry and slippery when wet	
Liscum	25	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	Excess surface organic matter	1.00
		Ponding	1.00	Silty surface layer	0.50	Ponding	1.00
		Excess surface organic matter	1.00	dusty when dry and slippery when wet		Silty surface layer	0.50
		Slow water movement	1.00			dusty when dry and slippery when wet	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TE01:							
Terric Cryohemists	20	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	Excess surface	1.00
		Ponding	1.00	Silty surface layer	0.50	organic matter	
		Excess surface	1.00	dusty when dry and		Ponding	1.00
		organic matter		slippery when wet		Sandy surface layer	0.50
		Slow water movement	1.00			easily displaced	
						Silty surface layer	0.50
						dusty when dry and	
						slippery when wet	
29TN01:							
Tanana	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Depth to permafrost	0.86
		Depth to permafrost	0.86	dusty when dry and		Silty surface layer	0.50
		Silty surface layer	0.50	slippery when wet		dusty when dry and	
		dusty when dry and				slippery when wet	
		slippery when wet					
29TN02:							
Tanana	60	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	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Depth to permafrost	0.86
		Depth to permafrost	0.86	dusty when dry and		Silty surface layer	0.50
		Silty surface layer	0.50	slippery when wet		dusty when dry and	
		dusty when dry and				slippery when wet	
		slippery when wet					
Mosquito	20	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	Excess surface	1.00
		Ponding	1.00	Silty surface layer	0.50	organic matter	
		Excess surface	1.00	dusty when dry and		Ponding	1.00
		organic matter		slippery when wet		Depth to permafrost	0.92
		Depth to permafrost	0.92			Silty surface layer	0.50
						dusty when dry and	
						slippery when wet	
29TT01:							
Totatlanika, poorly drained	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Excess surface	1.00
		Ponding	1.00	Silty surface layer	0.50	organic matter	
		Excess surface	1.00	dusty when dry and		Ponding	1.00
		organic matter		slippery when wet		Depth to permafrost	0.65
		Slow water movement	1.00			Silty surface layer	0.50
						dusty when dry and	
						slippery when wet	

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TT01:							
Tatlanika, poorly drained	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer	0.50	Depth to permafrost	0.95
		Slow water movement	0.96	dusty when dry and		Silty surface layer	0.50
		Depth to permafrost	0.95	slippery when wet		dusty when dry and	
						slippery when wet	
29TY01:							
Typic Haplocryepts, sandy	80	Not rated		Not rated		Not rated	
		Not rated; Sieve		Not rated; Surface		Not rated; Surface	
		size, 3 to 10", >10"		Fragments > 75mm		Fragments > 75mm	
		Not rated; Surface		Not rated; Sieve		Not rated; Sieve	
		Fragments > 75mm		size, 3 to 10", >10"		size, 3 to 10", >10"	
		Silty surface layer	0.50	Silty surface layer	0.50	Sandy surface layer	0.50
		dusty when dry and		dusty when dry and		easily displaced	
		slippery when wet		slippery when wet		Silty surface layer	0.50
		Sandy surface layer	0.50			dusty when dry and	
		easily displaced				slippery when wet	
29WI01:							
Windy Creek	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface	1.00
		Excess surface	1.00	Silty surface layer	0.50	organic matter	
		organic matter		dusty when dry and		Ponding	1.00
		Depth to permafrost	0.92	slippery when wet		Depth to permafrost	0.92
		Silty surface layer	0.50			Silty surface layer	0.50
		dusty when dry and				dusty when dry and	
		slippery when wet				slippery when wet	
Browne	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.88	Silty surface layer	0.50	Depth to permafrost	0.88
		Silty surface layer	0.50	dusty when dry and		Silty surface layer	0.50
		dusty when dry and		slippery when wet		dusty when dry and	
		slippery when wet				slippery when wet	
31BR01:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer	0.50	Silty surface layer	0.50	Silty surface layer	0.50
		dusty when dry and		dusty when dry and		dusty when dry and	
		slippery when wet		slippery when wet		slippery when wet	
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Slope	1.00	Silty surface layer	0.50	Excess surface	1.00
		Excess surface	1.00	dusty when dry and		organic matter	
		organic matter		slippery when wet		Silty surface layer	0.50
		Silty surface layer	0.50			dusty when dry and	
		dusty when dry and				slippery when wet	
		slippery when wet					

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31BR02:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31BR03:							
Brigadier	45	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31BR04:							
Brigadier	45	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
31BR05:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31BR06:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31BR07:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31CH01:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31CH02:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31CH03:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Depth to permafrost	0.99
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31CH04:							
Chatanika	45	Very limited:		Very limited:		Very limited:	
		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
		Depth to permafrost	0.99	Silty surface layer	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		Silty surface layer slippery when wet	0.50
Goldstream	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Silty surface layer	0.50	Excess surface	1.00
		Excess surface organic matter	1.00	dusty when dry and slippery when wet		organic matter	
						Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31DU01:							
Dumps, mine	100	Not rated		Not rated		Not rated	
31ES01:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Slope	1.00	Silty surface layer	0.50	Excess surface	1.00
		Excess surface organic matter	1.00	dusty when dry and slippery when wet		organic matter	
						Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31ES02:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Slope	1.00	Silty surface layer	0.50	Excess surface	1.00
		Excess surface organic matter	1.00	dusty when dry and slippery when wet		organic matter	
						Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31FA01:							
Fairbanks	80	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA02:							
Fairbanks	80	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA03:							
Fairbanks	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA04:							
Fairbanks	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA05:							
Fairbanks	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA06:							
Fairbanks	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA07:							
Fairbanks	60	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Fairbanks	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA08:							
Fairbanks	50	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	40	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA09:							
Fairbanks	50	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
						Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.04	Slope	0.04		
Steese	40	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
						Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.04	Slope	0.04		
31FA10:							
Fairbanks	55	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA11:							
Fairbanks	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	35	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31FA12:							
Fairbanks	42	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Steese	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31GD01:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31GD02:							
Goldstream	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31GD03:							
Goldstream	55	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to saturated zone	1.00	Depth to permafrost	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
Histels	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Ponding	1.00
		Slow water movement	1.00			Depth to permafrost	0.82
		Depth to permafrost	0.82				
31GL01:							
Gilmore	83	Very limited:		Somewhat limited:		Somewhat limited:	
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31GL02:							
Gilmore	70	Very limited:		Somewhat limited:		Very limited:	
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.16				

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31GL03:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31GL04:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31GL05:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31GL06:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31HA01:							
Happy	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Sandy surface layer easily displaced	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50			Clayey surface layer slippery when wet	0.50
		Clayey surface layer slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31HI01:							
Histels	90	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00			Ponding	1.00
		Slow water movement	1.00			Depth to permafrost	0.82
		Depth to permafrost	0.82				

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN01:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
31MN02:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
31MN03:							
Minto	65	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Massive ice possible below 6 feet, moderate subsidence potential	0.50	Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.04				
31MN04:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
31MN05:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN05:							
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		Silty surface layer dusty when dry and slippery when wet	0.50
31MN06:							
Minto	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
Chatanika	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		Silty surface layer dusty when dry and slippery when wet	0.50
31MN07:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Massive ice possible below 6 feet, moderate subsidence potential	0.50	Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.04				
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Silty surface layer	0.50	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	dusty when dry and slippery when wet		Depth to permafrost	0.99
		Slope	0.04	Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN08:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to permafrost	0.99	Slope	0.84	Water erosion hazard	1.00
		Slope	0.84	Silty surface layer dusty when dry and slippery when wet	0.50	Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31PT01:							
Pits, quarry	100	Not rated		Not rated		Not rated	
31RS01:							
Rosie	95	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31SA01:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Depth to permafrost	0.99			Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
31SA02:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Depth to permafrost	0.99			Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Slope	0.16	Depth to permafrost	0.99

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31SA03:							
Saulich	75	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Slope	1.00	Ponding	1.00
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Depth to permafrost	0.99			Depth to permafrost	0.99
31SA04:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Excess surface organic matter	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Depth to permafrost	0.99			Depth to permafrost	0.99
31SA05:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Depth to permafrost	0.99			Depth to permafrost	0.99
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
31SA06:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Depth to permafrost	0.99			Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Slope	0.16	Depth to permafrost	0.99

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31SA06:							
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Massive ice possible below 6 feet, moderate subsidence potential	0.50	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.16				
31SA07:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Slope	1.00	Ponding	1.00
		Slope	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Depth to permafrost	0.99			Depth to permafrost	0.99
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Massive ice possible below 6 feet, moderate subsidence potential	0.50				
31ST01:							
Steese	80	Somewhat limited:		Somewhat limited:		Somewhat limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31ST02:							
Steese	80	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
31ST03:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31ST04:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31ST05:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31ST06:							
Steese	90	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
31ST07:							
Steese	40	Somewhat limited:		Somewhat limited:		Very limited:	
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Slope	0.16	Slope	0.16	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	35	Very limited:		Somewhat limited:		Very limited:	
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Slope	0.04	Silty surface layer dusty when dry and slippery when wet	0.50
		Slope	0.04				
31ST08:							
Steese	50	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31ST09:							
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				

Table 12. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31ST10:							
Steese	45	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Depth to bedrock	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31TE01:							
Typic Cryaquents, frequent long ponding	30	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Histic Cryaquepts	25	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50			Silty surface layer dusty when dry and slippery when wet	0.50
Terric Cryofibrists	20	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Excess surface organic matter	1.00
		Excess surface organic matter	1.00	Silty surface layer dusty when dry and slippery when wet	0.50	Ponding	1.00
		Slow water movement	1.00			Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
31TG01:							
Toghotthele	90	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
W:							
Water	100	Not rated		Not rated		Not rated	

Table 13. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28DY01:							
Dystrogelepts	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gelorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
28HA01:							
Haplocryepts	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
28HA02:							
Haplocryepts	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
29BL01:							
Bolio	83	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
29CR01:							
Typic Cryorthents, fill	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Urban land	40	Not rated		Not rated		Not rated	
29DN01:							
Donnelly	90	Not limited		Not limited		Not limited	
29DN02:							
Donnelly	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
29DN04:							
Donnelly	50	Not limited		Not limited		Not limited	
Lupine	20	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
29DU01:							
Dumps, landfill	100	Not rated		Not rated		Not rated	

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29EL01:							
Eielson, occasional flooding	60	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
Piledriver, occasional flooding	30	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
29EL02:							
Eielson, rare flooding	50	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
Tanana	35	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
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
29EL03:							
Eielson, rare flooding	75	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
29FA01:							
Faa	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.88
29FU01:							
Fubar, occasional flooding	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
Piledriver, occasional flooding	40	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
29GE01:							
Gerstle	45	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
Moosehead	35	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

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29GE03:							
Donnelly	35	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Gerstle	25	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
		Slope	0.01	Slope	0.01	Slope	1.00
Moosehead	25	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
						Slope	0.88
29HY01:							
Hydric Cryofibrists	50	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
		Organic matter content	1.00			Organic matter content	1.00
Liscum	20	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
29LS01:							
Terric Cryohemists	35	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
Liscum	30	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
Bolio	20	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
29LU01:							
Lupine	70	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

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29MS01:							
Mosquito	70	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
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
29NE01:							
Nenana	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
29NE02:							
Nenana	45	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
Sawmill Creek	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
29NN01:							
Noonku	80	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
29PE01:							
Peede	85	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
29PL01:							
Eielson, rare flooding	55	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
Piledriver, rare flooding	30	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
29PT01:							
Pits, gravel	100	Not rated		Not rated		Not rated	
29SA01:							
Sawmill Creek	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TA01:							
Tatlanika, very poorly drained	50	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
		Depth to permafrost	0.95	Depth to permafrost	0.95	Depth to permafrost	0.95
Totatlanika, very poorly drained	30	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
		Depth to permafrost	0.65	Depth to permafrost	0.65	Depth to permafrost	0.65
29TC01:							
Tanacross	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
29TE01:							
Typic Cryaquents, frequent long ponding	35	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
Liscum	25	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
Terric Cryohemists	20	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
29TN01:							
Tanana	75	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
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86
29TN02:							
Tanana	60	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
		Depth to permafrost	0.86	Depth to permafrost	0.86	Depth to permafrost	0.86

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TN02:							
Mosquito	20	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
		Organic matter content	1.00	Depth to permafrost	0.92	Organic matter content	1.00
29TT01:							
Totatlanika, poorly drained	40	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
		Depth to permafrost	0.65	Depth to permafrost	0.65	Depth to permafrost	0.65
Tatlanika, poorly drained	30	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
		Depth to permafrost	0.95	Depth to permafrost	0.95	Depth to permafrost	0.95
29TY01:							
Typic Haplocryepts, sandy	80	Not limited		Not limited		Not limited	
29WI01:							
Windy Creek	45	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
		Depth to permafrost	0.92	Depth to permafrost	0.92	Depth to permafrost	0.92
Browne	40	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
		Depth to permafrost	0.88	Depth to permafrost	0.88	Depth to permafrost	0.88
31BR01:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Ester	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31BR02:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Ester	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		
31BR03:							
Brigadier	45	Not limited		Very limited		Somewhat limited	
				Depth to soft bedrock	1.00	Slope	0.12
Manchu	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
31BR04:							
Brigadier	45	Somewhat limited		Very limited		Very limited	
		Slope	0.16	Depth to soft bedrock	1.00	Slope	1.00
				Slope	0.16		
Manchu	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
31BR05:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Manchu	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
31BR06:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Manchu	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
31BR07:							
Brigadier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	1.00		
Manchu	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31CH01:							
Chatanika	75	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
31CH02:							
Chatanika	75	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
31CH03:							
Chatanika	75	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
		Slope	0.16	Slope	0.16	Slope	1.00
31CH04:							
Chatanika	45	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Goldstream	40	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
31DU01:							
Dumps, mine	100	Not rated		Not rated		Not rated	
31ES01:							
Ester	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		
31ES02:							
Ester	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to soft bedrock	0.99		

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA01:							
Fairbanks	80	Not limited		Not limited		Somewhat limited	
31FA02:							
Fairbanks	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
31FA03:							
Fairbanks	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31FA04:							
Fairbanks	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31FA05:							
Fairbanks	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31FA06:							
Fairbanks	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31FA07:							
Fairbanks	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
Fairbanks	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31FA08:							
Fairbanks	50	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Steese	40	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.20	Slope	0.12
31FA09:							
Fairbanks	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Steese	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.04		
31FA10:							
Fairbanks	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA11:							
Fairbanks	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
31FA12:							
Fairbanks	42	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Steese	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
31GD01:							
Goldstream	80	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
31GD02:							
Goldstream	75	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
						Slope	0.12
31GD03:							
Goldstream	55	Very limited		Very limited		Very limited	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		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
Histels	30	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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.82	Depth to permafrost	0.82	Depth to permafrost	0.82
31GL01:							
Gilmore	83	Somewhat limited		Very limited		Somewhat limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	0.12
31GL02:							
Gilmore	70	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.16	Slope	0.16	Slope	1.00

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31GL03:							
Gilmore	75	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Slope	1.00	Depth to soft bedrock	1.00
31GL04:							
Gilmore	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31GL05:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31GL06:							
Gilmore	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31HA01:							
Happy	80	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
		Depth to permafrost	0.26	Depth to permafrost	0.26	Depth to permafrost	0.26
31HI01:							
Histels	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.82	Depth to permafrost	0.82	Depth to permafrost	0.82
31MN01:							
Minto	80	Very limited		Very limited		Very limited	
		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
31MN02:							
Minto	80	Very limited		Very limited		Very limited	
		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
						Slope	0.12
31MN03:							
Minto	65	Very limited		Very limited		Very limited	
		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
		Slope	0.04	Slope	0.04	Slope	1.00

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN04:							
Minto	80	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
31MN05:							
Minto	45	Very limited		Very limited		Very limited	
		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
Chatanika	40	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
31MN06:							
Minto	40	Very limited		Very limited		Very limited	
		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
						Slope	0.12
Chatanika	35	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
						Slope	0.12
31MN07:							
Minto	45	Very limited		Very limited		Very limited	
		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
		Slope	0.04	Slope	0.04	Slope	1.00
Chatanika	40	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
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to permafrost	0.99
31MN08:							
Minto	45	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
Chatanika	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Subsidence	1.00	Subsidence	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to saturated zone	1.00
		Slope	0.84	Slope	0.84	Depth to permafrost	0.99

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31PT01:							
Pits, quarry	100	Not rated		Not rated		Not rated	
31RS01:							
Rosie	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.68		
31SA01:							
Saulich	80	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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
31SA02:							
Saulich	80	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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
31SA03:							
Saulich	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Subsidence	1.00	Subsidence	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Organic matter content	1.00	Organic matter content	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Organic matter content	1.00
31SA04:							
Saulich	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
31SA05:							
Saulich	40	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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Depth to permafrost	0.99
Minto	35	Very limited		Very limited		Very limited	
		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
						Slope	0.12

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31SA06:							
Saulich	40	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
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
		Depth to permafrost	0.99	Depth to permafrost	0.99	Slope	1.00
Minto	35	Very limited		Very limited		Very limited	
		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
		Slope	0.16	Slope	0.16	Slope	1.00
31SA07:							
Saulich	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Slope	1.00
		Subsidence	1.00	Subsidence	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Organic matter content	1.00	Organic matter content	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Organic matter content	1.00
Minto	35	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Subsidence	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
31ST01:							
Steese	80	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.20	Slope	0.12
31ST02:							
Steese	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.16		
31ST03:							
Steese	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
31ST04:							
Steese	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
31ST05:							
Steese	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
31ST06:							
Steese	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31ST07:							
Steese	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.20	Slope	1.00
				Slope	0.16		
Gilmore	35	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
31ST08:							
Steese	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31ST09:							
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31ST10:							
Steese	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.20		
Gilmore	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
31TE01:							
Typic Cryaquents, frequent long ponding	30	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
Histic Cryaquepts	25	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
Terric Cryofibrists	20	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
		Organic matter content	1.00			Organic matter content	1.00

Table 13. Building Site Development: Structures—Continued

Map symbol and soil name	Pct of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31TG01:							
Toghotthele	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
W:							
Water	100	Not rated		Not rated		Not rated	

Table 14. Sanitary Facilities: Sewage Treatment and Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28DY01:							
Dystrogelepts	60	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
Gelorthents	30	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00	Seepage	1.00	Slope	1.00
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
28HA01:							
Haplocryepts	80	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
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
28HA02:							
Haplocryepts	80	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
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
29BL01:							
Bolio	83	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	matter		Flooding	0.40
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
				Seepage	0.53		
29CR01:							
Typic Cryorthents, fill	40	Very limited:		Somewhat limited:		Somewhat limited:	
		Depth to bedrock	1.00	Seepage	0.50	Flooding	0.40
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
		Flooding	0.40				
		Restricted permeability	0.31				
Urban land	40	Not rated		Not rated		Not rated	

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29DN01:							
Donnelly	90	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
29DN02:							
Donnelly	90	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
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
29DN04:							
Donnelly	50	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
Lupine	20	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29DU01:							
Dumps, landfill	100	Not rated		Not rated		Not rated	
29EL01:							
Eielson, occasional flooding	60	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	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
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
Piledriver, occasional flooding	30	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	1.00
		Ponding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29EL02:							
Eielson, rare flooding	50	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	Seepage	0.53	Flooding	0.40
		Depth to cemented pan	1.00				
		Flooding	0.40				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29EL02:							
Tanana	35	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 permafrost	0.86	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53	Flooding	0.40
		Depth to permafrost	0.86				
29EL03:							
Eielson, rare flooding	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	0.53	Flooding	0.40
		Depth to cemented pan	1.00				
		Flooding	0.40				
29FA01:							
Faa	90	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00	Slope	1.00		
29FU01:							
Fubar, occasional flooding	50	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	0.17	Seepage	1.00
		Depth to cemented pan	1.00				
Piledriver, occasional flooding	40	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	1.00
		Ponding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	0.17	Seepage	1.00
		Depth to cemented pan	1.00				
29GE01:							
Gerstle	45	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	0.17	Seepage	1.00
		Depth to cemented pan	1.00				
		Filtering capacity	0.50				
Moosehead	35	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	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29GE03:							
Donnelly	35	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	0.68		
		Depth to saturated zone	1.00				
Gerstle	25	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Slope	0.01
		Filtering capacity	0.50				
Moosehead	25	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	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00		
29HY01:							
Hydric Cryofibrists	50	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	organic matter		Seepage	1.00
		Depth to bedrock	1.00	Seepage	1.00	Flooding	0.40
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
Liscum	20	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	organic matter		Flooding	0.40
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
		Flooding	0.40	Seepage	0.53		
29LS01:							
Terric Cryohemists	35	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	organic matter		Seepage	1.00
		Depth to bedrock	1.00	Seepage	1.00	Flooding	0.40
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
Liscum	30	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	organic matter		Seepage	1.00
		Depth to bedrock	1.00	Seepage	0.53	Flooding	0.40
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
		Flooding	0.40				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29LS01:							
Bolio	20	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Flooding	0.40
		Depth to bedrock	1.00	Seepage	0.53		
29LU01:							
Lupine	70	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29MS01:							
Mosquito	70	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	1.00	Depth to permafrost	0.92
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Flooding	0.40
		Depth to cemented pan	1.00	Depth to permafrost	0.92		
29NE01:							
Nenana	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29NE02:							
Nenana	45	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
Sawmill Creek	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29NN01:							
Noonku	80	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	1.00
		Ponding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29PE01:							
Peede	85	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	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
		Depth to bedrock	1.00	Seepage	0.50		
		Depth to cemented pan	1.00				
29PL01:							
Eielson, rare flooding	55	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	Seepage	0.53	Flooding	0.40
		Depth to cemented pan	1.00				
		Flooding	0.40				
Piledriver, rare flooding	30	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00			Flooding	0.40
		Flooding	0.40				
29PT01:							
Pits, gravel	100	Not rated		Not rated		Not rated	
29SA01:							
Sawmill Creek	80	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
29TA01:							
Tatlanika, very poorly drained	50	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.95	Depth to permafrost	0.95
		Depth to bedrock	1.00			Flooding	0.40
		Depth to cemented pan	1.00				
Totatlanika, very poorly drained	30	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	organic matter		Depth to permafrost	0.65
		Subsidence	1.00	Depth to saturated zone	1.00	Flooding	0.40
		Depth to bedrock	1.00	Depth to permafrost	0.65		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TC01:							
Tanacross	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	organic matter		Flooding	0.40
		Subsidence	1.00	Depth to saturated zone	1.00		
				Seepage	0.53		
29TE01:							
Typic Cryaquents, frequent long ponding	35	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	Seepage	0.01		
		Depth to cemented pan	1.00				
Liscum	25	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Flooding	0.40	organic matter		Flooding	0.40
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00	Seepage	0.53		
Terric Cryohemists	20	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	organic matter		Flooding	0.40
		Subsidence	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Seepage	1.00		
29TN01:							
Tanana	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.86	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53	Flooding	0.40
		Depth to permafrost	0.86				
29TN02:							
Tanana	60	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Depth to permafrost	0.86	Depth to permafrost	0.86
		Depth to cemented pan	1.00	Seepage	0.53	Flooding	0.40
		Depth to permafrost	0.86				
Mosquito	20	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	organic matter		Flooding	0.40
		Subsidence	1.00	Seepage	1.00	Depth to permafrost	0.92
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
				Depth to permafrost	0.92		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29TT01:							
Totatlanika, poorly drained	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00			Flooding	0.40
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.65
		Depth to bedrock	1.00	Depth to permafrost	0.65		
Tatlanika, poorly drained	30	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.95	Depth to permafrost	0.95
		Depth to bedrock	1.00			Flooding	0.40
		Depth to cemented pan	1.00				
29TY01:							
Typic Haplocryepts, sandy	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
29WI01:							
Windy Creek	45	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.92
		Depth to bedrock	1.00	Depth to permafrost	0.92		
		Depth to cemented pan	1.00	Seepage	0.50		
Browne	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.88	Depth to permafrost	0.88
		Depth to bedrock	1.00	Seepage	0.50		
		Depth to cemented pan	1.00				
31BR01:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31BR02:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Ester	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00	Excess surface	1.00	Depth to saturated zone	1.00
		Depth to cemented pan	1.00	organic matter		Depth to bedrock	1.00
		Slope	1.00	Slope	1.00		
				Depth to saturated zone	1.00		
31BR03:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Slope	0.68		
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
				Slope	0.68		
31BR04:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.16
		Slope	0.16				
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Slope	0.16	Depth to soft bedrock	1.00	Slope	0.16
31BR05:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Slope	1.00
		Depth to saturated zone	1.00				
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Seepage	1.00
		Slope	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Depth to soft bedrock	1.00	Slope	1.00

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31BR06:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Depth to saturated zone	1.00
		Slope	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
31BR07:							
Brigadier	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Manchu	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
31CH01:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99	Depth to permafrost	0.99
		Depth to bedrock	1.00	Seepage	0.50		
		Depth to cemented pan	1.00				
31CH02:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99	Depth to permafrost	0.99
		Depth to bedrock	1.00	Slope	0.68		
		Depth to cemented pan	1.00	Seepage	0.50		
31CH03:							
Chatanika	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to permafrost	0.99	Slope	0.16
		Depth to cemented pan	1.00	Seepage	0.50		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31CH04:							
Chatanika	45	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99	Depth to permafrost	0.99
		Depth to bedrock	1.00	Seepage	0.50		
		Depth to cemented pan	1.00				
Goldstream	40	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00		
		Depth to bedrock	1.00	Seepage	0.53		
31DU01:							
Dumps, mine	100	Not rated		Not rated		Not rated	
31ES01:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
31ES02:							
Ester	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
31FA01:							
Fairbanks	80	Very limited:		Somewhat limited:		Not limited	
		Depth to bedrock	1.00	Slope	0.68		
		Depth to cemented pan	1.00	Seepage	0.53		
		Depth to saturated zone	1.00				
31FA02:							
Fairbanks	80	Very limited:		Very limited:		Somewhat limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	0.16
		Depth to cemented pan	1.00	Seepage	0.53		
		Depth to saturated zone	1.00				
		Slope	0.16				
31FA03:							
Fairbanks	70	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA04:							
Fairbanks	80	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
31FA05:							
Fairbanks	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
31FA06:							
Fairbanks	85	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
31FA07:							
Fairbanks	60	Very limited:		Very limited:		Somewhat limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	0.16
		Depth to cemented pan	1.00	Seepage	0.53		
		Depth to saturated zone	1.00				
		Slope	0.16				
Fairbanks	30	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
31FA08:							
Fairbanks	50	Very limited:		Somewhat limited:		Not limited	
		Depth to bedrock	1.00	Slope	0.68		
		Depth to cemented pan	1.00	Seepage	0.53		
		Depth to saturated zone	1.00				
Steese	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Slope	0.68		
31FA09:							
Fairbanks	50	Very limited:		Very limited:		Somewhat limited:	
		Depth to bedrock	1.00	Slope	1.00	Slope	0.04
		Depth to cemented pan	1.00	Seepage	0.53		
		Depth to saturated zone	1.00				
		Slope	0.04				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31FA09:							
Steese	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.04
		Slope	0.04				
31FA10:							
Fairbanks	55	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
Steese	30	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Slope	1.00
		Depth to saturated zone	1.00				
31FA11:							
Fairbanks	40	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
Steese	35	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31FA12:							
Fairbanks	42	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
Steese	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31GD01:							
Goldstream	80	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00		
		Depth to bedrock	1.00	Seepage	0.53		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31GD02:							
Goldstream	75	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00		
		Depth to bedrock	1.00	Slope	0.68		
31GD03:							
Goldstream	55	Very limited:		Very limited:		Very limited:	
		Depth to permafrost	1.00	Depth to permafrost	1.00	Depth to permafrost	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00		
		Depth to bedrock	1.00	Seepage	0.53		
Histels	30	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.82
		Depth to bedrock	1.00	Depth to permafrost	0.82		
		Depth to cemented pan	1.00	Seepage	0.50		
31GL01:							
Gilmore	83	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Slope	0.68		
31GL02:							
Gilmore	70	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.16
		Slope	0.16				
31GL03:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Slope	1.00
		Depth to saturated zone	1.00				
31GL04:							
Gilmore	75	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31GL05:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31GL06:							
Gilmore	85	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31HA01:							
Happy	80	Very limited:		Very limited:		Very limited:	
		Flooding	1.00	Ponding	1.00	Flooding	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
		Subsidence	1.00	Seepage	0.50	Depth to permafrost	0.26
		Depth to bedrock	1.00	Depth to permafrost	0.26		
31HI01:							
Histels	90	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.82
		Depth to bedrock	1.00	Depth to permafrost	0.82		
		Depth to cemented pan	1.00	Seepage	0.50		
31MN01:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Massive ice possible below 6 feet, high subsidence potential	1.00	Seepage	0.53		
		Depth to bedrock	1.00				
		Depth to cemented pan	1.00				
31MN02:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Massive ice possible below 6 feet, high subsidence potential	1.00	Slope	0.68		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN03:							
Minto	65	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	0.04
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
31MN04:							
Minto	80	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	01.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Slope	1.00	Seepage	0.53		
		Depth to bedrock	1.00				
31MN05:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Massive ice possible below 6 feet, high subsidence potential	1.00	Seepage	0.53		
		Depth to bedrock	1.00				
		Depth to cemented pan	1.00				
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99	Depth to permafrost	0.99
		Depth to bedrock	1.00	Seepage	0.50		
		Depth to cemented pan	1.00				
31MN06:							
Minto	40	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Massive ice possible below 6 feet, high subsidence potential	1.00	Slope	0.68		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
Chatanika	35	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to permafrost	0.99	Depth to permafrost	0.99
		Depth to bedrock	1.00	Slope	0.68		
		Depth to cemented pan	1.00	Seepage	0.50		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31MN07:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	0.04
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to permafrost	0.99	Slope	0.04
		Depth to cemented pan	1.00	Seepage	0.50		
31MN08:							
Minto	45	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Slope	1.00	Seepage	0.53		
		Depth to bedrock	1.00				
Chatanika	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to permafrost	0.99	Slope	0.84
		Depth to cemented pan	1.00	Seepage	0.50		
31PT01:							
Pits, quarry	100	Not rated		Not rated		Not rated	
31RS01:							
Rosie	95	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31SA01:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00	Depth to permafrost	0.99		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31SA02:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Seepage	1.00	Slope	0.16
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
31SA03:							
Saulich	75	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
31SA04:							
Saulich	80	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Slope	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	1.00	Depth to permafrost	0.99
		Subsidence	1.00	Depth to saturated zone	1.00		
31SA05:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00	Depth to permafrost	0.99		
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Massive ice possible	1.00		
		Massive ice possible below 6 feet, high subsidence potential	1.00	below 6 feet, high subsidence potential			
				Slope	0.68		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
31SA06:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Seepage	1.00	Slope	0.16
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31SA06:							
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	0.16
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Depth to bedrock	1.00	Seepage	0.53		
		Depth to cemented pan	1.00				
31SA07:							
Saulich	40	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00	Depth to permafrost	0.99
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
Minto	35	Very limited:		Very limited:		Very limited:	
		Depth to saturated zone	1.00	Slope	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Depth to saturated zone	1.00	Slope	1.00
		Massive ice possible below 6 feet, high subsidence potential	1.00	Massive ice possible below 6 feet, high subsidence potential	1.00		
		Slope	1.00	Seepage	0.53		
		Depth to bedrock	1.00				
31ST01:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Slope	0.68		
31ST02:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.16
		Slope	0.16				
31ST03:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Slope	1.00
		Depth to saturated zone	1.00				
31ST04:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31ST05:							
Steese	80	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31ST06:							
Steese	90	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31ST07:							
Steese	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.16
		Slope	0.16				
Gilmore	35	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00	Slope	0.04
		Slope	0.04				
31ST08:							
Steese	50	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Gilmore	30	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31ST09:							
Steese	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				

Table 14. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31ST10:							
Steese	45	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
Gilmore	40	Very limited:		Very limited:		Very limited:	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Seepage	1.00	Depth to bedrock	1.00
		Depth to saturated zone	1.00				
31TE01:							
Typic Cryaquents, frequent long ponding	30	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	Seepage	0.01		
		Depth to cemented pan	1.00				
Histic Cryaquepts	25	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Depth to cemented pan	1.00	Depth to saturated zone	1.00		
Terric Cryofibrists	20	Very limited:		Very limited:		Very limited:	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Excess surface organic matter	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00		
		Depth to cemented pan	1.00				
31TG01:							
Toghotthele	90	Very limited:		Very limited:		Very limited:	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00		
		Depth to cemented pan	1.00				
		Depth to saturated zone	1.00				
		Restricted permeability	0.29				
W:							
Water	100	Not rated		Not rated		Not rated	

Table 15. Hydric Soils List

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
28DY01:						
Dystrogelepts (60%)	No	mountains	---	---	---	---
Gelorthents (30%)	No	mountains	---	---	---	---
Rock outcrop (5%)	Unranked	mountains	---	---	---	---
Turbels (5%)	Yes	depressions on hills	2B3	Yes	No	No
28HA01:						
Haplocryepts (80%)	No	mountains	---	---	---	---
Haplocryepts (10%)	No	mountains	---	---	---	---
Rock outcrop (5%)	Unranked	hills, mountains	---	---	---	---
Turbels (5%)	Yes	depressions on hills	2B3	Yes	No	No
28HA02:						
Haplocryepts (80%)	No	mountains	---	---	---	---
Haplocryepts (10%)	No	mountains	---	---	---	---
Turbels (10%)	Yes	depressions on hills	2B3	Yes	No	No
29BL01:						
Bolio (83%)	Yes	terraces, flood plains	1,3	Yes	No	Yes
Lemeta (10%)	Yes	terraces, flood plains	1	Yes	No	No
Tanacross (5%)	Yes	flood plains	2B3	Yes	No	No
Water (2%)	Unranked	streams on flood plains, rivers on flood plains, depressions on flood plains, lakes on flood plains	---	---	---	---
29CR01:						
Typic Cryorthents, fill (40%)	No	terraces, flood plains	---	---	---	---
Urban land (40%)	Unranked	urban land	---	---	---	---
Donnelly (2%)	No	outwash plains, plains, terraces, escarpments, fans	---	---	---	---
Eielson, rare flooding (2%)	No	flood plains	---	---	---	---
Fubar, rare flooding (2%)	No	flood plains	---	---	---	---
Gerstle (2%)	No	terraces, alluvial fans	---	---	---	---
Jarvis (2%)	No	flood plains, terraces	---	---	---	---
Moosehead (2%)	No	terraces, alluvial fans	---	---	---	---
Nenana (2%)	No	alluvial fans	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29CR01:						
Piledriver, rare flooding (2%)	No	flood plains	---	---	---	---
Salchaket (2%)	No	flood plains	---	---	---	---
Sawmill Creek (1%)	No	alluvial fans	---	---	---	---
Volkmar (1%)	No	stream terraces	---	---	---	---
29DN01:						
Donnelly (90%)	No	plains, terraces, outwash plains, fans	---	---	---	---
Lupine (5%)	No	terraces, fans	---	---	---	---
Nenana (5%)	No	alluvial fans	---	---	---	---
29DN02:						
Donnelly (90%)	No	fans, escarpments	---	---	---	---
Lupine (5%)	No	fans, terraces	---	---	---	---
Moosehead (5%)	No	terraces, alluvial fans	---	---	---	---
29DN04:						
Donnelly (50%)	No	fans, terraces, plains, outwash plains	---	---	---	---
Lupine (20%)	No	fans, terraces	---	---	---	---
Nenana (10%)	No	alluvial fans	---	---	---	---
Sawmill Creek (10%)	No	alluvial fans	---	---	---	---
Browne (5%)	Yes	alluvial fans	2B3	Yes	No	No
Volkmar (5%)	No	stream terraces	---	---	---	---
29DU01:						
Dumps, landfill (100%)	Unranked	sanitary landfills	---	---	---	---
29EL01:						
Eielson, occasional flooding (60%)	No	flood plains	---	---	---	---
Piledriver, occasional flooding (30%)	No	flood plains	---	---	---	---
Fubar, occasional flooding (5%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	flood plains	3,2B3	Yes	No	Yes
Riverwash (2%)	Unranked	flood plains	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29EL02:						
Eielson, rare flooding (50%)	No	flood plains	---	---	---	---
Tanana (35%)	Yes	flood plains, terraces	2B3	Yes	No	No
Liscum (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Tanacross (5%)	Yes	flood plains	2B3	Yes	No	No
29EL03:						
Eielson, rare flooding (75%)	No	flood plains	---	---	---	---
Piledriver, rare flooding (10%)	No	flood plains	---	---	---	---
Liscum (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Noonku (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Tanana (5%)	Yes	terraces, flood plains	2B3	Yes	No	No
29FA01:						
Faa (90%)	No	dunes on flood plains	---	---	---	---
Eielson, rare flooding (5%)	No	flood plains	---	---	---	---
Tanana (5%)	Yes	flood plains, terraces	2B3	Yes	No	No
29FU01:						
Fubar, occasional flooding (50%)	No	flood plains	---	---	---	---
Piledriver, occasional flooding (40%)	No	flood plains	---	---	---	---
Eielson, occasional flooding (5%)	No	flood plains	---	---	---	---
Noonku (3%)	Yes	flood plains	3,2B3	Yes	No	Yes
Riverwash (2%)	Unranked	flood plains	---	---	---	---
29GE01:						
Moosehead (45%)	No	alluvial fans, terraces	---	---	---	---
Gerstle (35%)	No	terraces, alluvial fans	---	---	---	---
Lupine (5%)	No	fans, terraces	---	---	---	---
Donnelly (3%)	No	plains, outwash plains, escarpments, fans, terraces	---	---	---	---
Histic Cryaquepts (3%)	Yes	depressions on terraces, depressions on fans	3,2B3	Yes	No	Yes
Sawmill Creek (3%)	No	alluvial fans	---	---	---	---
Browne (2%)	Yes	alluvial fans	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29GE01:						
Tanana (2%)	Yes	flood plains, terraces	2B3	Yes	No	No
Volkmar (2%)	No	stream terraces	---	---	---	---
29GE03:						
Donnelly (30%)	No	fans, plains, terraces, outwash plains	---	---	---	---
Gerstle (25%)	No	terraces, alluvial fans	---	---	---	---
Moosehead (25%)	No	terraces, alluvial fans	---	---	---	---
Windy Creek (10%)	Yes	alluvial fans	2B3	Yes	No	No
Browne (3%)	Yes	alluvial fans	2B3	Yes	No	No
29HY01:						
Hydric Cryofibrists (50%)	Yes	lakeshores on flood plains	1,3	Yes	No	Yes
Liscum (20%)	Yes	flood plains	3,2B3	Yes	No	Yes
Bolio (10%)	Yes	terraces, flood plains	1,3	Yes	No	Yes
Terric Cryohemists (10%)	Yes	depressions on flood plains	3,1	Yes	No	Yes
Water (10%)	Unranked	streams on flood plains, rivers on flood plains, depressions on flood plains, lakes on flood plains	---	---	---	---
29LS01:						
Terric Cryohemists (35%)	Yes	depressions on flood plains	1,3	Yes	No	Yes
Liscum (30%)	Yes	flood plains	2B3,3	Yes	No	Yes
Bolio (20%)	Yes	flood plains, terraces	1,3	Yes	No	Yes
Eielson, rare flooding (5%)	No	flood plains	---	---	---	---
Peede (5%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
Totatlanika, very poorly drained (5%)	Yes	flood plains	2B3	Yes	No	No
29LU01:						
Lupine (70%)	No	terraces, fans	---	---	---	---
Donnelly (10%)	No	escarpments, outwash plains, terraces, fans, plains	---	---	---	---
Browne (5%)	Yes	alluvial fans	2B3	Yes	No	No
Moosehead (5%)	No	alluvial fans, terraces	---	---	---	---
Sawmill Creek (5%)	No	alluvial fans	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29LU01:						
Volkmar (5%)	No	stream terraces	---	---	---	---
29MS01:						
Mosquito (70%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Tanacross (10%)	Yes	flood plains	2B3	Yes	No	No
Bolio (5%)	Yes	terraces, flood plains	1,3	Yes	No	Yes
Tanana (5%)	Yes	terraces, flood plains	2B3	Yes	No	No
Liscum (3%)	Yes	flood plains	2B3,3	Yes	No	Yes
Water (3%)	Unranked	streams on flood plains, rivers on flood plains, lakes on flood plains, depressions on flood plains	---	---	---	---
Eielson, rare flooding (2%)	No	flood plains	---	---	---	---
Peede (2%)	Yes	depressions on flood plains	3,2B3	Yes	No	Yes
29NE01:						
Nenana (75%)	No	alluvial fans	---	---	---	---
Donnelly (5%)	No	fans, terraces, outwash plains, escarpments, plains	---	---	---	---
Lupine (5%)	No	terraces, fans	---	---	---	---
Moosehead (5%)	No	alluvial fans, terraces	---	---	---	---
Richardson (3%)	No	stream terraces	---	---	---	---
Sawmill Creek (3%)	No	alluvial fans	---	---	---	---
Histic Cryaquepts (2%)	Yes	depressions on fans, depressions on terraces	2B3,3	Yes	No	Yes
Volkmar (2%)	No	stream terraces	---	---	---	---
29NE02:						
Nenana (45%)	No	alluvial fans	---	---	---	---
Sawmill Creek (40%)	No	alluvial fans	---	---	---	---
Volkmar (5%)	No	stream terraces	---	---	---	---
Richardson (3%)	No	stream terraces	---	---	---	---
Browne (2%)	Yes	alluvial fans	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29NN01:						
Noonku (80%)	Yes	flood plains	3,2B3	Yes	No	Yes
Liscum (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Piledriver, occasional flooding (5%)	No	flood plains	---	---	---	---
Tanacross (5%)	Yes	flood plains	2B3	Yes	No	No
Tanana (5%)	Yes	terraces, flood plains	2B3	Yes	No	No
29PE01:						
Peede (85%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Liscum (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Mosquito (5%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Water (5%)	Unranked	lakes on flood plains, depressions on flood plains, rivers on flood plains, streams on flood plains	---	---	---	---
29PL01:						
Eielson, rare flooding (55%)	No	flood plains	---	---	---	---
Piledriver, rare flooding (30%)	No	flood plains	---	---	---	---
Noonku (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Salchaket (3%)	No	flood plains	---	---	---	---
Tanana (3%)	Yes	terraces, flood plains	2B3	Yes	No	No
Fubar, rare flooding (2%)	No	flood plains	---	---	---	---
Riverwash (2%)	Unranked	flood plains	---	---	---	---
29PT01:						
Pits, gravel (100%)	Unranked	gravel pits	---	---	---	---
29SA01:						
Sawmill Creek (80%)	No	alluvial fans	---	---	---	---
Gerstle (5%)	No	alluvial fans, terraces	---	---	---	---
Lupine (5%)	No	terraces, fans	---	---	---	---
Nenana (5%)	No	alluvial fans	---	---	---	---
Volkmar (3%)	No	stream terraces	---	---	---	---
Browne (2%)	Yes	alluvial fans	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29TA01:						
Tatlanika, very poorly drained (50%)	Yes	flood plains	2B3	Yes	No	No
Totatlanika, very poorly drained (30%)	Yes	flood plains	2B3	Yes	No	No
Liscum (10%)	Yes	flood plains	3,2B3	Yes	No	Yes
Peede (5%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Bolio (3%)	Yes	flood plains, terraces	1,3	Yes	No	Yes
Terric Cryohemists (2%)	Yes	depressions on flood plains	1,3	Yes	No	Yes
29TC01:						
Tanacross (75%)	Yes	flood plains	2B3	Yes	No	No
Eielson, rare flooding (5%)	No	flood plains	---	---	---	---
Jarvis (5%)	No	flood plains, terraces	---	---	---	---
Liscum (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Noonku (5%)	Yes	flood plains	3,2B3	Yes	No	Yes
Tanana (5%)	Yes	terraces, flood plains	2B3	Yes	No	No
29TE01:						
Typic Cryaquents, frequent long ponding (30%)	Yes	flood plains	3,2B3	Yes	No	Yes
Liscum (25%)	Yes	flood plains	2B3,3	Yes	No	Yes
Terric Cryohemists (20%)	Yes	depressions on flood plains	1,3	Yes	No	Yes
Bolio (10%)	Yes	terraces, flood plains	1,3	Yes	No	Yes
Water (10%)	Unranked	lakes on flood plains, streams on flood plains, rivers on flood plains, depressions on flood plains	---	---	---	---
29TN01:						
Tanana (75%)	Yes	terraces, flood plains	2B3	Yes	No	No
Liscum (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Mosquito (5%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Tanacross (5%)	Yes	flood plains	2B3	Yes	No	No
Eielson, rare flooding (2%)	No	flood plains	---	---	---	---
Jarvis (2%)	No	terraces, flood plains	---	---	---	---
Noonku (2%)	Yes	flood plains	3,2B3	Yes	No	Yes
Piledriver, rare flooding (2%)	No	flood plains	---	---	---	---
Salchaket (2%)	No	flood plains	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
29TN02:						
Tanana (60%)	Yes	terraces, flood plains	2B3	Yes	No	No
Mosquito (20%)	Yes	depressions on flood plains	2B3,3	Yes	No	Yes
Piledriver, rare flooding (10%)	No	flood plains	---	---	---	---
Liscum (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
Noonku (5%)	Yes	flood plains	2B3,3	Yes	No	Yes
29TT01:						
Totatlanika, poorly drained (40%)	Yes	flood plains	2B3	Yes	No	No
Tatlanika, poorly drained (30%)	Yes	flood plains	2B3	Yes	No	No
Hydric Cryofibrists (10%)	Yes	lakeshores on flood plains	3,1	Yes	No	Yes
Liscum (10%)	Yes	flood plains	3,2B3	Yes	No	Yes
Terric Cryohemists (10%)	Yes	depressions on flood plains	3,1	Yes	No	Yes
29TY01:						
Typic Haplocryepts, sandy (80%)	No	levees on flood plains	---	---	---	---
Piledriver, rare flooding (10%)	No	flood plains	---	---	---	---
Eielson, rare flooding (8%)	No	flood plains	---	---	---	---
Tanana (2%)	Yes	terraces, flood plains	2B3	Yes	No	No
29WI01:						
Browne (45%)	Yes	alluvial fans	2B3	Yes	No	No
Windy Creek (40%)	Yes	alluvial fans	2B3	Yes	No	No
Histic Cryaquepts (5%)	Yes	depressions on fans, depressions on terraces	3,2B3	Yes	No	Yes
Nenana (5%)	No	alluvial fans	---	---	---	---
Richardson (5%)	No	stream terraces	---	---	---	---
31BR01:						
Brigadier (45%)	No	hills	---	---	---	---
Ester (40%)	Yes	hills	2B3	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3	Yes	No	No
Gilmore (2%)	No	hills	---	---	---	---
Manchu (2%)	No	hills	---	---	---	---
Saulich (1%)	Yes	hills	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31BR02:						
Brigadier (45%)	No	hills	---	---	---	---
Ester (40%)	Yes	hills	2B3	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3	Yes	No	No
Manchu (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
31BR03:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Brigadier (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Manchu (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
31BR04:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Manchu (5%)	No	hills	---	---	---	---
Brigadier (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
31BR05:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Manchu (3%)	No	hills	---	---	---	---
Brigadier (2%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B3	Yes	No	No
Gilmore (2%)	No	hills	---	---	---	---
Manchu (2%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31BR06:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Manchu (3%)	No	hills	---	---	---	---
Brigadier (2%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B3	Yes	No	No
Gilmore (2%)	No	hills	---	---	---	---
Manchu (2%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
31BR07:						
Brigadier (45%)	No	hills	---	---	---	---
Manchu (40%)	No	hills	---	---	---	---
Manchu (3%)	No	hills	---	---	---	---
Brigadier (2%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B3	Yes	No	No
Gilmore (2%)	No	hills	---	---	---	---
Manchu (2%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
31CH01:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Chatanika (7%)	Yes	hills	2B3	Yes	No	No
Goldstream (7%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Saulich (3%)	Yes	hills	2B3	Yes	No	No
Histels (2%)	Yes	flats on terraces, depressions on terraces	2B3,1,3	Yes	No	Yes
Water (1%)	Unranked	depressions on hills, lakes on hills	---	---	---	---
31CH02:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31CH02:						
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
31CH03:						
Chatanika (75%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
31CH04:						
Chatanika (45%)	Yes	hills	2B3	Yes	No	No
Goldstream (40%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	flats on terraces, depressions on terraces	2B3,1,3	Yes	No	Yes
Minto (3%)	No	hills	---	---	---	---
Saulich (2%)	Yes	hills	2B3	Yes	No	No
Water (0%)	Unranked	lakes on flood plains, depressions on flood plains	---	---	---	---
31DU01:						
Dumps, mine (100%)	Unranked	spoil piles	---	---	---	---
31ES01:						
Ester (75%)	Yes	hills	2B3	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3	Yes	No	No
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Steese (3%)	No	hills	---	---	---	---
31ES02:						
Ester (75%)	Yes	hills	2B3	Yes	No	No
Ester (10%)	Yes	hills	2B3	Yes	No	No
Brigadier (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31FA01:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA02:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA03:						
Fairbanks (70%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA04:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA05:						
Fairbanks (85%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA06:						
Fairbanks (80%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA07:						
Fairbanks (60%)	No	hills	---	---	---	---
Fairbanks (30%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31FA07:						
Steese (3%)	No	hills	---	---	---	---
Typic Cryaquents (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
31FA08:						
Fairbanks (50%)	No	hills	---	---	---	---
Steese (40%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA09:						
Fairbanks (50%)	No	hills	---	---	---	---
Steese (40%)	No	hills	---	---	---	---
Fairbanks (2%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
31FA10:						
Fairbanks (55%)	No	hills	---	---	---	---
Steese (30%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
31FA11:						
Fairbanks (40%)	No	hills	---	---	---	---
Steese (35%)	No	hills	---	---	---	---
Fairbanks (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31FA12:						
Fairbanks (42%)	No	hills	---	---	---	---
Steese (40%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31FA12:						
Steese (5%)	No	hills	---	---	---	---
Gilmore (3%)	No	hills	---	---	---	---
31GD01:						
Goldstream (80%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	depressions on terraces, flats on terraces	2B3,1,3	Yes	No	Yes
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
Happy (2%)	No	natural levees on flood plains	---	---	---	---
Typic Cryaquents, frequent long ponding (1%)	Yes	depressions	2B3,3	Yes	No	Yes
31GD02:						
Goldstream (75%)	Yes	valley floors	2B3,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Histels (5%)	Yes	flats on terraces, depressions on terraces	2B3,1,3	Yes	No	Yes
Minto (4%)	No	hills	---	---	---	---
Goldstream (3%)	Yes	valley floors	2B3,3	Yes	No	Yes
Saulich (2%)	Yes	hills	2B3	Yes	No	No
Typic Cryaquents, frequent long ponding (1%)	Yes	depressions	3,2B3	Yes	No	Yes
31GD03:						
Goldstream (55%)	Yes	valley floors	2B3,3	Yes	No	Yes
Histels (30%)	Yes	depressions on terraces, flats on terraces	2B3,1,3	Yes	No	Yes
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Terric Cryofibrists (5%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
31GL01:						
Gilmore (83%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31GL02:						
Gilmore (70%)	No	hills	---	---	---	---
Gilmore (13%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Steese (7%)	No	hills	---	---	---	---
31GL03:						
Gilmore (75%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Ester (3%)	Yes	hills	2B3	Yes	No	No
Brigadier (2%)	No	hills	---	---	---	---
31GL04:						
Gilmore (75%)	No	hills	---	---	---	---
Gilmore (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Ester (3%)	Yes	hills	2B3	Yes	No	No
Brigadier (2%)	No	hills	---	---	---	---
31GL05:						
Gilmore (85%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Ester (3%)	Yes	hills	2B3	Yes	No	No
Steese (3%)	No	hills	---	---	---	---
Brigadier (2%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---
31GL06:						
Gilmore (85%)	No	hills	---	---	---	---
Ester (5%)	Yes	hills	2B3	Yes	No	No
Gilmore (5%)	No	hills	---	---	---	---
Steese (3%)	No	hills	---	---	---	---
Rock outcrop (2%)	Unranked	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31HA01:						
Happy (80%)	No	natural levees on flood plains	---	---	---	---
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Histels (5%)	Yes	flats on terraces, depressions on terraces	2B3,1,3	Yes	No	Yes
Water, fresh (5%)	Unranked	lakes on flood plains, depressions on flood plains, rivers on flood plains, streams on flood plains	---	---	---	---
Aquic Cryofluvents (3%)	No	flood plains	---	---	---	---
Chatanika (2%)	Yes	hills	2B3	Yes	No	No
31HI01:						
Histels (90%)	Yes	depressions on terraces, flats on terraces	2B3,1,3	Yes	No	Yes
Goldstream (10%)	Yes	valley floors	2B3,3	Yes	No	Yes
31MN01:						
Minto (80%)	No	hills	---	---	---	---
Chatanika (10%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
31MN02:						
Minto (80%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
31MN03:						
Minto (65%)	No	hills	---	---	---	---
Minto (10%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Fairbanks (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31MN04:						
Minto (80%)	No	hills	---	---	---	---
Minto (10%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Typic Cryaquents (5%)	Yes	depressions	3,2B3	Yes	No	Yes
31MN05:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
31MN06:						
Minto (40%)	No	hills	---	---	---	---
Chatanika (35%)	Yes	hills	2B3	Yes	No	No
Minto (7%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Chatanika (2%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
31MN07:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
31MN08:						
Minto (45%)	No	hills	---	---	---	---
Chatanika (40%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
Minto (3%)	No	hills	---	---	---	---
Saulich (2%)	Yes	hills	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31PT01:						
Pits, quarry (100%)	Unranked	quarries	---	---	---	---
31RS01:						
Rosie (95%)	No	hills	---	---	---	---
Rock outcrop (5%)	Unranked	hills	---	---	---	---
31SA01:						
Saulich (80%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
31SA02:						
Saulich (80%)	Yes	hills	2B3	Yes	No	No
Goldstream (5%)	Yes	valley floors	2B3,3	Yes	No	Yes
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Minto (2%)	No	hills	---	---	---	---
31SA03:						
Saulich (75%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Ester (5%)	Yes	hills	2B3	Yes	No	No
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (3%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (2%)	No	hills	---	---	---	---
31SA04:						
Saulich (80%)	Yes	hills	2B3	Yes	No	No
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Goldstream (3%)	Yes	valley floors	2B3,3	Yes	No	Yes
Ester (2%)	Yes	hills	2B3	Yes	No	No

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31SA05:						
Saulich (40%)	Yes	hills	2B3	Yes	No	No
Minto (35%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Chatanika (3%)	Yes	hills	2B3	Yes	No	No
Saulich (3%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
Minto (2%)	No	hills	---	---	---	---
31SA06:						
Saulich (40%)	Yes	hills	2B3	Yes	No	No
Minto (35%)	No	hills	---	---	---	---
Chatanika (5%)	Yes	hills	2B3	Yes	No	No
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Saulich (3%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
31SA07:						
Saulich (40%)	Yes	hills	2B3	Yes	No	No
Minto (35%)	No	hills	---	---	---	---
Minto (5%)	No	hills	---	---	---	---
Saulich (5%)	Yes	hills	2B3	Yes	No	No
Chatanika (2%)	Yes	hills	2B3	Yes	No	No
Goldstream (2%)	Yes	valley floors	2B3,3	Yes	No	Yes
Ester (1%)	Yes	hills	2B3	Yes	No	No
31ST01:						
Steese (80%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31ST02:						
Steese (80%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31ST03:						
Steese (80%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31ST04:						
Steese (80%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B3,2B2	Yes	No	No
31ST05:						
Steese (80%)	No	hills	---	---	---	---
Steese (10%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Ester (2%)	Yes	hills	2B2,2B3	Yes	No	No
31ST06:						
Steese (90%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31ST07:						
Steese (40%)	No	hills	---	---	---	---
Gilmore (35%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31ST08:						
Steese (50%)	No	hills	---	---	---	---
Gilmore (30%)	No	hills	---	---	---	---
Fairbanks (5%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31ST09:						
Steese (45%)	No	hills	---	---	---	---
Gilmore (40%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
31ST10:						
Steese (45%)	No	hills	---	---	---	---
Gilmore (40%)	No	hills	---	---	---	---
Gilmore (5%)	No	hills	---	---	---	---
Steese (5%)	No	hills	---	---	---	---
31TE01:						
Typic Cryaquents, frequent long ponding (30%)	Yes	flood plains	2B3,3	Yes	No	Yes
Histic Cryaquepts (25%)	Yes	depressions on terraces	2B3,3	Yes	No	Yes
Terric Cryofibrists (20%)	Yes	thermokarst depressions	1,3	Yes	No	Yes
Histels (15%)	Yes	flats on terraces, depressions on terraces	2B3,1,3	Yes	No	Yes
Water (10%)	Unranked	depressions on hills, lakes on hills, depressions on flood plains, lakes on flood plains, rivers on flood plains, streams on flood plains	---	---	---	---

Table 15. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
31TG01:						
Toghotthele (90%)	No	climbing dunes on hills	---	---	---	---
Fairbanks (3%)	No	hills	---	---	---	---
Rosie (3%)	No	hills	---	---	---	---
Gilmore (2%)	No	hills	---	---	---	---
Steese (2%)	No	hills	---	---	---	---
W:						
Water (100%)	Unranked	lakes on flood plains, depressions on flood plains, rivers on flood plains, streams on flood plains, depressions on hills, lakes on hills	---	---	---	---

Table 16. Classification of the Soils

Soil name	Family or higher taxonomic class
Aquic Cryofluvents	Aquic Cryofluvents
Bolio	Euic, subgelic Typic Hemistels
Brigadier	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Browne	Coarse-silty, mixed, active, subgelic Typic Aquiturbels
Chatanika	Coarse-silty, mixed, superactive, subgelic Typic Aquiturbels
Donnelly	Sandy-skeletal, mixed Typic Haplocryepts
Dystrogelepts	Dystrogelepts
Eielson	Coarse-loamy, mixed, superactive, nonacid Aquic Cryofluvents
Ester	Loamy-skeletal, mixed, superactive, subgelic, shallow Typic Histoturbels
Faa	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Aquic Haplocryepts
Fairbanks	Coarse-silty, mixed, superactive Typic Haplocryepts
Fubar	Sandy-skeletal, mixed Typic Cryofluvents
Gelorthents	Gelorthents
Gerstle	Coarse-loamy, mixed, superactive Aquic Haplocryepts
Gilmore	Loamy-skeletal, mixed, superactive, shallow Typic Dystrocryepts
Goldstream	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Haplocryepts	Haplocryepts
Happy	Coarse-silty, mixed, superactive, subgelic Fluvaquentic Aquorthels
Histels	Histels
Histic Cryaquepts	Histic Cryaquepts
Hydric Cryofibrists	Hydric Cryofibrists
Jarvis	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents
Lemeta	Euic, subgelic Typic Fibristels
Liscum	Coarse-loamy, mixed, superactive, nonacid Histic Cryaquepts
Lupine	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Typic Haplocryepts
Manchu	Coarse-loamy, mixed, superactive Aquic Haplocryepts
Minto	Coarse-silty, mixed, superactive Aquic Haplocryepts
Moosehead	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Aquic Haplocryepts
Mosquito	Coarse-loamy, mixed, superactive, subgelic Ruptic Histoturbels
Nenana	Coarse-silty over sandy or sandy-skeletal, mixed, superactive Typic Haplocryepts
Noonku	Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents
Peede	Coarse-silty, mixed, superactive, nonacid Typic Cryaquents
Piledriver	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Aquic Cryofluvents
Richardson	Coarse-silty, mixed, superactive Aquic Haplocryepts
Rosie	Coarse-loamy, mixed, superactive Ustic Calcicryolls
Salchaket	Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents
Saulich	Coarse-silty, mixed, superactive, subgelic Typic Histoturbels
Sawmill Creek	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Typic Haplocryepts
Steese	Coarse-loamy, mixed, superactive Typic Haplocryepts
Tanacross	Coarse-loamy, mixed, superactive, subgelic Typic Histoturbels
Tanana	Coarse-loamy, mixed, superactive, subgelic Typic Aquiturbels
Tatlanika	Fine-silty, mixed, active, subgelic Typic Aquiturbels
Terric Cryofibrists	Terric Cryofibrists
Terric Cryohemists	Terric Cryohemists
Toghotthele	Coarse-silty, mixed, superactive Typic Haplocryepts
Totatlanika	Fine-silty, mixed, active, subgelic Typic Histoturbels
Turbels	Turbels
Typic Cryaquents	Typic Cryaquents
Typic Cryorthents	Typic Cryorthents
Typic Haplocryepts	Sandy, mixed Typic Haplocryepts
Volkmar	Coarse-silty over sandy or sandy-skeletal, mixed, superactive Aquic Haplocryepts
Windy Creek	Coarse-silty, mixed, active, subgelic Typic Histoturbels

NRCS Accessibility Statement

The Natural Resources Conservation Service (NRCS) is committed to making its information accessible to all of its customers and employees. If you are experiencing accessibility issues and need assistance, please contact our Helpdesk by phone at 1-800-457-3642 or by e-mail at helpdesk@helpdesk.itc.nrcs.usda.gov. For assistance with publications that include maps, graphs, or similar forms of information, you may also wish to contact our State or local office. You can locate the correct office and phone number at http://offices.sc.egov.usda.gov/locator/app.