ATTACHMENT K

NATURAL RESOURCES CONSERVATION SERVICE CUSTOM SOIL RESOURCE REPORT

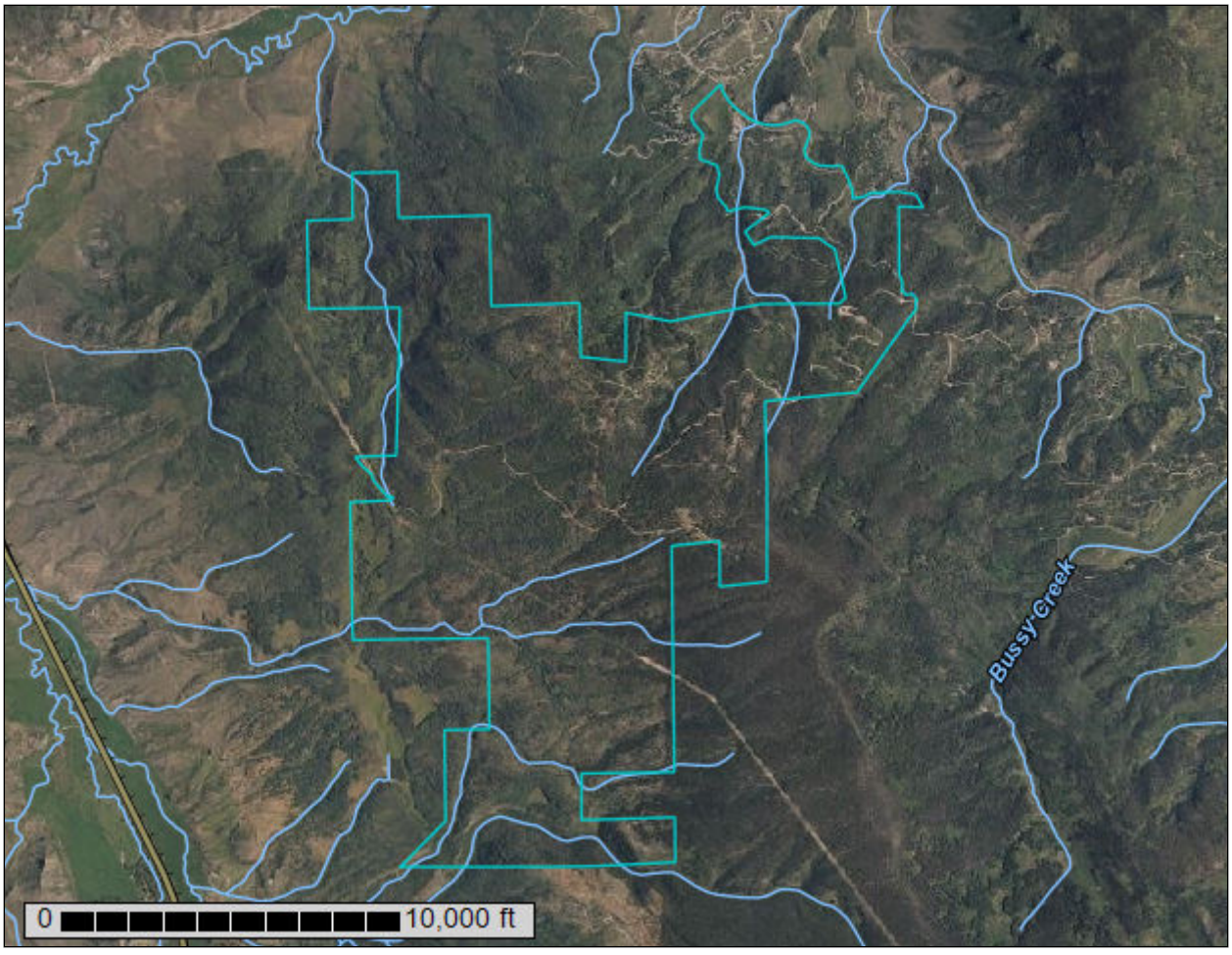
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Routt Area, Colorado, Parts of Rio Blanco and Routt Counties; and Routt National Forest Area, Colorado, Parts of Grand, Jackson, Moffat, and Routt Counties



November 14, 2024

Preface

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

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

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

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

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

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

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

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

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

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

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

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

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

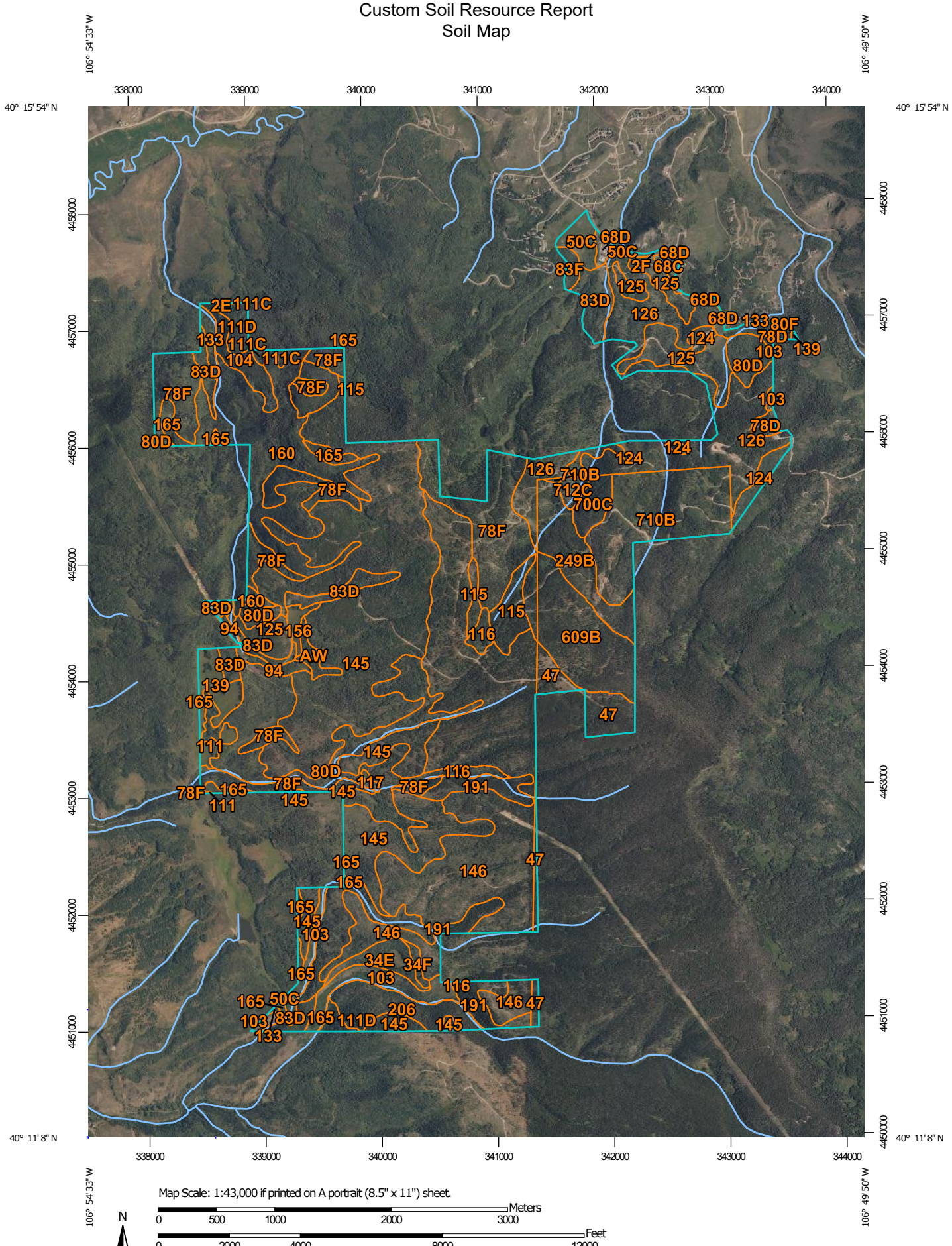
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report
Soil Map



MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
Survey Area Data: Version 14, Aug 29, 2024

Soil Survey Area: Routt National Forest Area, Colorado, Parts of Grand, Jackson, Moffat, and Routt Counties
Survey Area Data: Version 8, Aug 29, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2021—Aug 25, 2021

MAP LEGEND

MAP INFORMATION

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2E	Routtskin loam, 12 to 25 percent slopes	0.6	0.0%
2F	Lintim loam, 25 to 65 percent slopes	2.9	0.1%
34E	Coutis fine sandy loam, 3 to 25 percent slopes	33.4	0.8%
34F	Coutis fine sandy loam, 25 to 65 percent slopes	7.1	0.2%
50C	Lintim loam, 3 to 12 percent slopes	25.1	0.6%
68C	Rabbitears loam, 3 to 12 percent slopes	9.9	0.2%
68D	Rabbitears loam, 12 to 25 percent slopes	10.5	0.2%
78D	Frisco, very stony-Dorpat complex, 3 to 25 percent slopes	10.3	0.2%
78F	Fulvance very gravelly sandy loam, 25 to 65 percent slopes, very stony	347.3	8.0%
80D	Foidel loam, 5 to 25 percent slopes	276.6	6.4%
80F	Foidel loam, 20 to 50 percent slopes, cool	3.4	0.1%
83D	Routt loam, 3 to 25 percent slopes, very stony	106.7	2.5%
83F	Routt loam, 25 to 65 percent slopes, cool, very stony	9.8	0.2%
94	Dorpat-Reddles complex, 30 to 65 percent slopes	16.4	0.4%
103	Foidel-Rock outcrop complex, 20 to 60 percent slopes	71.7	1.7%
104	Foidel loam, 25 to 50 percent slopes	35.8	0.8%
111	Evna, very stony-Lintim complex, 5 to 25 percent slopes	12.7	0.3%
111C	Slater-Routt complex, 5 to 25 percent slopes, very stony	5.1	0.1%
111D	Slater-Routt complex, 25 to 65 percent slopes, very stony	29.9	0.7%
115	Gateview cobbly loam, 30 to 75 percent slopes, very bouldery	76.5	1.8%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
116	Gateview loam, 10 to 30 percent slopes, extremely stony	30.2	0.7%
117	Handran, extremely bouldery-Venable complex, 0 to 5 percent slopes	3.6	0.1%
124	Vabem-Rabbitears complex, 25 to 65 percent slopes	44.0	1.0%
125	Reddles loam, 3 to 20 percent slopes	126.5	2.9%
126	Sanford very fine sandy loam, 25 to 65 percent slopes	292.2	6.8%
133	Lintim loam, 3 to 25 percent slopes	27.1	0.6%
139	Maciver stony loam, 3 to 25 percent slopes, extremely stony	40.0	0.9%
145	Mine-Reddles complex, 3 to 25 percent slopes	845.7	19.6%
146	Perfecto very stony sandy loam, 3 to 25 percent slopes	685.3	15.9%
156	Egeria clay, 0 to 3 percent slopes	11.4	0.3%
160	Northwater loam, 25 to 75 percent slopes	266.8	6.2%
165	Northwater loam, 3 to 25 percent slopes	55.7	1.3%
191	Perfecto very stony sandy loam, 25 to 65 percent slopes	149.5	3.5%
206	Domepeak very gravelly loam, 15 to 50 percent slopes, very stony	72.5	1.7%
AW	Venable, mucky peat, 0 to 3 percent slopes, frequently flooded	15.6	0.4%
Subtotals for Soil Survey Area		**3,757.8**	**87.1%**
Totals for Area of Interest		**4,315.4**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
47	Grenadier taxadjunct cobbly loam, 10 to 40 percent slopes	72.0	1.7%
249B	Frisco-Tamarron complex, 10 to 40 percent slopes	94.4	2.2%
609B	Hollandlake-Jumpstart families, complex, 15 to 40 percent slopes, landslides	147.9	3.4%
700C	Como-Agneston family-Legault family association, 30 to 60 percent slopes, extremely stony	29.4	0.7%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
710B	Agneston-Legault families, association, 10 to 40 percent slopes, extremely stony	201.5	4.7%
712C	Rogert-Bowen association, 20 to 55 percent slopes, extremely stony	12.4	0.3%
Subtotals for Soil Survey Area		**557.6**	**12.9%**
Totals for Area of Interest		**4,315.4**	**100.0%**

Map Unit Descriptions

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

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

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

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

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

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

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

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

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

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

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

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

Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

2E—Routtskin loam, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0ds
Elevation: 6,560 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Routtskin and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Routtskin

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 5 inches: loam
A2 - 5 to 14 inches: loam
Bt1 - 14 to 23 inches: gravelly clay loam
Bt2 - 23 to 39 inches: cobbly clay
Bt3 - 39 to 60 inches: clay loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Minor Components

Lintim

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Jerry

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

2F—Lintim loam, 25 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0dt
Elevation: 6,560 to 8,200 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Lintim and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lintim

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Colluvium derived from shale

Typical profile

A1 - 0 to 5 inches: loam
A2 - 5 to 20 inches: loam

Bt1 - 20 to 30 inches: clay
Bt2 - 30 to 40 inches: clay
BC - 40 to 65 inches: clay

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Minor Components

Foidel

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Evna

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Eckmanpark

Percent of map unit: 5 percent
Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048BY296CO - Claypan
Hydric soil rating: No

34E—Coutis fine sandy loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0fl
Elevation: 6,790 to 8,230 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Coutis and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coutis

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 9 inches: fine sandy loam
A2 - 9 to 22 inches: fine sandy loam
A3 - 22 to 37 inches: fine sandy loam
AC - 37 to 45 inches: fine sandy loam
C1 - 45 to 56 inches: fine sandy loam
C2 - 56 to 74 inches: fine sandy loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (2.13 to 7.09 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Minor Components

Skyway

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Winevada

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Foidel

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

34F—Coutis fine sandy loam, 25 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0fm
Elevation: 6,990 to 8,230 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days

Farmland classification: Not prime farmland

Map Unit Composition

Coutis and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coutis

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 9 inches: fine sandy loam
A2 - 9 to 14 inches: fine sandy loam
AC - 14 to 45 inches: fine sandy loam
C - 45 to 60 inches: fine sandy loam

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High (2.13 to 7.09 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Minor Components

Skyway

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Foidel

Percent of map unit: 5 percent

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

50C—Lintim loam, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0g9
Elevation: 6,560 to 8,200 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lintim and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lintim

Setting

Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from shale

Typical profile

A1 - 0 to 5 inches: loam
A2 - 5 to 20 inches: loam
Bt1 - 20 to 30 inches: clay
Bt2 - 30 to 40 inches: clay
BC - 40 to 65 inches: clay

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 6c
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: C
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Minor Components

Evna

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

Impass

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048BY296CO - Claypan
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

68C—Rabbitears loam, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0gy
Elevation: 6,560 to 8,040 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Rabbitears and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rabbitears

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from sandstone and shale

Typical profile

A1 - 0 to 7 inches: loam
A2 - 7 to 22 inches: loam
Bt1 - 22 to 26 inches: sandy clay loam
Bt2 - 26 to 38 inches: gravelly clay loam
Bt3 - 38 to 54 inches: gravelly sandy clay loam
C - 54 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 6c
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: C
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Minor Components

Winevada

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Hunchback

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: No

Jerry

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

68D—Rabbitears loam, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0gz
Elevation: 6,230 to 7,870 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Rabbitears and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rabbitears

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 7 inches: loam
A2 - 7 to 14 inches: loam
Bt1 - 14 to 22 inches: clay loam
Bt2 - 22 to 48 inches: clay loam
Bk - 48 to 60 inches: loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Minor Components

Routt

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Routtskin

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

78D—Frisco, very stony-Dorpat complex, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0h7
Elevation: 8,500 to 9,510 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 35 to 39 degrees F

Frost-free period: 25 to 65 days
Farmland classification: Not prime farmland

Map Unit Composition

Frisco, very stony, and similar soils: 50 percent
Dorpat and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Frisco, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E1 - 1 to 4 inches: very cobbly sandy loam
E2 - 4 to 16 inches: very gravelly sandy loam
Bt1 - 16 to 32 inches: very cobbly sandy clay loam
Bt2 - 32 to 55 inches: extremely stony clay loam
Bt3 - 55 to 66 inches: extremely stony clay loam

Properties and qualities

Slope: 5 to 25 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Description of Dorpat

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 6 inches: loam
E - 6 to 23 inches: sandy loam
Bt1 - 23 to 42 inches: clay loam
Bt2 - 42 to 50 inches: sandy clay loam
Bt3 - 50 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Reddles

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: SPRUCE/FIR OR LODGE POLE? (null_23)
Hydric soil rating: No

Pergrin

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY912CO - Lodgepole Pine
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

78F—Fulvance very gravelly sandy loam, 25 to 65 percent slopes, very stony

Map Unit Setting

National map unit symbol: k0h8
Elevation: 7,610 to 10,170 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Fulvance, very stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fulvance, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E1 - 1 to 5 inches: very gravelly sandy loam
E2 - 5 to 14 inches: very cobbly sandy loam
Bt1 - 14 to 35 inches: very cobbly sandy clay loam
Bt2 - 35 to 55 inches: extremely stony clay loam
Bt3 - 55 to 66 inches: extremely stony clay loam

Properties and qualities

Slope: 25 to 65 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

Dorpat

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: SPRUCE/FIR (null_22)
Hydric soil rating: No

Reddles

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: SPRUCE/FIR OR LODGE POLE? (null_23)
Hydric soil rating: No

80D—Foidel loam, 5 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0hc
Elevation: 7,220 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Foidel and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Foidel

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 10 inches: loam
A2 - 10 to 30 inches: loam
B/E - 30 to 34 inches: clay loam
B/E - 34 to 37 inches: loam
Bt - 37 to 47 inches: clay loam
BC - 47 to 60 inches: clay loam

Properties and qualities

Slope: 5 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Rabbitears

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Routt

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

80F—Foidel loam, 20 to 50 percent slopes, cool

Map Unit Setting

National map unit symbol: k0hd
Elevation: 6,890 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Foidel and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Foidel

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 10 inches: loam
A2 - 10 to 30 inches: loam
B/E - 30 to 34 inches: clay loam
B/E - 34 to 37 inches: loam
Bt - 37 to 47 inches: clay loam
BC - 47 to 60 inches: clay loam

Properties and qualities

Slope: 20 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Winevada

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Rabbitears

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Routt

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

83D—Routt loam, 3 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: k0hh
Elevation: 7,540 to 8,690 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Routt, very stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Routt, Very Stony

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 12 inches: loam
A2 - 12 to 22 inches: loam
A3 - 22 to 27 inches: clay loam
B/E - 27 to 29 inches: clay loam
B/E - 29 to 31 inches: loam
Bt1 - 31 to 46 inches: clay
Bt2 - 46 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Venable

Percent of map unit: 10 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Slater

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Other vegetative classification: ASPEN (null_3)
Hydric soil rating: No

83F—Routt loam, 25 to 65 percent slopes, cool, very stony

Map Unit Setting

National map unit symbol: k0hj
Elevation: 7,540 to 8,690 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Routt, very stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Routt, Very Stony

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 12 inches: loam
A2 - 12 to 22 inches: loam
A3 - 22 to 27 inches: clay loam
B/E - 27 to 29 inches: clay loam
B/E - 29 to 31 inches: loam
Bt1 - 31 to 46 inches: clay
Bt2 - 46 to 65 inches: clay loam

Properties and qualities

Slope: 25 to 65 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Venable

Percent of map unit: 10 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Slater

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Other vegetative classification: ASPEN (null_3)
Hydric soil rating: No

94—Dorpat-Reddles complex, 30 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0hz
Elevation: 7,540 to 8,860 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Dorpat and similar soils: 70 percent

Reddles and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dorpat

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: fine sandy loam
E - 3 to 16 inches: sandy loam
Bt1 - 16 to 30 inches: sandy clay loam
Bt2 - 30 to 46 inches: sandy clay loam
Bt3 - 46 to 60 inches: sandy loam

Properties and qualities

Slope: 30 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Description of Reddles

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 10 inches: very fine sandy loam
E - 10 to 15 inches: sandy loam
E/B - 15 to 24 inches: sandy loam
E/B - 24 to 28 inches: clay
Bt1 - 28 to 35 inches: clay

Bt2 - 35 to 60 inches: clay
Cr - 60 to 70 inches: bedrock

Properties and qualities

Slope: 30 to 65 percent
Depth to restrictive feature: 57 to 67 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.07 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Fulvance

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

103—Foidel-Rock outcrop complex, 20 to 60 percent slopes

Map Unit Setting

National map unit symbol: k0j5
Elevation: 6,560 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Foidel and similar soils: 70 percent
Rock outcrop: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Foidel

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 5 inches: sandy loam
A2 - 5 to 10 inches: loam
B/E - 10 to 15 inches: loam
B/E - 15 to 25 inches: clay loam
Bt - 25 to 60 inches: clay loam

Properties and qualities

Slope: 20 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydric soil rating: No

104—Foidel loam, 25 to 50 percent slopes

Map Unit Setting

National map unit symbol: k0j6
Elevation: 6,890 to 8,200 feet
Mean annual precipitation: 24 to 28 inches

Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Foidel and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Foidel

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 10 inches: loam
A2 - 10 to 30 inches: loam
B/E - 30 to 34 inches: loam
B/E - 34 to 37 inches: clay loam
Bt - 37 to 47 inches: clay loam
BC - 47 to 60 inches: clay loam

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Minor Components

Clayburn

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

Northwater

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Routtskin

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

111—Evna, very stony-Lintim complex, 5 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0jb
Elevation: 7,220 to 9,510 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Evna, very stony, and similar soils: 45 percent
Lintim and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Evna, Very Stony

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 11 inches: stony loam

Bt2 - 11 to 22 inches: very bouldery clay loam
Bt3 - 22 to 48 inches: extremely bouldery clay
Bt4 - 48 to 65 inches: very bouldery clay

Properties and qualities

Slope: 5 to 25 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

Description of Lintim

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from shale

Typical profile

A1 - 0 to 5 inches: loam
A2 - 5 to 20 inches: loam
Bt1 - 20 to 30 inches: clay
Bt2 - 30 to 40 inches: clay
BC - 40 to 65 inches: clay

Properties and qualities

Slope: 5 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Minor Components

Routtskin
Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Impass
Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048BY296CO - Claypan
Hydric soil rating: No

Venable
Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

111C—Slater-Routt complex, 5 to 25 percent slopes, very stony

Map Unit Setting
National map unit symbol: k0jc
Elevation: 7,540 to 9,350 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition
Slater, very stony, and similar soils: 55 percent
Routt, very stony, and similar soils: 30 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Slater, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 6 inches: cobbly loam
A2 - 6 to 15 inches: cobbly clay loam
E/B - 15 to 18 inches: very stony sandy clay loam
E/B - 18 to 20 inches: very stony clay
Bt1 - 20 to 29 inches: extremely stony clay
Bt2 - 29 to 45 inches: extremely stony clay
Bt3 - 45 to 60 inches: extremely stony clay

Properties and qualities

Slope: 5 to 25 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Description of Routt, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 12 inches: loam
A2 - 12 to 22 inches: loam
A3 - 22 to 27 inches: clay loam

B/E - 27 to 29 inches: clay loam
B/E - 29 to 31 inches: loam
Bt1 - 31 to 46 inches: clay
Bt2 - 46 to 65 inches: clay loam

Properties and qualities

Slope: 5 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Venable

Percent of map unit: 10 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Northwater

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

111D—Slater-Routt complex, 25 to 65 percent slopes, very stony

Map Unit Setting

National map unit symbol: k0jd
Elevation: 7,540 to 9,350 feet

Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Slater, very stony, and similar soils: 50 percent
Routt, very stony, and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Slater, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 6 inches: cobbly loam
A2 - 6 to 15 inches: cobbly clay loam
E/B - 15 to 18 inches: very cobbly sandy clay loam
E/B - 18 to 20 inches: very cobbly clay
Bt1 - 20 to 29 inches: extremely cobbly clay
Bt2 - 29 to 45 inches: extremely stony clay
Bt3 - 45 to 60 inches: extremely stony clay

Properties and qualities

Slope: 25 to 65 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.07 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Description of Routt, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 12 inches: loam
A2 - 12 to 22 inches: loam
A3 - 22 to 27 inches: clay loam
B/E - 27 to 29 inches: clay loam
B/E - 29 to 31 inches: loam
Bt1 - 31 to 46 inches: clay
Bt2 - 46 to 65 inches: clay loam

Properties and qualities

Slope: 25 to 65 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.7 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Northwater

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

115—Gateview cobbly loam, 30 to 75 percent slopes, very bouldery

Map Unit Setting

National map unit symbol: k0jj
Elevation: 6,560 to 8,530 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Gateview, very bouldery, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gateview, Very Bouldery

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from igneous and sedimentary rock

Typical profile

A1 - 0 to 1 inches: cobbly loam
A2 - 1 to 14 inches: bouldery loam
AC1 - 14 to 18 inches: very stony loam
AC2 - 18 to 33 inches: very stony sandy loam
C - 33 to 60 inches: very stony sandy loam

Properties and qualities

Slope: 30 to 75 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: B

Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Coutis
Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Routt
Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Rogert
Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

116—Gateview loam, 10 to 30 percent slopes, extremely stony

Map Unit Setting
National map unit symbol: k0jk
Elevation: 6,890 to 8,360 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition
Gateview, extremely stony, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gateview, Extremely Stony

Setting
Landform: Mountain slopes

Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from igneous and sedimentary rock

Typical profile

A1 - 0 to 1 inches: loam
A2 - 1 to 12 inches: bouldery loam
A3 - 12 to 20 inches: very stony loam
AC - 20 to 37 inches: very stony sandy loam
C - 37 to 60 inches: very stony sandy loam

Properties and qualities

Slope: 10 to 30 percent
Surface area covered with cobbles, stones or boulders: 5.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Routt

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Coutis

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Foidel

Percent of map unit: 5 percent
Landform: Mountain slopes

Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

117—Handran, extremely bouldery-Venable complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: k0jl
Elevation: 6,690 to 7,540 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Handran, extremely bouldery, and similar soils: 55 percent
Venable and similar soils: 40 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Handran, Extremely Bouldery

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium over glaciofluvial deposits derived from igneous and sedimentary rock

Typical profile

A - 0 to 12 inches: extremely stony loam
AC - 12 to 40 inches: extremely stony loam
C - 40 to 60 inches: extremely stony loamy sand

Properties and qualities

Slope: 0 to 5 percent
Surface area covered with cobbles, stones or boulders: 8.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B/D
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

Description of Venable

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Typical profile

Oe - 0 to 4 inches: moderately decomposed plant material
A - 4 to 16 inches: loam
AC - 16 to 26 inches: sandy clay loam
Cg1 - 26 to 43 inches: loamy sand
2Cg2 - 43 to 60 inches: extremely cobbly fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): 5w
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: Yes

Minor Components

Lintim

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

124—Vabem-Rabbitears complex, 25 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0jv
Elevation: 7,050 to 8,860 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Vabem and similar soils: 60 percent
Rabbitears and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vabem

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 2 inches: very fine sandy loam
A2 - 2 to 5 inches: very fine sandy loam
Bt - 5 to 11 inches: gravelly loam
Cr - 11 to 21 inches: bedrock

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: 10 to 18 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D

Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Description of Rabbitears

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 6 inches: very fine sandy loam
A2 - 6 to 17 inches: very fine sandy loam
Bt1 - 17 to 27 inches: sandy clay loam
Bt2 - 27 to 37 inches: sandy clay loam
C - 37 to 60 inches: sandy clay loam

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Minor Components

Coutis

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Libeg

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY237CO - Stony Loam
Hydric soil rating: No

125—Reddles loam, 3 to 20 percent slopes

Map Unit Setting

National map unit symbol: k0jw
Elevation: 7,540 to 9,510 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Reddles and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reddles

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 7 inches: loam
E - 7 to 12 inches: loam
E/B - 12 to 17 inches: loam
E/B - 17 to 21 inches: clay loam
Bt1 - 21 to 35 inches: clay
Bt2 - 35 to 51 inches: clay
C - 51 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 20 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Fulvance

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

126—Sanford very fine sandy loam, 25 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0jx
Elevation: 7,540 to 8,530 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Sanford and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sanford

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 8 inches: very fine sandy loam
E and Bt1 - 8 to 25 inches: loam
E and Bt1 - 25 to 30 inches: sandy clay loam
E and Bt2 - 30 to 33 inches: very fine sandy loam
E and Bt2 - 33 to 37 inches: sandy clay loam
Cr - 37 to 40 inches: bedrock

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: 30 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Dorpat

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Reddles

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

133—Lintim loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0k1
Elevation: 6,890 to 7,970 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Lintim and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lintim

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from shale

Typical profile

A1 - 0 to 5 inches: loam
A2 - 5 to 20 inches: loam
Bt1 - 20 to 30 inches: clay
Bt2 - 30 to 40 inches: clay
BC - 40 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R048AY247CO - Deep Clay Loam

Hydric soil rating: No

Minor Components

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Slater

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

139—Maciver stony loam, 3 to 25 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: k0k6
Elevation: 7,050 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Maciver, extremely stony, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maciver, Extremely Stony

Setting

Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Glaciofluvial deposits derived from igneous and sedimentary rock

Typical profile

A - 0 to 5 inches: stony loam
BA - 5 to 11 inches: very gravelly clay loam
Bt - 11 to 21 inches: very gravelly sandy clay loam

Bk - 21 to 34 inches: very cobbly loam
2Bk - 34 to 65 inches: very cobbly sandy clay loam

Properties and qualities

Slope: 3 to 25 percent
Surface area covered with cobbles, stones or boulders: 5.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: R048BY237CO - Stony Loam
Hydric soil rating: No

Minor Components

Foidel

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Lintim

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

145—Mine-Reddles complex, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0lp
Elevation: 8,530 to 9,510 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 35 to 39 degrees F
Frost-free period: 25 to 65 days
Farmland classification: Not prime farmland

Map Unit Composition

Mine and similar soils: 45 percent
Reddles and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mine

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium over colluvium derived from granite and gneiss

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 4 inches: loam
Bw1 - 4 to 12 inches: loam
Bw2 - 12 to 24 inches: loam
Bw3 - 24 to 35 inches: gravelly sandy loam
C - 35 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Description of Reddles

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 7 inches: loam
E - 7 to 12 inches: loam
E/B - 12 to 17 inches: loam
E/B - 17 to 21 inches: clay loam
Bt1 - 21 to 35 inches: clay
Bt2 - 35 to 51 inches: clay
C - 51 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Dorpat

Percent of map unit: 8 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Hunchback

Percent of map unit: 7 percent
Landform: Drainageways

Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: No

146—Perfecto very stony sandy loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0lq
Elevation: 8,860 to 9,840 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 35 to 39 degrees F
Frost-free period: 25 to 65 days
Farmland classification: Not prime farmland

Map Unit Composition

Perfecto and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Perfecto

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from granite

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E - 1 to 13 inches: very stony sandy loam
Bw - 13 to 22 inches: extremely gravelly loamy sand
BC - 22 to 42 inches: very gravelly loamy sand
C - 42 to 60 inches: very gravelly sand

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High (2.13 to 7.09 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Mine

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: LODGE POLE (null_12)
Hydric soil rating: No

156—Egeria clay, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: k0lt
Elevation: 7,280 to 8,530 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Egeria and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Egeria

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone and shale

Typical profile

A1 - 0 to 8 inches: clay
A2 - 8 to 24 inches: clay
C1 - 24 to 42 inches: clay
C2 - 42 to 65 inches: cobbly clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 6w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: C/D
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Minor Components

Tanella

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: No

Slocum

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: No

160—Northwater loam, 25 to 75 percent slopes

Map Unit Setting

National map unit symbol: k0kh
Elevation: 7,540 to 8,860 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Northwater and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northwater

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from sandstone and shale

Typical profile

A1 - 0 to 10 inches: loam
A2 - 10 to 26 inches: loam
Bt1 - 26 to 43 inches: very stony clay loam
Bt2 - 43 to 60 inches: very stony clay loam

Properties and qualities

Slope: 25 to 75 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Skyway

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

Routt

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear

Across-slope shape: Concave
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

165—Northwater loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0kj
Elevation: 7,740 to 8,690 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Northwater and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northwater

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 10 inches: loam
A2 - 10 to 24 inches: loam
Bt1 - 24 to 31 inches: very stony clay loam
Bt2 - 31 to 60 inches: very stony sandy clay loam

Properties and qualities

Slope: 3 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Minor Components

Venable

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: Yes

Routt

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY449CO - Aspen Woodland
Hydric soil rating: No

Foidel

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY238CO - Brushy Loam
Hydric soil rating: No

191—Perfecto very stony sandy loam, 25 to 65 percent slopes

Map Unit Setting

National map unit symbol: k0kr
Elevation: 8,530 to 10,170 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 35 to 39 degrees F
Frost-free period: 25 to 65 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Perfecto

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Slope alluvium and/or colluvium derived from granite

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E - 1 to 13 inches: very stony sandy loam
Bw - 13 to 22 inches: extremely gravelly loamy sand
BC - 22 to 42 inches: very gravelly loamy sand
C - 42 to 60 inches: very gravelly sand

Properties and qualities

Slope: 25 to 65 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): High (2.13 to 7.09 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

Minor Components

Mine

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Hydric soil rating: No

206—Domepeak very gravelly loam, 15 to 50 percent slopes, very stony

Map Unit Setting

National map unit symbol: k0m1
Elevation: 8,530 to 9,840 feet
Mean annual precipitation: 24 to 28 inches
Mean annual air temperature: 37 to 40 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Domepeak, very stony, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Domepeak, Very Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium and/or colluvium derived from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E1 - 1 to 4 inches: very gravelly loam
E2 - 4 to 17 inches: very cobbly loam
E/B - 17 to 30 inches: very cobbly loam
E/B - 30 to 40 inches: very cobbly clay
Bt - 40 to 65 inches: very cobbly clay

Properties and qualities

Slope: 10 to 45 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C
Ecological site: F048AY912CO - Lodgepole Pine
Hydric soil rating: No

Minor Components

Venable
Percent of map unit: 10 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Dorpat
Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: SPRUCE FIR (null_21)
Hydric soil rating: No

Rock outcrop
Percent of map unit: 5 percent
Hydric soil rating: No

AW—Venable, mucky peat, 0 to 3 percent slopes, frequently flooded

Map Unit Setting
National map unit symbol: k0kv
Elevation: 6,490 to 9,180 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 35 to 41 degrees F
Frost-free period: 25 to 65 days
Farmland classification: Not prime farmland

Map Unit Composition
Venable, frequently flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Venable, Frequently Flooded

Setting
Landform: Drainageways, flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave

Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Oe - 0 to 4 inches: moderately decomposed plant material
A - 4 to 16 inches: loam
AC - 16 to 26 inches: sandy clay loam
Cg - 26 to 43 inches: loamy sand
2Cg - 43 to 59 inches: extremely cobbly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.71 to 2.13 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 6w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Ecological site: R048AY241CO - Mountain Meadow
Hydric soil rating: Yes

Minor Components

Riverwash, frequently flooded

Percent of map unit: 10 percent
Hydric soil rating: No

Routt National Forest Area, Colorado, Parts of Grand, Jackson, Moffat, and Routt Counties

47—Grenadier taxadjunct cobbly loam, 10 to 40 percent slopes

Map Unit Setting

National map unit symbol: k30j
Elevation: 8,000 to 10,890 feet
Mean annual precipitation: 38 to 51 inches
Mean annual air temperature: 34 to 36 degrees F
Frost-free period: 20 to 50 days
Farmland classification: Not prime farmland

Map Unit Composition

Grenadier and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Grenadier

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Till over residuum weathered from granite and gneiss

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
E - 2 to 6 inches: cobbly loam
EB - 6 to 11 inches: very cobbly loam
Bw - 11 to 22 inches: very cobbly loam
BC - 22 to 31 inches: extremely cobbly sandy loam
C - 31 to 54 inches: extremely cobbly sandy loam
R - 54 to 79 inches: bedrock

Properties and qualities

Slope: 10 to 40 percent
Depth to restrictive feature: 39 to 59 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Minor Components

Targhee
Percent of map unit: 10 percent
Hydric soil rating: No

Moran
Percent of map unit: 10 percent
Hydric soil rating: No

Leighcan
Percent of map unit: 5 percent
Hydric soil rating: No

249B—Frisco-Tamarron complex, 10 to 40 percent slopes

Map Unit Setting
National map unit symbol: k2zk
Elevation: 8,330 to 9,910 feet
Mean annual precipitation: 24 to 33 inches
Mean annual air temperature: 35 to 37 degrees F
Frost-free period: 25 to 55 days
Farmland classification: Not prime farmland

Map Unit Composition
Frisco and similar soils: 50 percent
Tamarron and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Frisco

Setting
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium and/or slope alluvium derived from sandstone and shale

Typical profile
Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 2 inches: moderately decomposed plant material
E - 2 to 6 inches: gravelly loam
Bt1 - 6 to 11 inches: very gravelly loam
Bt2 - 11 to 59 inches: very gravelly clay loam

Properties and qualities
Slope: 10 to 40 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Description of Tamarron

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Colluvium and/or slope alluvium over residuum weathered from sandstone and shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 3 inches: moderately decomposed plant material
E - 3 to 7 inches: very cobbly very fine sandy loam
Bt1 - 7 to 12 inches: very cobbly loam
Bt2 - 12 to 30 inches: very cobbly clay loam
Cr - 30 to 59 inches: bedrock

Properties and qualities

Slope: 10 to 40 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F048AY912CO - Lodgepole Pine
Hydric soil rating: No

Minor Components

Hyannis

Percent of map unit: 10 percent
Hydric soil rating: No

609B—Hollandlake-Jumpstart families, complex, 15 to 40 percent slopes, landslides

Map Unit Setting

National map unit symbol: k311
Elevation: 8,360 to 10,330 feet
Mean annual precipitation: 31 to 45 inches
Mean annual air temperature: 34 to 37 degrees F
Frost-free period: 25 to 55 days
Farmland classification: Not prime farmland

Map Unit Composition

Hollandlake, very stony, landslide, and similar soils: 65 percent
Jumpstart, landslide, and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hollandlake, Very Stony, Landslide

Setting

Landform: Complex landslides
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Complex landslide deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
E - 2 to 7 inches: gravelly loam
E/Bt - 7 to 11 inches: very gravelly sandy loam
Bt/E - 11 to 17 inches: very gravelly sandy clay loam
Bt - 17 to 63 inches: very gravelly sandy clay loam

Properties and qualities

Slope: 15 to 40 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Description of Jumpstart, Landslide

Setting

Landform: Complex landslides
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Complex landslide deposits derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 7 inches: loam
E - 7 to 14 inches: loam
Bt - 14 to 35 inches: clay loam
C - 35 to 59 inches: clay

Properties and qualities

Slope: 15 to 40 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Minor Components

Haydenfork

Percent of map unit: 10 percent
Hydric soil rating: Yes

Owlcreek

Percent of map unit: 5 percent
Hydric soil rating: No

700C—Como-Agneston family-Legault family association, 30 to 60 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: k31m
Elevation: 8,400 to 10,500 feet
Mean annual precipitation: 24 to 34 inches
Mean annual air temperature: 33 to 36 degrees F
Frost-free period: 15 to 45 days
Farmland classification: Not prime farmland

Map Unit Composition

Como, extremely stony, and similar soils: 45 percent
Agneston, extremely stony, and similar soils: 25 percent
Legault, extremely stony, and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Como, Extremely Stony

Setting

Landform: Complex landslides, mountain slopes
Landform position (three-dimensional): Center third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from granite

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E - 1 to 9 inches: very stony sandy loam
Bw - 9 to 15 inches: very stony sandy loam
C - 15 to 59 inches: very cobbly loamy sand

Properties and qualities

Slope: 40 to 60 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.13 to 7.09 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A
Ecological site: F048AY918CO - Spruce-Fir Woodland
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Description of Agneston, Extremely Stony

Setting

Landform: Complex landslides, mountain slopes
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Colluvium derived from granite

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E - 1 to 4 inches: gravelly sandy loam
E/Bt - 4 to 9 inches: very gravelly sandy loam
Bt/E - 9 to 12 inches: very gravelly sandy clay loam
Bt - 12 to 46 inches: very gravelly sandy clay loam
C - 46 to 59 inches: very gravelly loamy sand

Properties and qualities

Slope: 30 to 55 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: F048AY917CO - Abies lasiocarpa/Paxistima myrsinites/Erigeron eximius
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Description of Legault, Extremely Stony

Setting

Landform: Complex landslides, mountain slopes
Landform position (three-dimensional): Upper third of mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium over residuum weathered from granite

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
E - 2 to 7 inches: very stony sandy loam
C - 7 to 15 inches: very cobbly loamy sand

Cr - 15 to 59 inches: bedrock

Properties and qualities

Slope: 30 to 50 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Other vegetative classification: subalpie fir/grouse whortleberry (RNF601)
Hydric soil rating: No

Minor Components

Gorpas

Percent of map unit: 5 percent
Hydric soil rating: No

Fria

Percent of map unit: 3 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Hydric soil rating: No

710B—Agneston-Legault families, association, 10 to 40 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: k31s
Elevation: 8,200 to 10,760 feet
Mean annual precipitation: 22 to 31 inches
Mean annual air temperature: 35 to 37 degrees F
Frost-free period: 25 to 55 days
Farmland classification: Not prime farmland

Map Unit Composition

Agneston, extremely stony, and similar soils: 50 percent
Legault, extremely stony, and similar soils: 35 percent

Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Agneston, Extremely Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium derived from igneous and metamorphic rock

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
E - 1 to 4 inches: gravelly sandy loam
E/Bt - 4 to 9 inches: very gravelly sandy loam
Bt/E - 9 to 12 inches: very gravelly sandy clay loam
Bt - 12 to 46 inches: very gravelly sandy clay loam
C - 46 to 59 inches: very gravelly loamy sand

Properties and qualities

Slope: 10 to 40 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: F048AY917CO - Abies lasiocarpa/Paxistima myrsinites/Erigeron eximius
Other vegetative classification: subalpine fir/Geyer's sedge (RNF602)
Hydric soil rating: No

Description of Legault, Extremely Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium over residuum weathered from igneous and metamorphic rock

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
E - 2 to 7 inches: very stony sandy loam
C - 7 to 15 inches: very cobbly loamy sand
Cr - 15 to 59 inches: bedrock

Properties and qualities

Slope: 10 to 40 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Other vegetative classification: lodgepole pine/russet buffaloberry (RNF501)
Hydric soil rating: No

Minor Components

Como

Percent of map unit: 4 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 3 percent
Hydric soil rating: No

Rubble land

Percent of map unit: 3 percent
Hydric soil rating: No

Hiamovi

Percent of map unit: 3 percent
Hydric soil rating: No

Cryaquolls

Percent of map unit: 2 percent
Hydric soil rating: Yes

712C—Rogert-Bowen association, 20 to 55 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: k31v
Elevation: 7,220 to 10,070 feet
Mean annual precipitation: 20 to 30 inches
Mean annual air temperature: 37 to 39 degrees F
Frost-free period: 35 to 75 days

Farmland classification: Not prime farmland

Map Unit Composition

Rogert, extremely stony, and similar soils: 60 percent
Bowen, extremely stony, and similar soils: 25 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rogert, Extremely Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium over residuum weathered from granite

Typical profile

A1 - 0 to 5 inches: very stony sandy loam
A2 - 5 to 10 inches: extremely stony sandy loam
R - 10 to 79 inches: bedrock

Properties and qualities

Slope: 25 to 55 percent
Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 0.7 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R048AY229CO - Rocky Loam
Hydric soil rating: No

Description of Bowen, Extremely Stony

Setting

Landform: Mountain slopes
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Colluvium over residuum weathered from granite

Typical profile

A - 0 to 8 inches: very gravelly loam
Bt1 - 8 to 13 inches: very gravelly sandy clay loam
Bt2 - 13 to 26 inches: extremely gravelly sandy clay loam
R - 26 to 79 inches: bedrock

Properties and qualities

Slope: 20 to 50 percent

Surface area covered with cobbles, stones or boulders: 7.0 percent
Depth to restrictive feature: 20 to 39 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): 7s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R034AY312WY - Gravelly High Plains Southeast (Gr)
Other vegetative classification: quaking aspen/mountain snowberry (RNF401)
Hydric soil rating: No

Minor Components

Quander

Percent of map unit: 10 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

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