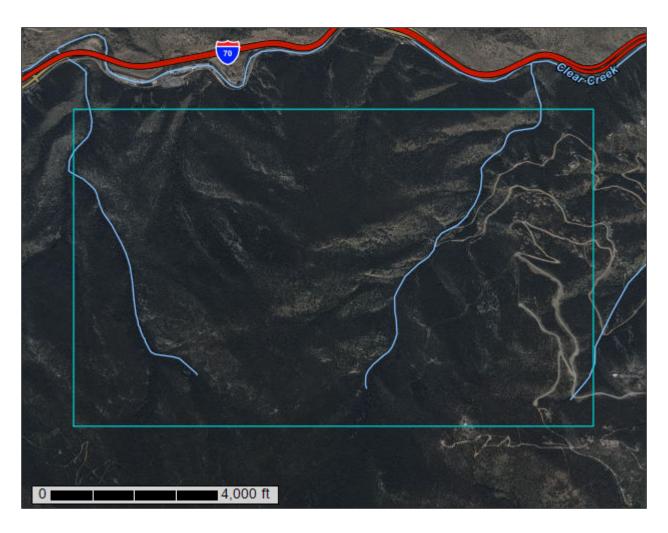


Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource
Report for
Arapaho-Roosevelt
National Forest Area,
Colorado, Parts of Boulder,
Clear Creek, Gilpin, Grand,
Park and Larimer Counties;
and Georgetown Area,
Colorado, Parts of Clear
Creek, Gilpin, and Park
Counties

**Uphill** 



# **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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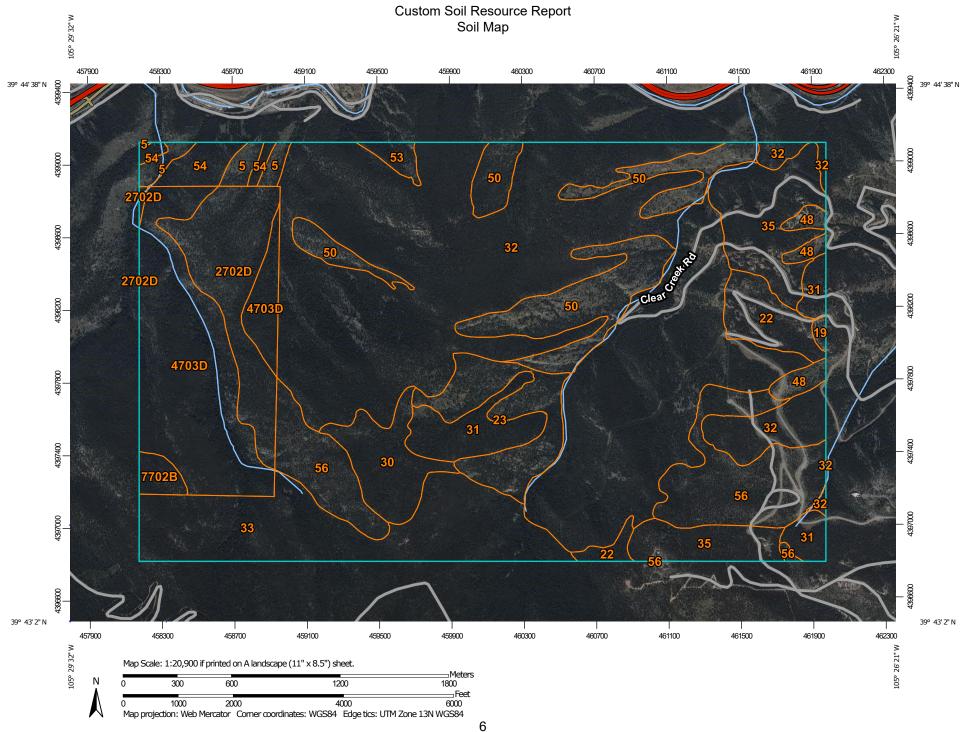
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# Soil Map

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.



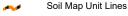
#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### **Special Point Features**

Blowout ဖ

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

å

Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---







# 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: Arapaho-Roosevelt National Forest Area, Colorado, Parts of Boulder, Clear Creek, Gilpin, Grand, Park and **Larimer Counties** 

Survey Area Data: Version 9, Sep 2, 2021

Soil Survey Area: Georgetown Area, Colorado, Parts of Clear Creek, Gilpin, and Park Counties

Survey Area Data: Version 15, Sep 2, 2021

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: Aug 25, 2021—Sep 5, 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
2702D	Cathedral family-Rock outcrop complex, 40 to 150 percent slopes	102.5	4.7%
4703D	Bullwark-Catamount families- Rock outcrop complex, 40 to 150 percent slopes	208.0	9.6%
7702B	Frisco-Catamount, moist families complex, 5 to 40 percent slopes	12.1	0.6%
Subtotals for Soil Survey Area		322.5	14.8%
Totals for Area of Interest		2,173.1	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Cathedral-Rock outcrop complex, 30 to 70 percent slopes	22.3	1.0%
19	Kittredge-Guanella complex, 3 to 9 percent slopes	2.8	0.1%
22	Legault very gravelly sandy loam, 15 to 30 percent slopes	47.3	2.2%
23	Legault-Rock outcrop complex, 30 to 80 percent slopes	75.4	3.5%
30	Mammoth-Ohman-Bendemeere complex, 15 to 30 percent slopes	55.4	2.5%
31	Mammoth-Ohman-Bendemeere complex, 30 to 60 percent slopes	68.0	3.1%
32	Mammoth-Ohman-Rock outcrop complex, 30 to 60 percent slopes	896.2	41.2%
33	Ohman-Ivywild very gravelly sandy loams, 30 to 60 percent slopes	193.7	8.9%
35	Ohman-Legault very gravelly sandy loams, 30 to 60 percent slopes	124.9	5.7%
48	Resort-Cathedral-Rubble land complex, 30 to 60 percent slopes	20.8	1.0%
50	Rock outcrop-Cathedral-Resort complex, 30 to 70 percent slopes	151.1	7.0%
53	Rock outcrop-Rubble land- Cathedral complex, 40 to 100 percent slopes	9.5	0.4%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
54	Rock outcrop-Tolland complex, 30 to 100 percent slopes	25.8	1.2%
56	Tahana-Legault-Rock outcrop complex, 30 to 70 percent slopes	156.9	7.2%
Subtotals for Soil Survey Area		1,850.4	85.2%
Totals for Area of Interest		2,173.1	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.

# Arapaho-Roosevelt National Forest Area, Colorado, Parts of Boulder, Clear Creek, Gilpin, Grand, Park and Larimer Counties

# 2702D—Cathedral family-Rock outcrop complex, 40 to 150 percent slopes

# **Map Unit Setting**

National map unit symbol: tlxj Elevation: 7,000 to 9,500 feet

Mean annual precipitation: 16 to 25 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 70 to 90 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Cathedral family and similar soils: 60 percent

Rock outcrop: 30 percent Minor components: 10 percent

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

# **Description of Cathedral Family**

# Setting

Landform: Mountain slopes

Parent material: Residuum weathered from igneous and metamorphic rock

# **Typical profile**

Oi - 0 to 0 inches: slightly decomposed plant material

A - 0 to 6 inches: very stony sandy loam

Bw - 6 to 11 inches: extremely stony sandy loam C - 11 to 17 inches: extremely stony sandy loam

R - 17 to 26 inches: bedrock

# **Properties and qualities**

Slope: 40 to 75 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.01 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 0.9 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: D

Other vegetative classification: Ponderosa pine/antelope bitterbrush (PIPO/PUTR2) (C1120), Ponderosa pine/true mountain mahogany (PIPO/CEMO2)

(C1107)

# **Description of Rock Outcrop**

# Setting

Landform: Mountain slopes

Landform position (two-dimensional): Summit, backslope Landform position (three-dimensional): Mountainflank

# **Typical profile**

R - 0 to 60 inches: bedrock

# Properties and qualities

Slope: 60 to 150 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

# **Bullwark family**

Percent of map unit: 5 percent

Hydric soil rating: No

# Ratake family

Percent of map unit: 5 percent

Hydric soil rating: No

# 4703D—Bullwark-Catamount families-Rock outcrop complex, 40 to 150 percent slopes

# **Map Unit Setting**

National map unit symbol: 28sk8 Elevation: 8,000 to 9,500 feet

Mean annual precipitation: 20 to 30 inches Mean annual air temperature: 39 to 43 degrees F

Frost-free period: 50 to 70 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Bullwark family and similar soils: 50 percent Catamount family and similar soils: 25 percent

Rock outcrop: 15 percent Minor components: 10 percent

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

# **Description of Bullwark Family**

#### Setting

Landform: Mountain slopes Down-slope shape: Linear Across-slope shape: Linear

Parent material: Colluvium and/or residuum derived from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 3 inches: very cobbly sandy loam
E - 3 to 11 inches: very gravelly sandy loam
EB1 - 11 to 20 inches: very cobbly sandy loam
EB2 - 20 to 24 inches: extremely cobbly sandy loam
E and Bt - 24 to 32 inches: extremely stony sandy loam
E and Bt - 32 to 40 inches: extremely stony sandy clay loam

C - 40 to 49 inches: extremely stony sandy loam

R - 49 to 59 inches: bedrock

# Properties and qualities

Slope: 40 to 75 percent

Surface area covered with cobbles, stones or boulders: 4.0 percent

Depth to restrictive feature: 20 to 60 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.01 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 2.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: B

Ecological site: F048AY908CO - Mixed Conifer

Other vegetative classification: Douglas-fir/Ross sedge (PSME/CARO5) (C1204),

Lodgepole pine/common juniper (PICO/JUCO6) (C0905), Douglas-fir/

kinnikinnick-common juniper (PSME/ARUV-JUCO6) (C1219)

Hydric soil rating: No

# **Description of Catamount Family**

# Setting

Landform: Mountain slopes Down-slope shape: Linear Across-slope shape: Linear

Parent material: Residuum weathered from igneous and metamorphic rock

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A1 - 1 to 2 inches: gravelly loam

A2 - 2 to 5 inches: very gravelly sandy loam

Bw - 5 to 11 inches: extremely gravelly sandy loam

C - 11 to 15 inches: extremely gravelly sandy loam

Cr - 15 to 26 inches: bedrock R - 26 to 36 inches: bedrock

# Properties and qualities

Slope: 40 to 75 percent

Surface area covered with cobbles, stones or boulders: 0.0 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 40 inches

to lithic bedrock

Drainage class: Excessively drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.01 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 0.9 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: D

Ecological site: F048AY912CO - Lodgepole Pine

Other vegetative classification: Lodgepole pine/kinnikinnick (PICO/ARUV) (C0901), Lodgepole pine/common juniper (PICO/JUCO6) (C0905)

Hydric soil rating: No

# **Description of Rock Outcrop**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Summit, backslope Landform position (three-dimensional): Mountainflank

#### Typical profile

R - 0 to 60 inches: bedrock

#### Properties and qualities

Slope: 60 to 150 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

#### Frisco family, dry

Percent of map unit: 5 percent

Hydric soil rating: No

# **Cathedral family**

Percent of map unit: 5 percent

# 7702B—Frisco-Catamount, moist families complex, 5 to 40 percent slopes

# **Map Unit Setting**

National map unit symbol: tlyq Elevation: 9,000 to 10,200 feet

Mean annual precipitation: 20 to 40 inches Mean annual air temperature: 36 to 39 degrees F

Frost-free period: 30 to 50 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Frisco family and similar soils: 45 percent

Catamount family, moist, and similar soils: 40 percent

Minor components: 15 percent

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

# **Description of Frisco Family**

#### Setting

Landform: Benches
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Colluvium and/or residuum derived from sandstone

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material Oe - 1 to 3 inches: moderately decomposed plant material

A - 3 to 5 inches: sandy loam

E - 5 to 13 inches: gravelly sandy loam

Bt - 13 to 32 inches: very cobbly sandy clay loam BCt - 32 to 62 inches: extremely cobbly sandy loam

# Properties and qualities

Slope: 5 to 40 percent

Surface area covered with cobbles, stones or boulders: 0.0 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 to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Other vegetative classification: Subalpine fir - Engelmann spruce/common juniper (ABLA-PIEN/JUCO6) (C0309), Subalpine fir - Engelmann spruce/myrtle

whortleberry (ABLA-PIEN/VAMY2) (C0320)

Hydric soil rating: No

# **Description of Catamount Family, Moist**

# Setting

Landform: Mountain slopes Down-slope shape: Linear Across-slope shape: Linear

Parent material: Residuum weathered from igneous and metamorphic rock

# Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A1 - 1 to 2 inches: gravelly loam

A2 - 2 to 5 inches: very gravelly sandy loam

Bw - 5 to 11 inches: extremely gravelly sandy loam C - 11 to 15 inches: extremely gravelly sandy loam

Cr - 15 to 26 inches: bedrock R - 26 to 36 inches: bedrock

# **Properties and qualities**

Slope: 5 to 40 percent

Surface area covered with cobbles, stones or boulders: 0.0 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 40 inches

to lithic bedrock

Drainage class: Excessively drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.01 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 0.9 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: D

Ecological site: F048AY908CO - Mixed Conifer

Other vegetative classification: Lodgepole pine/common juniper (PICO/JUCO6) (C0905), Lodgepole pine/kinnikinnick (PICO/ARUV) (C0901), Subalpine fir - Engelmann spruce/myrtle whortleberry (ABLA-PIEN/VAMY2) (C0320)

Hydric soil rating: No

# **Minor Components**

# Leighcan family

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

# **Bullwark family**

Percent of map unit: 5 percent

Hydric soil rating: No

**Rock outcrop** 

Percent of map unit: 5 percent
Hydric soil rating: Unranked

# Georgetown Area, Colorado, Parts of Clear Creek, Gilpin, and Park Counties

# 5—Cathedral-Rock outcrop complex, 30 to 70 percent slopes

# **Map Unit Setting**

National map unit symbol: k6gy Elevation: 7,000 to 8,200 feet

Mean annual precipitation: 17 to 20 inches Mean annual air temperature: 43 to 46 degrees F

Frost-free period: 70 to 100 days

Farmland classification: Not prime farmland

# Map Unit Composition

Cathedral and similar soils: 65 percent

Rock outcrop: 20 percent Minor components: 15 percent

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

# **Description of Cathedral**

# Setting

Landform: Mountain slopes, ridges

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Convex, linear Across-slope shape: Convex, linear

Parent material: Micaceous residuum weathered from igneous and metamorphic

rock

# Typical profile

A - 0 to 3 inches: very cobbly coarse sandy loam
AB - 3 to 6 inches: very gravelly sandy loam
Bw - 6 to 11 inches: very gravelly sandy loam
R - 11 to 15 inches: unweathered bedrock

# Properties and qualities

Slope: 30 to 70 percent

Surface area covered with cobbles, stones or boulders: 8.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

# **Description of Rock Outcrop**

# Setting

Landform: Mountain slopes, cliffs, ridges

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Igneous and metamorphic rock

# Typical profile

R - 0 to 60 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 30 to 70 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

#### **Breece**

Percent of map unit: 5 percent

Landform: Mountain slopes, drainageways, alluvial fans

Landform position (two-dimensional): Toeslope Ecological site: R048AY222CO - Loamy Park

Hydric soil rating: No

#### Trag

Percent of map unit: 4 percent Landform: Mountain slopes

Landform position (two-dimensional): Toeslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

#### Lininger

Percent of map unit: 3 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

#### **Arents**

Percent of map unit: 3 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

# 19—Kittredge-Guanella complex, 3 to 9 percent slopes

# Map Unit Setting

National map unit symbol: k6hf Elevation: 7,400 to 9,000 feet

Mean annual precipitation: 17 to 24 inches Mean annual air temperature: 36 to 43 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Kittredge and similar soils: 60 percent Guanella and similar soils: 25 percent

Minor components: 15 percent

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

# **Description of Kittredge**

# Setting

Landform: Alluvial fans
Down-slope shape: Concave
Across-slope shape: Concave

Parent material: Micaceous alluvium derived from igneous and metamorphic rock

#### Typical profile

A - 0 to 10 inches: sandy loam

Bt1 - 10 to 13 inches: sandy clay loam

Bt2 - 13 to 22 inches: clay loam

Bt3 - 22 to 28 inches: sandy clay loam

Bt4 - 28 to 38 inches: gravelly sandy clay loam

BC - 38 to 53 inches: gravelly clay loam

C - 53 to 72 inches: loamy sand

# Properties and qualities

Slope: 3 to 9 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 (0.20

to 0.60 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 8.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: C

Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

# **Description of Guanella**

# Setting

Landform: Mountain slopes

Landform position (two-dimensional): Toeslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium and slope alluvium derived from igneous

and metamorphic rock

# **Typical profile**

A1 - 0 to 6 inches: gravelly loam A2 - 6 to 18 inches: gravelly loam

A3 - 18 to 29 inches: loam

C1 - 29 to 48 inches: gravelly loamy sand C2 - 48 to 62 inches: cobbly loamy sand

# Properties and qualities

Slope: 3 to 9 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): Moderately high to high

(0.60 to 6.00 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 5.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: A

Ecological site: R048AY222CO - Loamy Park

Hydric soil rating: No

# **Minor Components**

# **Cumulic cryaquolls**

Percent of map unit: 10 percent

Landform: Drainageways

Ecological site: R048AY241CO - Mountain Meadow

Hydric soil rating: Yes

# Rogert

Percent of map unit: 5 percent Landform: Mountain slopes, ridges

Landform position (two-dimensional): Shoulder Ecological site: R048AY237CO - Stony Loam

# 22—Legault very gravelly sandy loam, 15 to 30 percent slopes

# **Map Unit Setting**

National map unit symbol: k6hh Elevation: 8,000 to 9,500 feet

Mean annual precipitation: 17 to 25 inches
Mean annual air temperature: 36 to 41 degrees F

Frost-free period: 25 to 85 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

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

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

# **Description of Legault**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 5 inches: very gravelly sandy loam AC - 5 to 18 inches: very gravelly loamy sand Cr - 18 to 22 inches: weathered bedrock

#### **Properties and qualities**

Slope: 15 to 30 percent

Surface area covered with cobbles, stones or boulders: 6.0 percent Depth to restrictive feature: 8 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 0.8 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Minor Components**

# lvywild

Percent of map unit: 10 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Other vegetative classification: PICO/VAMY (lodgepole pine, Rocky Mountain

whortleberry) (null\_18)

Hydric soil rating: No

#### **Tahana**

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Hydric soil rating: No

#### **Arents**

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Hydric soil rating: No

# **Rock outcrop**

Percent of map unit: 5 percent

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Hydric soil rating: No

# 23—Legault-Rock outcrop complex, 30 to 80 percent slopes

# Map Unit Setting

National map unit symbol: k6hk Elevation: 7,000 to 10,000 feet

Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 36 to 43 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Legault and similar soils: 70 percent

Rock outcrop: 20 percent Minor components: 10 percent

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

#### **Description of Legault**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear, concave Across-slope shape: Linear, concave

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 6 inches: very gravelly loamy sand AC - 6 to 19 inches: very gravelly sand Cr - 19 to 23 inches: weathered bedrock

# Properties and qualities

Slope: 30 to 80 percent

Surface area covered with cobbles, stones or boulders: 8.0 percent Depth to restrictive feature: 8 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Description of Rock Outcrop**

#### Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Igneous and metamorphic rock

# **Typical profile**

R - 0 to 60 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 30 to 80 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

#### **Minor Components**

#### Arents

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Hydric soil rating: No

#### Tahana

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Hydric soil rating: No

# 30—Mammoth-Ohman-Bendemeere complex, 15 to 30 percent slopes

# **Map Unit Setting**

National map unit symbol: k6hs Elevation: 7,800 to 10,500 feet

Mean annual precipitation: 17 to 23 inches
Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Mammoth and similar soils: 40 percent Ohman and similar soils: 35 percent Bendemeere and similar soils: 20 percent

Minor components: 5 percent

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

# **Description of Mammoth**

# Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Down-slope shape: Linear Across-slope shape: Concave

Parent material: Micaceous colluvium and/or slope alluvium derived from igneous

and metamorphic rock

# Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

*E - 1 to 10 inches:* very gravelly sandy loam *E and Bt1 - 10 to 16 inches:* gravelly loam

E and Bt2 - 16 to 22 inches: very gravelly loamy sand E and Bt3 - 22 to 32 inches: very gravelly sandy loam E and Bt4 - 32 to 59 inches: very gravelly sandy loam

C - 59 to 67 inches: stony loamy coarse sand

# **Properties and qualities**

Slope: 15 to 30 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): High (2.00 to 6.00

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 3.4 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

# **Description of Ohman**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium and/or slope alluvium over residuum

weathered from igneous and metamorphic rock

# **Typical profile**

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: very stony sandy loam
E - 5 to 13 inches: very gravelly sandy loam

E and Bt1 - 13 to 21 inches: very gravelly sandy loam
E and Bt2 - 21 to 35 inches: extremely gravelly sandy loam

Cr - 35 to 39 inches: weathered bedrock

#### **Properties and qualities**

Slope: 15 to 30 percent

Surface area covered with cobbles, stones or boulders: 0.5 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.7 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

# **Description of Bendemeere**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium and/or slope alluvium derived from igneous

and metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 3 inches: very gravelly sandy loam E - 3 to 10 inches: gravelly coarse sandy loam

E and Bt1 - 10 to 21 inches: very cobbly coarse sandy loam E and Bt2 - 21 to 30 inches: very gravelly loamy coarse sand Bt and E1 - 30 to 42 inches: very gravelly loamy sand Bt and E2 - 42 to 50 inches: gravelly loamy sand

BC - 50 to 62 inches: very gravelly coarse sandy loam

# Properties and qualities

Slope: 15 to 30 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: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

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 3.1 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Minor Components**

#### Legault

Percent of map unit: 3 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Other vegetative classification: PICO/JUCO (lodgepole pine, common juniper)

(null\_15)

Hydric soil rating: No

#### **Rock outcrop**

Percent of map unit: 1 percent

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

#### lvywild

Percent of map unit: 1 percent Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Hydric soil rating: No

# 31—Mammoth-Ohman-Bendemeere complex, 30 to 60 percent slopes

# **Map Unit Setting**

National map unit symbol: k6ht Elevation: 7,800 to 10,500 feet

Mean annual precipitation: 20 to 32 inches Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Mammoth and similar soils: 40 percent Ohman and similar soils: 35 percent Bendemeere and similar soils: 15 percent

Minor components: 10 percent

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

# **Description of Mammoth**

# Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Micaceous colluvium derived from igneous and metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

*E - 1 to 10 inches:* very gravelly sandy loam *E and Bt1 - 10 to 16 inches:* gravelly loam

E and Bt2 - 16 to 22 inches: very gravelly loamy sand E and Bt3 - 22 to 32 inches: very gravelly sandy loam E and Bt4 - 32 to 59 inches: very gravelly sandy loam

C - 59 to 67 inches: stony loamy coarse sand

# Properties and qualities

Slope: 30 to 60 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: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

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 3.4 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Description of Ohman**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium over residuum weathered from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: very stony sandy loam E - 5 to 13 inches: very gravelly sandy loam

E and Bt1 - 13 to 21 inches: very gravelly sandy loam
E and Bt2 - 21 to 35 inches: extremely gravelly sandy loam

Cr - 35 to 39 inches: weathered bedrock

#### **Properties and qualities**

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 5.0 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hvdrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

# **Description of Bendemeere**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium derived from igneous and metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 3 inches: very cobbly sandy loam
E - 3 to 10 inches: gravelly coarse sandy loam

E and Bt1 - 10 to 21 inches: very cobbly coarse sandy loam
E and Bt2 - 21 to 30 inches: very gravelly loamy coarse sand
Bt and E1 - 30 to 42 inches: very gravelly loamy sand
Bt and E2 - 42 to 50 inches: gravelly loamy sand

BC - 50 to 62 inches: very gravelly coarse sandy loam

# Properties and qualities

Slope: 30 to 60 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: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

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 3.1 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Minor Components**

#### Legault

Percent of map unit: 5 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Other vegetative classification: PICO/JUCO (lodgepole pine, common juniper)

(null\_15)

Hydric soil rating: No

#### Rock outcrop

Percent of map unit: 3 percent

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Hydric soil rating: No

#### **Arents**

Percent of map unit: 2 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

# 32—Mammoth-Ohman-Rock outcrop complex, 30 to 60 percent slopes

# **Map Unit Setting**

National map unit symbol: k6hv Elevation: 7,200 to 10,000 feet

Mean annual precipitation: 18 to 28 inches Mean annual air temperature: 36 to 43 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Mammoth and similar soils: 50 percent Ohman and similar soils: 25 percent

Rock outcrop: 15 percent Minor components: 10 percent

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

# **Description of Mammoth**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Micaceous colluvium derived from igneous and metamorphic rock

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

*E - 1 to 10 inches:* very gravelly sandy loam *E and Bt1 - 10 to 16 inches:* gravelly loam

*E and Bt2 - 16 to 22 inches:* very gravelly loamy sand *E and Bt3 - 22 to 32 inches:* very gravelly sandy loam *E and Bt4 - 32 to 59 inches:* very gravelly sandy loam

C - 59 to 67 inches: stony loamy coarse sand

#### Properties and qualities

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 0.5 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): High (2.00 to 6.00

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 3.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

# **Description of Ohman**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium over residuum weathered from igneous and

metamorphic rock

# Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: very stony sandy loam E - 5 to 13 inches: very gravelly sandy loam

E and Bt1 - 13 to 21 inches: very gravelly sandy loam E and Bt2 - 21 to 35 inches: extremely gravelly sandy loam

Cr - 35 to 39 inches: weathered bedrock

# **Properties and qualities**

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 23.0 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.7 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hvdrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

# **Description of Rock Outcrop**

# Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Igneous and metamorphic rock

#### Typical profile

R - 0 to 60 inches: unweathered bedrock

# **Properties and qualities**

Slope: 30 to 150 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

#### **Minor Components**

#### Legault

Percent of map unit: 4 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Other vegetative classification: PICO/JUCO (lodgepole pine, common juniper)

(null\_15)

Hydric soil rating: No

#### Hiwan

Percent of map unit: 4 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Hydric soil rating: No

#### Arents

Percent of map unit: 2 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Hydric soil rating: No

# 33—Ohman-Ivywild very gravelly sandy loams, 30 to 60 percent slopes

# **Map Unit Setting**

National map unit symbol: k6hw Elevation: 7,600 to 9,900 feet

Mean annual precipitation: 18 to 25 inches Mean annual air temperature: 36 to 43 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Ohman and similar soils: 45 percent

Ivywild and similar soils: 35 percent Minor components: 20 percent

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

# **Description of Ohman**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear

Across-slope shape: Linear, concave

Parent material: Micaceous colluvium over residuum weathered from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: very gravelly sandy loam E - 5 to 13 inches: very gravelly sandy loam

E and Bt1 - 13 to 21 inches: very gravelly sandy loam E and Bt2 - 21 to 35 inches: extremely gravelly sandy loam

Cr - 35 to 39 inches: weathered bedrock

# Properties and qualities

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 15.0 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

#### **Description of Ivywild**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous colluvium derived from igneous and metamorphic rock

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

E - 1 to 3 inches: very gravelly sandy loam
B/E - 3 to 11 inches: very gravelly sandy loam
Bw - 11 to 23 inches: very gravelly sandy loam
Cr - 23 to 27 inches: weathered bedrock

# **Properties and qualities**

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

# **Minor Components**

#### Tolvar

Percent of map unit: 10 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Other vegetative classification: ABLA-PIEN/VAMY (subalpine fir, Engelmann's

spruce, Rocky Mountain whortleberry) (null 5)

Hydric soil rating: No

# **Rock outcrop**

Percent of map unit: 5 percent

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Hydric soil rating: No

# Grimstone

Percent of map unit: 5 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Hydric soil rating: No

# 35—Ohman-Legault very gravelly sandy loams, 30 to 60 percent slopes

# **Map Unit Setting**

National map unit symbol: k6hy Elevation: 7,800 to 9,800 feet

Mean annual precipitation: 19 to 23 inches
Mean annual air temperature: 37 to 41 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Ohman and similar soils: 50 percent Legault and similar soils: 45 percent Minor components: 5 percent

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

#### **Description of Ohman**

## Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Linear, concave Across-slope shape: Linear, concave

Parent material: Micaceous colluvium over residuum weathered from igneous and

metamorphic rock

## Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: very gravelly sandy loam E - 5 to 13 inches: very gravelly sandy loam

E and Bt1 - 13 to 21 inches: very gravelly sandy loam
E and Bt2 - 21 to 35 inches: extremely gravelly sandy loam

Cr - 35 to 39 inches: weathered bedrock

# **Properties and qualities**

Slope: 30 to 60 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.7 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hvdrologic Soil Group: B

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

# **Description of Legault**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 5 inches: very gravelly sandy loam
AC - 5 to 18 inches: very gravelly loamy sand
Cr - 18 to 22 inches: weathered bedrock

## **Properties and qualities**

Slope: 30 to 60 percent

Depth to restrictive feature: 8 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 0.8 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

## **Minor Components**

## Rock outcrop

Percent of map unit: 5 percent

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Hydric soil rating: No

# 48—Resort-Cathedral-Rubble land complex, 30 to 60 percent slopes

# **Map Unit Setting**

National map unit symbol: k6jc Elevation: 7.400 to 8.800 feet

Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 41 to 46 degrees F

Frost-free period: 55 to 100 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Resort and similar soils: 35 percent Cathedral and similar soils: 30 percent

Rubble land: 20 percent Minor components: 15 percent

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

#### **Description of Resort**

#### Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder

Down-slope shape: Linear, convex Across-slope shape: Linear, convex

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

## **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material

A1 - 1 to 6 inches: very stony sandy loam

A2 - 6 to 14 inches: extremely cobbly loamy sand

*Cr - 14 to 18 inches:* weathered bedrock

#### **Properties and qualities**

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 3.0 percent Depth to restrictive feature: 10 to 20 inches to paralithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 0.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

## **Description of Cathedral**

## Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope Landform position (three-dimensional): Mountainflank

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous residuum weathered from igneous and metamorphic

rock

## **Typical profile**

A - 0 to 3 inches: very cobbly sandy loam
AB - 3 to 6 inches: very gravelly sandy loam
Bw - 6 to 11 inches: very gravelly sandy loam
R - 11 to 15 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 30 to 60 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

#### **Description of Rubble Land**

#### Setting

Landform: Talus slopes
Down-slope shape: Linear
Across-slope shape: Linear

# **Typical profile**

C - 0 to 60 inches: fragmental material

## **Properties and qualities**

Slope: 30 to 60 percent

Depth to restrictive feature: 20 to 80 inches to lithic bedrock

Drainage class: Excessively drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)

Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A Hydric soil rating: No

# **Minor Components**

#### **Breece**

Percent of map unit: 5 percent

Landform: Mountain slopes, drainageways, alluvial fans

Landform position (two-dimensional): Toeslope Ecological site: R048AY222CO - Loamy Park

Hydric soil rating: No

# Trag

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Toeslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

#### Lininger

Percent of map unit: 5 percent

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

# 50—Rock outcrop-Cathedral-Resort complex, 30 to 70 percent slopes

## **Map Unit Setting**

National map unit symbol: k6jf Elevation: 7,000 to 9,500 feet

Mean annual precipitation: 16 to 25 inches
Mean annual air temperature: 36 to 46 degrees F

Frost-free period: 25 to 100 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Rock outcrop: 45 percent

Cathedral and similar soils: 25 percent Resort and similar soils: 20 percent Minor components: 10 percent

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

#### **Description of Rock Outcrop**

# Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear, convex Across-slope shape: Linear, convex

Parent material: Igneous and metamorphic rock

#### Typical profile

R - 0 to 60 inches: unweathered bedrock

# Properties and qualities

Slope: 30 to 70 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

#### **Description of Cathedral**

## Setting

Landform: Mountain slopes, ridges

Landform position (two-dimensional): Shoulder, backslope Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex, linear Across-slope shape: Convex, linear

Parent material: Micaceous residuum weathered from igneous and metamorphic

rock

# **Typical profile**

A - 0 to 3 inches: very cobbly sandy loam
AB - 3 to 6 inches: very gravelly sandy loam
Bw - 6 to 11 inches: very gravelly sandy loam
R - 11 to 15 inches: unweathered bedrock

# **Properties and qualities**

Slope: 30 to 70 percent

Surface area covered with cobbles, stones or boulders: 3.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

#### **Description of Resort**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

# Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A1 - 1 to 6 inches: very stony sandy loam

A2 - 6 to 14 inches: extremely cobbly loamy sand

Cr - 14 to 18 inches: weathered bedrock

## Properties and qualities

Slope: 30 to 70 percent

Surface area covered with cobbles, stones or boulders: 1.0 percent Depth to restrictive feature: 10 to 20 inches to paralithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 0.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

#### **Minor Components**

#### Tolvar

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope, toeslope

Other vegetative classification: ABLA-PIEN/VAMY (subalpine fir, Engelmann's

spruce, Rocky Mountain whortleberry) (null\_5)

Hydric soil rating: No

#### Lininger

Percent of map unit: 3 percent Landform: Ridges, mountain slopes

Landform position (two-dimensional): Backslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

#### Lone rock

Percent of map unit: 2 percent

Landform: Mountain slopes, alluvial fans

Landform position (two-dimensional): Footslope Ecological site: R048AY228CO - Mountain Loam

Hydric soil rating: No

# 53—Rock outcrop-Rubble land-Cathedral complex, 40 to 100 percent slopes

#### **Map Unit Setting**

National map unit symbol: k6jj Elevation: 7,200 to 11,850 feet

Mean annual precipitation: 16 to 40 inches Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 25 to 100 days

Farmland classification: Not prime farmland

## **Map Unit Composition**

Rock outcrop: 40 percent Rubble land: 20 percent

Cathedral and similar soils: 20 percent

Minor components: 20 percent

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

# **Description of Rock Outcrop**

#### Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear, convex Across-slope shape: Linear, convex

Parent material: Igneous and metamorphic rock

## **Typical profile**

R - 0 to 60 inches: unweathered bedrock

## Properties and qualities

Slope: 40 to 100 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

#### **Description of Rubble Land**

#### Setting

Landform: Talus slopes Down-slope shape: Linear Across-slope shape: Linear

#### Typical profile

C - 0 to 60 inches: fragmental material

#### **Properties and qualities**

Slope: 40 to 60 percent

Depth to restrictive feature: 20 to 80 inches to lithic bedrock

Drainage class: Excessively drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)

Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A

Hydric soil rating: No

## **Description of Cathedral**

#### Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Upper third of mountainflank

Down-slope shape: Linear, convex Across-slope shape: Linear, convex

Parent material: Micaceous residuum weathered from igneous and metamorphic

rock

## **Typical profile**

A - 0 to 3 inches: very cobbly sandy loam
AB - 3 to 6 inches: very gravelly sandy loam
Bw - 6 to 11 inches: very gravelly sandy loam
R - 11 to 15 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 40 to 70 percent

Surface area covered with cobbles, stones or boulders: 8.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

# **Minor Components**

#### **Tolland**

Percent of map unit: 15 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Other vegetative classification: ABLA=PIEN/CAGE (subalpine fir, Engelmann's

spruce, elk sedge) (null\_1)

Hydric soil rating: No

#### Legault

Percent of map unit: 5 percent

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Other vegetative classification: PICO/JUCO (lodgepole pine, common juniper)

(null\_15)

Hydric soil rating: No

# 54—Rock outcrop-Tolland complex, 30 to 100 percent slopes

## **Map Unit Setting**

National map unit symbol: k6jk Elevation: 9,000 to 10,700 feet

Mean annual precipitation: 17 to 23 inches
Mean annual air temperature: 37 to 43 degrees F

Frost-free period: 25 to 90 days

Farmland classification: Not prime farmland

## **Map Unit Composition**

Rock outcrop: 60 percent

Tolland and similar soils: 30 percent Minor components: 10 percent

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

## **Description of Rock Outcrop**

#### Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear, convex Across-slope shape: Linear, convex

Parent material: Igneous and metamorphic rock

# **Typical profile**

R - 0 to 60 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 30 to 100 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

# **Description of Tolland**

# Setting

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Micaceous sandy colluvium derived from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 1 inches: slightly decomposed plant material Oe - 1 to 2 inches: moderately decomposed plant material

A - 2 to 5 inches: cobbly sandy loam

BE - 5 to 11 inches: very gravelly coarse sandy loam
C1 - 11 to 50 inches: extremely gravelly loamy coarse sand
C2 - 50 to 69 inches: extremely cobbly loamy coarse sand

# Properties and qualities

Slope: 30 to 80 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): High (2.00 to 6.00

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 1.6 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: F048AY918CO - Spruce-Fir Woodland

Hydric soil rating: No

#### **Minor Components**

#### Pettingell

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Lower third of mountainflank

Ecological site: R048AY237CO - Stony Loam

Hydric soil rating: No

#### **Bendemeere**

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Other vegetative classification: ABLA-PIEN/CAGE (subalpine fir, Engelmann's

spruce, elk sedge) (null\_3)

Hydric soil rating: No

# 56—Tahana-Legault-Rock outcrop complex, 30 to 70 percent slopes

# **Map Unit Setting**

National map unit symbol: k6jm Elevation: 7,400 to 9,500 feet

Mean annual precipitation: 17 to 25 inches Mean annual air temperature: 37 to 41 degrees F

Frost-free period: 25 to 75 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Tahana and similar soils: 40 percent Legault and similar soils: 30 percent

Rock outcrop: 25 percent Minor components: 5 percent

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

## **Description of Tahana**

#### Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Micaceous sandy colluvium over residuum weathered from

igneous and metamorphic rock

#### Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oa - 1 to 2 inches: moderately decomposed plant material

Bw - 2 to 8 inches: gravelly sandy loam
BC - 8 to 20 inches: very gravelly loamy sand
C - 20 to 24 inches: extremely gravelly loamy sand

Cr - 24 to 28 inches: weathered bedrock

# **Properties and qualities**

Slope: 30 to 70 percent

Surface area covered with cobbles, stones or boulders: 8.0 percent Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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 1.1 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: F048AY908CO - Mixed Conifer

Hydric soil rating: No

# **Description of Legault**

# Setting

Landform: Ridges, mountain slopes

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Micaceous sandy residuum weathered from igneous and

metamorphic rock

# **Typical profile**

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 6 inches: very gravelly loamy sand AC - 6 to 19 inches: very gravelly sand Cr - 19 to 23 inches: weathered bedrock

# Properties and qualities

Slope: 30 to 70 percent

Surface area covered with cobbles, stones or boulders: 6.0 percent Depth to restrictive feature: 8 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 2.00 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): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: F048AY912CO - Lodgepole Pine

Hydric soil rating: No

#### **Description of Rock Outcrop**

#### Setting

Landform: Ridges, mountain slopes, cliffs

Landform position (two-dimensional): Shoulder, backslope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Igneous and metamorphic rock

#### Typical profile

R - 0 to 60 inches: unweathered bedrock

#### Properties and qualities

Slope: 30 to 70 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

#### **Tolland**

Percent of map unit: 5 percent Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Hydric soil rating: No