

## Map Unit Description

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 in this report, 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, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components 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. Some minor components, however, have properties and behavior 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*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given 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.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description

### Susanville Area, Parts of Lassen and Plumas Counties, California

#### 116—Bieber cobbly loam, 2 to 9 percent slopes

##### Map Unit Setting

*National map unit symbol:* jc3t

*Elevation:* 4,020 to 5,200 feet  
*Mean annual precipitation:* 9 to 16 inches  
*Mean annual air temperature:* 47 to 52 degrees F  
*Frost-free period:* 80 to 130 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

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

### Description of Bieber

#### Setting

*Landform:* Fan remnants  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from volcanic rock

#### Typical profile

*H1 - 0 to 6 inches:* cobbly loam  
*H2 - 6 to 11 inches:* clay loam  
*H3 - 11 to 18 inches:* clay  
*H4 - 18 to 60 inches:* indurated

#### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* 12 to 20 inches to duripan  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 2.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* D  
*Ecological site:* SHALLOW STONY LOAM 12-16" (R021XE173CA)  
*Hydric soil rating:* No

### Minor Components

#### Barnard

*Percent of map unit:* 10 percent  
*Landform:* Fan remnants

*Ecological site:* STONY LOAM 9-12" (R023XF082CA)

*Hydric soil rating:* No

#### **Modoc**

*Percent of map unit:* 10 percent

*Landform:* Fan remnants

*Ecological site:* LOAMY TERRACE 12-16" (R021XE186CA)

*Hydric soil rating:* No

## **120—Blickenstaff sandy loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* jc42

*Elevation:* 4,000 to 4,300 feet

*Mean annual precipitation:* 9 to 12 inches

*Mean annual air temperature:* 50 to 52 degrees F

*Frost-free period:* 100 to 130 days

*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Blickenstaff and similar soils:* 85 percent

*Minor components:* 15 percent

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

### **Description of Blickenstaff**

#### **Setting**

*Landform:* Stream terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

#### **Typical profile**

*H1 - 0 to 15 inches:* sandy loam

*H2 - 15 to 34 inches:* gravelly sandy loam

*H3 - 34 to 60 inches:* gravelly sandy loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very low

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

*Depth to water table:* About 42 to 60 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 13.0  
*Available water storage in profile:* Low (about 5.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A  
*Hydric soil rating:* No

#### **Minor Components**

##### **Honeylake**

*Percent of map unit:* 8 percent  
*Landform:* Lake terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* SALINE-SODIC SUBIRRIGATED 6-16"  
 (R023XG058CA)  
*Hydric soil rating:* No

##### **Truckee**

*Percent of map unit:* 7 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **159—Cleghorn sandy loam, 2 to 5 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* jc66  
*Elevation:* 4,000 to 5,400 feet  
*Mean annual precipitation:* 6 to 12 inches  
*Mean annual air temperature:* 45 to 52 degrees F  
*Frost-free period:* 80 to 130 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

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

#### **Description of Cleghorn**

##### **Setting**

*Landform:* Fan remnants  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

*Parent material:* Alluvium derived from volcanic rock

### Typical profile

*H1 - 0 to 7 inches:* sandy loam

*H2 - 7 to 15 inches:* clay loam

*H3 - 15 to 19 inches:* loam

*H4 - 19 to 34 inches:* sandy loam

*H5 - 34 to 60 inches:* loam

### Properties and qualities

*Slope:* 2 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* 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

*Calcium carbonate, maximum in profile:* 9 percent

*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* C

*Ecological site:* LOAMY UPLAND 9-12" (R023XF091CA)

*Hydric soil rating:* No

### Minor Components

#### Bobert

*Percent of map unit:* 5 percent

*Landform:* Stream terraces

*Ecological site:* SALINE-SODIC LOAM 6-12" (R023XG059CA)

*Hydric soil rating:* No

#### Ragtown

*Percent of map unit:* 5 percent

*Landform:* Lake terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* SODIC TERRACE 6-9" (R023XG047CA)

*Hydric soil rating:* No

#### Ravendale

*Percent of map unit:* 5 percent

*Landform:* Basin floors

*Ecological site:* CLAY FLOODPLAIN 9-16" (R023XF092CA)

*Hydric soil rating:* No

## 164—Corral sandy loam, 5 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* jc6j  
*Elevation:* 4,400 to 5,400 feet  
*Mean annual precipitation:* 9 to 12 inches  
*Mean annual air temperature:* 46 to 50 degrees F  
*Frost-free period:* 80 to 100 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

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

### Description of Corral

#### Setting

*Landform:* Rock pediments  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Colluvium derived from tuff and/or residuum weathered from tuff

#### Typical profile

*H1 - 0 to 4 inches:* sandy loam  
*H2 - 4 to 12 inches:* sandy clay loam  
*H3 - 12 to 60 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* 12 to 20 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to 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 storage in profile:* Very low (about 1.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* LOAMY UPLAND 9-12" (R023XF091CA)  
*Hydric soil rating:* No

**Minor Components****Hunnton**

*Percent of map unit:* 3 percent  
*Landform:* Fan remnants  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* STONY LOAM 9-12" (R023XF082CA)  
*Hydric soil rating:* No

**Shinnpeak**

*Percent of map unit:* 3 percent  
*Landform:* Fan remnants  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* VERY SHALLOW STONY LOAM 9-12"  
 (R023XF087CA)  
*Hydric soil rating:* No

**Lodico**

*Percent of map unit:* 2 percent  
*Landform:* Plateaus  
*Ecological site:* SHALLOW STONY LOAM 9-12" (R023XF081CA)  
*Hydric soil rating:* No

**Chalco family**

*Percent of map unit:* 1 percent  
*Landform:* Rock pediments  
*Landform position (two-dimensional):* Backslope, summit  
*Ecological site:* SHALLOW STONY LOAM 9-12" (R023XF081CA)  
*Other vegetative classification:* GRAVELLY CLAY 10-12" P.Z.  
 (023XY093NV\_2)  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent  
*Landform:* Escarpments, knolls  
*Hydric soil rating:* No

**220—Gerlach silty clay, 2 to 9 percent slopes****Map Unit Setting**

*National map unit symbol:* jc94  
*Elevation:* 4,000 to 5,900 feet  
*Mean annual precipitation:* 9 to 16 inches  
*Mean annual air temperature:* 44 to 49 degrees F  
*Frost-free period:* 60 to 100 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Gerlach and similar soils:* 80 percent  
*Minor components:* 20 percent



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

## **Description of Gerlach**

### **Setting**

*Landform:* Alluvial flats  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from volcanic rock

### **Typical profile**

*H1 - 0 to 3 inches:* silty clay  
*H2 - 3 to 52 inches:* silty clay  
*H3 - 52 to 60 inches:* clay loam

### **Properties and qualities**

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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  
*Calcium carbonate, maximum in profile:* 3 percent  
*Gypsum, maximum in profile:* 1 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 9.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* CLAY UPLAND 9-16" (R023XF084CA)  
*Hydric soil rating:* No

## **Minor Components**

### **Cleghorn**

*Percent of map unit:* 5 percent  
*Landform:* Fan remnants  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* LOAMY UPLAND 9-12" (R023XF091CA)  
*Hydric soil rating:* No

### **Devada**

*Percent of map unit:* 5 percent

*Landform:* Plateaus  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* SHALLOW STONY LOAM 9-12" (R023XF081CA)  
*Hydric soil rating:* No

**Ravendale**

*Percent of map unit:* 4 percent  
*Landform:* Basin floors  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* CLAY FLOODPLAIN 9-16" (R023XF092CA)  
*Hydric soil rating:* No

**Longcreek**

*Percent of map unit:* 4 percent  
*Landform:* Plateaus  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* STONY LOAM 9-12" (R023XF082CA)  
*Hydric soil rating:* No

**Termo**

*Percent of map unit:* 2 percent  
*Landform:* Lake terraces  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* SODIC FLAT 9-12" (R023XF089CA)  
*Hydric soil rating:* No

**242—Horsecamp cobbly silty clay, 2 to 9 percent slopes****Map Unit Setting**

*National map unit symbol:* jcb2  
*Elevation:* 4,300 to 6,000 feet  
*Mean annual precipitation:* 9 to 16 inches  
*Mean annual air temperature:* 44 to 49 degrees F  
*Frost-free period:* 70 to 100 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

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

## Description of Horsecamp

### Setting

*Landform:* Plateaus

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Residuum weathered from volcanic rock

### Typical profile

*H1 - 0 to 2 inches:* cobbly silty clay

*H2 - 2 to 27 inches:* silty clay

*H3 - 27 to 46 inches:* silty clay

*H4 - 46 to 50 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 2 to 9 percent

*Percent of area covered with surface fragments:* 3.0 percent

*Depth to restrictive feature:* 40 to 60 inches to lithic bedrock

*Natural 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

*Calcium carbonate, maximum in profile:* 8 percent

*Gypsum, maximum in profile:* 1 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* C

*Ecological site:* CLAY UPLAND 9-16" (R023XF084CA)

*Hydric soil rating:* No

## Minor Components

### Devada

*Percent of map unit:* 4 percent

*Landform:* Plateaus

*Ecological site:* SHALLOW STONY LOAM 9-12" (R023XF081CA)

*Hydric soil rating:* No

### Ravendale

*Percent of map unit:* 3 percent

*Landform:* Basin floors

*Ecological site:* CLAY FLOODPLAIN 9-16" (R023XF092CA)

*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 2 percent

*Landform:* Plateaus

*Hydric soil rating:* No

**Brubeck**

*Percent of map unit:* 2 percent

*Landform:* Plateaus

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* CLAY UPLAND 9-16" (R023XF084CA)

*Hydric soil rating:* No

**Tunnison**

*Percent of map unit:* 2 percent

*Landform:* Plateaus

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* SHALLOW CLAY 9-16" (R023XF093CA)

*Hydric soil rating:* No

**Longcreek**

*Percent of map unit:* 2 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Ecological site:* STONY LOAM 9-12" (R023XF082CA)

*Hydric soil rating:* No

**247—Humboldt silty clay, 0 to 1 percent slopes, occasionally flooded****Map Unit Setting**

*National map unit symbol:* jcb8

*Elevation:* 4,000 to 5,300 feet

*Mean annual precipitation:* 9 to 16 inches

*Mean annual air temperature:* 46 to 52 degrees F

*Frost-free period:* 60 to 130 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Humboldt and similar soils:* 80 percent

*Minor components:* 20 percent

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

**Description of Humboldt****Setting**

*Landform:* Flood plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from mixed rocks

**Typical profile**

*H1 - 0 to 21 inches:* silty clay  
*H2 - 21 to 60 inches:* stratified silty clay loam to clay

**Properties and qualities**

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* 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:* About 18 to 36 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Available water storage in profile:* High (about 10.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3w  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

**Minor Components****Rices**

*Percent of map unit:* 5 percent  
*Landform:* Lake terraces  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Saddlerock**

*Percent of map unit:* 4 percent  
*Landform:* Flood plains  
*Hydric soil rating:* No

**Smocreek**

*Percent of map unit:* 4 percent  
*Landform:* Stream terraces  
*Ecological site:* LOAMY BOTTOM 9-16" (R023XF088CA)  
*Hydric soil rating:* No

**Truckee**

*Percent of map unit:* 4 percent  
*Landform:* Flood plains  
*Hydric soil rating:* No

**Riverwash**

*Percent of map unit:* 3 percent

*Landform:* Channels  
*Hydric soil rating:* No

## 265—Lakeview loam, warm, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* jcbv  
*Elevation:* 4,100 to 6,500 feet  
*Mean annual precipitation:* 9 to 20 inches  
*Mean annual air temperature:* 44 to 52 degrees F  
*Frost-free period:* 60 to 130 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

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

### Description of Lakeview

#### Setting

*Landform:* Flood plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from volcanic rock

#### Typical profile

*H1 - 0 to 18 inches:* loam  
*H2 - 18 to 60 inches:* clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately 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:* About 30 to 60 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 10.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 2w  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* C  
*Hydric soil rating:* No

**Minor Components****Massack**

*Percent of map unit:* 5 percent

*Landform:* Flood plains

*Hydric soil rating:* No

**Incy**

*Percent of map unit:* 5 percent

*Landform:* Dunes

*Ecological site:* GRANITIC SAND 9-12" (R026XF022CA)

*Hydric soil rating:* No

**Madeline**

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Toeslope

*Ecological site:* WARM STONY LOAM 12-16" (R021XE179CA)

*Hydric soil rating:* No

**280—Massack loam, 0 to 2 percent slopes****Map Unit Setting**

*National map unit symbol:* jccq

*Elevation:* 4,100 to 4,750 feet

*Mean annual precipitation:* 12 to 20 inches

*Mean annual air temperature:* 49 to 52 degrees F

*Frost-free period:* 80 to 130 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Massack and similar soils:* 95 percent

*Minor components:* 5 percent

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

**Description of Massack****Setting**

*Landform:* Flood plains

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from mixed

**Typical profile**

*H1 - 0 to 33 inches:* loam

*H2 - 33 to 60 inches:* stratified loamy sand to very fine sandy loam

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* High  
 (2.00 to 6.00 in/hr)  
*Depth to water table:* About 12 to 30 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 3w  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Hydric soil rating:* No

#### **Minor Components**

##### **Keddie**

*Percent of map unit:* 5 percent  
*Landform:* Flood plains  
*Hydric soil rating:* No

### **360—Searles-Orhood-Devada association, 5 to 30 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* jchk  
*Elevation:* 4,000 to 6,200 feet  
*Mean annual precipitation:* 9 to 35 inches  
*Mean annual air temperature:* 44 to 52 degrees F  
*Frost-free period:* 60 to 130 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Searles and similar soils:* 35 percent  
*Orhood and similar soils:* 30 percent  
*Devada and similar soils:* 20 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Searles**

##### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Colluvium derived from volcanic rock and/or residuum weathered from volcanic rock

##### **Typical profile**

*H1 - 0 to 13 inches:* very stony loam



*H2 - 13 to 29 inches:* very cobbly clay loam  
*H3 - 29 to 39 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 5 to 30 percent  
*Percent of area covered with surface fragments:* 15.0 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*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 storage in profile:* Low (about 3.1 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* C  
*Ecological site:* WARM STONY LOAM 12-16" (R021XE179CA)  
*Hydric soil rating:* No

#### **Description of Orhood**

##### **Setting**

*Landform:* Mountains, ridges  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Upper third of mountainflank  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear  
*Parent material:* Colluvium derived from volcanic rock and/or residuum weathered from volcanic rock

##### **Typical profile**

*H1 - 0 to 4 inches:* very stony loam  
*H2 - 4 to 9 inches:* very cobbly loam  
*H3 - 9 to 19 inches:* very cobbly clay loam  
*H4 - 19 to 29 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 5 to 30 percent  
*Percent of area covered with surface fragments:* 15.0 percent  
*Depth to restrictive feature:* 14 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*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 storage in profile:* Very low (about 1.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* STONY LOAM 12-16" (R021XE174CA)

*Hydric soil rating:* No

**Description of Devada****Setting**

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Colluvium derived from andesite and/or colluvium derived from basalt and/or residuum weathered from basalt and/or residuum weathered from andesite

**Typical profile**

*H1 - 0 to 7 inches:* very cobbly loam

*H2 - 7 to 15 inches:* gravelly clay

*H3 - 15 to 19 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 5 to 30 percent

*Percent of area covered with surface fragments:* 15.0 percent

*Depth to restrictive feature:* 12 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to 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 storage in profile:* Very low (about 1.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* SHALLOW STONY LOAM 9-12" (R023XF081CA)

*Hydric soil rating:* No

**Minor Components****Bucklake**

*Percent of map unit:* 4 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Ecological site:* STONY LOAM 9-12" (R023XF082CA)

*Hydric soil rating:* No

**Fiddler**

*Percent of map unit:* 4 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Ecological site:* STONY LOAM 12-16" (R021XE174CA)

*Hydric soil rating:* No

**Fivesprings**

*Percent of map unit:* 3 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Ecological site:* STONY LOAM 9-12" (R023XF082CA)

*Hydric soil rating:* No

**Xerolls**

*Percent of map unit:* 2 percent

*Landform:* Lakeshores

*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 2 percent

*Landform:* Mountains

*Hydric soil rating:* No

**363—Smocreek silty clay loam, 0 to 2 percent slopes****Map Unit Setting**

*National map unit symbol:* jchp

*Elevation:* 4,000 to 5,450 feet

*Mean annual precipitation:* 9 to 16 inches

*Mean annual air temperature:* 44 to 52 degrees F

*Frost-free period:* 60 to 130 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Smocreek and similar soils:* 80 percent

*Minor components:* 20 percent

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

**Description of Smocreek****Setting**

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Concave, convex

*Parent material:* Alluvium derived from volcanic rock

**Typical profile**

*H1 - 0 to 13 inches:* silty clay loam

*H2 - 13 to 19 inches:* silt loam

*H3 - 19 to 60 inches:* silty clay loam

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* 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:* About 42 to 60 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 12 percent

*Salinity, maximum in profile:* Moderately saline to strongly saline

(8.0 to 16.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 50.0

*Available water storage in profile:* Moderate (about 7.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3w

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C

*Ecological site:* LOAMY BOTTOM 9-16" (R023XF088CA)

*Hydric soil rating:* No

**Minor Components****Saddlerock**

*Percent of map unit:* 5 percent

*Landform:* Stream terraces

*Ecological site:* LOAMY BOTTOM 9-16" (R023XF088CA)

*Hydric soil rating:* No

**Truckee**

*Percent of map unit:* 5 percent

*Landform:* Flood plains

*Hydric soil rating:* No

**Cochran**

*Percent of map unit:* 4 percent

*Landform:* Lake terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* STONY LOAM 12-16" (R021XE174CA)

*Hydric soil rating:* No

**Riverwash**

*Percent of map unit:* 3 percent

*Landform:* Channels

*Hydric soil rating:* No

**Springmeyer**

*Percent of map unit:* 3 percent

*Landform:* Fan remnants, fan remnants

*Ecological site:* LOAMY UPLAND 9-12" (R023XF091CA)

*Hydric soil rating:* No

## 365—Springmeyer sandy loam, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* jchs  
*Elevation:* 4,000 to 4,600 feet  
*Mean annual precipitation:* 9 to 16 inches  
*Mean annual air temperature:* 50 to 52 degrees F  
*Frost-free period:* 100 to 130 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Springmeyer and similar soils:* 95 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Springmeyer

#### Setting

*Landform:* Fan remnants  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from mixed rocks

#### Typical profile

*H1 - 0 to 11 inches:* sandy loam  
*H2 - 11 to 25 inches:* clay loam  
*H3 - 25 to 60 inches:* stratified gravelly loamy sand to sandy clay loam

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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  
*Calcium carbonate, maximum in profile:* 1 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 7.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* LOAMY TERRACE 12-16" (R021XE186CA)

*Hydric soil rating:* No

### Minor Components

#### Mottsville

*Percent of map unit:* 5 percent

*Landform:* Fan remnants

*Ecological site:* GRANITIC FAN 12-16" (R021XE181CA)

*Hydric soil rating:* No

## 386—Truckee loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* jcw

*Elevation:* 4,000 to 4,250 feet

*Mean annual precipitation:* 9 to 12 inches

*Mean annual air temperature:* 50 to 52 degrees F

*Frost-free period:* 100 to 130 days

*Farmland classification:* Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

### Map Unit Composition

*Truckee and similar soils:* 90 percent

*Minor components:* 10 percent

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

### Description of Truckee

#### Setting

*Landform:* Flood plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from mixed rocks

#### Typical profile

*H1 - 0 to 17 inches:* loam

*H2 - 17 to 69 inches:* stratified sandy loam to silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly 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:* About 30 to 60 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Salinity, maximum in profile:* Very slightly saline to slightly saline  
(2.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 5.0

*Available water storage in profile:* High (about 9.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 2w

*Land capability classification (nonirrigated):* 6w

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

#### **Minor Components**

##### **Modoc**

*Percent of map unit:* 10 percent

*Landform:* Fan remnants

*Ecological site:* LOAMY TERRACE 12-16" (R021XE186CA)

*Hydric soil rating:* No

### **390—Tunnison-Devada association, 2 to 9 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* jck1

*Elevation:* 5,000 to 5,600 feet

*Mean annual precipitation:* 12 to 16 inches

*Mean annual air temperature:* 44 to 47 degrees F

*Frost-free period:* 80 to 100 days

*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Tunnison and similar soils:* 50 percent

*Devada and similar soils:* 45 percent

*Minor components:* 5 percent

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

#### **Description of Tunnison**

##### **Setting**

*Landform:* Plateaus

*Landform position (two-dimensional):* Summit

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Colluvium derived from volcanic rock and/or residuum weathered from volcanic rock

##### **Typical profile**

*H1 - 0 to 1 inches:* very stony clay

*H2 - 1 to 31 inches:* clay

*H3 - 31 to 38 inches:* weathered bedrock

*H4 - 38 to 48 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 2 to 9 percent

*Percent of area covered with surface fragments:* 20.0 percent

*Depth to restrictive feature:* 20 to 35 inches to paralithic bedrock;  
30 to 40 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very  
low to 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 storage in profile:* Low (about 4.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* SHALLOW CLAY 9-16" (R023XF093CA)

*Hydric soil rating:* No

**Description of Devada****Setting**

*Landform:* Plateaus

*Landform position (two-dimensional):* Shoulder

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Colluvium derived from andesite and/or colluvium  
derived from basalt and/or residuum weathered from basalt  
and/or residuum weathered from andesite

**Typical profile**

*H1 - 0 to 7 inches:* extremely cobbly loam

*H2 - 7 to 15 inches:* gravelly clay

*H3 - 15 to 25 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 2 to 9 percent

*Percent of area covered with surface fragments:* 30.0 percent

*Depth to restrictive feature:* 12 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very  
low to 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 storage in profile:* Very low (about 1.6 inches)



**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* D

*Ecological site:* SHALLOW STONY LOAM 12-16" (R021XE173CA)

*Hydric soil rating:* No

**Minor Components****Orhood**

*Percent of map unit:* 5 percent

*Landform:* Mountains, ridges

*Landform position (two-dimensional):* Backslope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Ecological site:* STONY LOAM 12-16" (R021XE174CA)

*Hydric soil rating:* No

**Data Source Information**

Soil Survey Area: Susanville Area, Parts of Lassen and Plumas Counties,  
California

Survey Area Data: Version 10, Sep 16, 2019