

Weld County, Colorado, Northern Part

10—Avar-Manzanola complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 35yr
Elevation: 4,400 to 5,600 feet
Mean annual precipitation: 11 to 15 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 130 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Avar

Setting

Landform: Swales
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Typical profile

H1 - 0 to 3 inches: fine sandy loam
H2 - 3 to 8 inches: clay loam
H3 - 8 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 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: 15 percent
Salinity, maximum in profile: Slightly saline to strongly saline (4.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 250.0
Available water storage in profile: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C

Ecological site: Salt Flat (R067XY033CO)

Hydric soil rating: No

Description of Manzanola

Setting

Landform: Swales

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous clayey alluvium

Typical profile

H1 - 0 to 3 inches: clay loam

H2 - 3 to 18 inches: clay

H3 - 18 to 48 inches: clay

H4 - 48 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 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: 5 percent

Gypsum, maximum in profile: 3 percent

Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 15.0

Available water storage in profile: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: Clayey Plains (R067BY042CO)

Hydric soil rating: No

Minor Components

Heldt

Percent of map unit: 8 percent

Hydric soil rating: No

Mollic halaquepts

Percent of map unit: 7 percent

Landform: Swales

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 11, Sep 22, 2016

Weld County, Colorado, Northern Part

55—Renohill fine sandy loam, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 360b

Elevation: 3,600 to 6,200 feet

Mean annual precipitation: 11 to 16 inches

Mean annual air temperature: 46 to 48 degrees F

Frost-free period: 100 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Renohill and similar soils: 85 percent

Minor components: 15 percent

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

Description of Renohill

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous, clayey loamy residuum weathered from shale

Typical profile

H1 - 0 to 5 inches: fine sandy loam

H2 - 5 to 18 inches: clay

H3 - 18 to 32 inches: clay loam

H4 - 32 to 36 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 6 percent

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

Natural drainage class: Well drained

Runoff class: Low

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: 15 percent

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

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Minor Components

Shingle

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

Midway

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

Other soils

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

Ulm

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

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 11, Sep 22, 2016

Weld County, Colorado, Northern Part

75—Wages fine sandy loam, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 3611

Elevation: 3,900 to 5,600 feet

Mean annual precipitation: 15 to 19 inches

Mean annual air temperature: 46 to 52 degrees F

Frost-free period: 135 to 155 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Wages and similar soils: 85 percent

Minor components: 15 percent

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

Description of Wages

Setting

Landform: Alluvial fans, plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium

Typical profile

H1 - 0 to 4 inches: fine sandy loam

H2 - 4 to 14 inches: sandy clay loam

H3 - 14 to 60 inches: loam

H4 - 60 to 64 inches: sandy loam, gravelly sandy loam

H4 - 60 to 64 inches:

Properties and qualities

Slope: 0 to 6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

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

Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

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

Available water storage in profile: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Minor Components

Platner

Percent of map unit: 9 percent
Hydric soil rating: No

Kim

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

Mitchell

Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 11, Sep 22, 2016