

Weld County, Colorado, Northern Part

4—Ascalon fine sandy loam, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2tlp5

Elevation: 4,550 to 6,050 feet

Mean annual precipitation: 12 to 17 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 135 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Ascalon and similar soils: 85 percent

Minor components: 15 percent

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

Description of Ascalon

Setting

Landform: Interfluves

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Wind-reworked alluvium and/or calcareous sandy eolian deposits

Typical profile

Ap - 0 to 7 inches: fine sandy loam

Bt1 - 7 to 13 inches: sandy clay loam

Bt2 - 13 to 18 inches: sandy clay loam

Bk - 18 to 48 inches: sandy loam

C - 48 to 80 inches: sandy loam

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 (0.60 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Salinity, maximum in profile: Nonsaline (0.1 to 1.9 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: Sandy Plains (R067BY024CO)
Hydric soil rating: No

Minor Components

Oldest

Percent of map unit: 8 percent
Landform: Interfluves
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO)
Hydric soil rating: No

Otero

Percent of map unit: 7 percent
Landform: Interfluves
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 12, Oct 10, 2017

Weld County, Colorado, Northern Part

46—Otero sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 3600

Elevation: 4,500 to 5,500 feet

Mean annual precipitation: 12 to 15 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 130 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Otero and similar soils: 85 percent

Minor components: 15 percent

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

Description of Otero

Setting

Landform: Alluvial fans, plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium

Typical profile

H1 - 0 to 5 inches: sandy loam

H2 - 5 to 60 inches: sandy loam, fine sandy loam

H2 - 5 to 60 inches:

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very low

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

Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

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

Available water storage in profile: Very high (about 14.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: Sandy Plains (R067BY024CO)

Hydric soil rating: No

Minor Components

Stoneham

Percent of map unit: 5 percent

Hydric soil rating: No

Bushman

Percent of map unit: 4 percent

Hydric soil rating: No

Kim

Percent of map unit: 3 percent

Hydric soil rating: No

Mitchell

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 12, Oct 10, 2017

Weld County, Colorado, Northern Part

60—Shingle clay loam, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 360j

Elevation: 3,600 to 5,500 feet

Mean annual precipitation: 10 to 13 inches

Mean annual air temperature: 46 to 48 degrees F

Frost-free period: 110 to 140 days

Farmland classification: Not prime farmland

Map Unit Composition

Shingle and similar soils: 80 percent

Minor components: 20 percent

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

Description of Shingle

Setting

Landform: Plains, breaks, ridges

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous, clayey loamy residuum weathered from shale

Typical profile

H1 - 0 to 4 inches: clay loam

H2 - 4 to 11 inches: clay loam

H3 - 11 to 15 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 9 percent

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

Natural drainage class: Well drained

Runoff class: Medium

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: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: Shaly Plains (R067BY045CO)

Hydric soil rating: No

Minor Components

Renohill

Percent of map unit: 10 percent

Hydric soil rating: No

Thedalund

Percent of map unit: 5 percent

Hydric soil rating: No

Keota

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 12, Oct 10, 2017