Weld County, Colorado, Southern Part

50—Otero sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 362z
Elevation: 4,700 to 5,250 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: Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

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: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits and/or mixed outwash

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 1 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: Moderate (about 7.7 inches)

Interpretive groups

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

Minor Components

Haverson

Percent of map unit: 8 percent
Hydric soil rating: No

Kim

Percent of map unit: 7 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 15, Sep 22, 2016

Weld County, Colorado, Southern Part

70—Valent sand, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2tczf
Elevation: 3,050 to 5,150 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 130 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Valent

Setting

Landform: Dunes, hills
Landform position (two-dimensional): Shoulder, backslope, summit, footslope
Landform position (three-dimensional): Crest, side slope, head slope, nose slope
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Noncalcareous eolian sands

Typical profile

A - 0 to 5 inches: sand
AC - 5 to 12 inches: sand
C1 - 12 to 30 inches: sand
C2 - 30 to 80 inches: sand

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 39.96 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 (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: Deep Sand (R067BY015CO), Sands (North) (PE 16-20) (R072XA021KS)
Hydric soil rating: No

Minor Components

Dailey
Percent of map unit: 10 percent
Landform: Interdunes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Deep Sand (R067BY015CO), Sands (North) (PE 16-20) (R072XA021KS)
Hydric soil rating: No

Vona
Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope, backslope, shoulder
Landform position (three-dimensional): Side slope, head slope, nose slope, base slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO), Sandy (North) Draft (April 2010) (PE 16-20) (R072XA022KS)
Hydric soil rating: No

Haxtun
Percent of map unit: 5 percent
Landform: Interdunes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Sandy Plains (R067BY024CO), Sandy (North) Draft (April 2010) (PE 16-20) (R072XA022KS)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 15, Sep 22, 2016