

Weld County, Colorado, Southern Part

69—Valent sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tczd

Elevation: 3,850 to 5,210 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: Farmland of local importance

Map Unit Composition

Valent and similar soils: 85 percent

Minor components: 15 percent

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

Description of Valent

Setting

Landform: Interdunes

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

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: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 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): 4s

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Ecological site: Deep sand (R067BY015CO)

Minor Components

Dailey

Percent of map unit: 5 percent

Landform: Interdunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: Deep sand (R067BY015CO)

Julesburg

Percent of map unit: 5 percent

Landform: Interdunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Sandy plains (R067BY024CO)

Vona

Percent of map unit: 5 percent

Landform: Interdunes

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: Sandy plains (R067BY024CO)

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 13, Sep 23, 2014

Weld County, Colorado, Southern Part

72—Vona loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 363r
Elevation: 4,600 to 5,200 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Farmland of local importance

Map Unit Composition

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

Description of Vona

Setting

Landform: Terraces, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy sand
H2 - 6 to 28 inches: fine sandy loam
H3 - 28 to 60 inches: sandy loam

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): High (1.98 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: 15 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water storage in profile: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: Sandy plains (R067BY024CO)

Minor Components

Remmit

Percent of map unit: 10 percent

Valent

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 13, Sep 23, 2014