

Weld County, Colorado, Southern Part

73—Vona loamy sand, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 363s

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: Not prime farmland

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: 3 to 5 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: 8 percent

Valent

Percent of map unit: 7 percent

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

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

Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
70—Valent sand, 3 to 9 percent slopes		Favorable	Normal	Unfavorable		
Valent	Deep Sand; Sands (north) (pe 16-20)	3,000	2,000	1,200	Sand bluestem	25
					Prairie sandreed	15
					Switchgrass	10
					Sand dropseed	10
					Blue grama	10
					Yucca	5
					Little bluestem	5
					Sedge	5
					Needleandthread	5
					Plains pricklypear	5
					Sand sagebrush	5

Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
73—Vona loamy sand, 3 to 5 percent slopes		Favorable	Normal	Unfavorable		
Vona	Sandy Plains	2,000	1,700	1,200	Prairie sandreed	20
					Switchgrass	10
					Sand bluestem	10
					Sand sagebrush	5
					Sideoats grama	5
					Little bluestem	5
					Needleandthread	5
					Western wheatgrass	5
					Blue grama	—