

Cheyenne County, Colorado

51—Vona loamy sand, warm, 3 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2t515

Elevation: 3,420 to 5,580 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 50 to 54 degrees F

Frost-free period: 130 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Vona, warm, and similar soils: 85 percent

Minor components: 15 percent

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

Description of Vona, Warm

Setting

Landform: Sand sheets

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian sands

Typical profile

Ap - 0 to 7 inches: loamy sand

Bt - 7 to 16 inches: sandy loam

Bk1 - 16 to 25 inches: sandy loam

Bk2 - 25 to 79 inches: loamy sand

Properties and qualities

Slope: 3 to 6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 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 to very slightly saline (0.5
to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 2.0

Available water storage in profile: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A
Ecological site: Sandy Plains (R067BY024CO)
Forage suitability group: Loamy, Dry (G067BW019CO)
Hydric soil rating: No

Minor Components

Olnest, warm

Percent of map unit: 5 percent
Landform: Hillslopes
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: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Plains (R067BY024CO)
Other vegetative classification: SANDY PLAINS (067XY024CO_1)
Hydric soil rating: No

Valent, warm

Percent of map unit: 5 percent
Landform: Sand sheets
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Deep Sand (R067BY015CO)
Other vegetative classification: Deep Sands #15 (067XY015CO_3)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cheyenne County, Colorado
Survey Area Data: Version 20, Sep 10, 2018