

Map Unit Description

Weld County, Colorado, Southern Part

70 Valent sand, 3 to 9 percent slopes

Setting

Elevation: 4650 to 5100 feet
Mean annual precipitation: 13 to 19 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 130 to 180 days

Composition

Valent and similar soils: 95 percent
Minor components: 5 percent

Description of Valent

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits

Properties and Qualities

Slope: 3 to 9 percent
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Very low (about 2.6 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 6e
Ecological site: Deep Sand (R067BY015CO)

Typical Profile

0 to 8 inches: fine sand
8 to 60 inches: sand

Minor Components

Osgood

Percent of map unit: 5 percent

Map Unit Description

Weld County, Colorado, Southern Part

74 Vona loamy sand, 5 to 9 percent slopes

Setting

Elevation: 4600 to 5200 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 130 to 160 days

Composition

Vona and similar soils: 85 percent
Minor components: 15 percent

Description of Vona

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits

Properties and Qualities

Slope: 5 to 9 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 6.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.5 inches)

Interpretive Groups

Land capability classification (irrigated): 6e
Land capability (non irrigated): 6e
Ecological site: Sandy Plains (R067BY024CO)

Typical Profile

0 to 6 inches: loamy sand
6 to 28 inches: fine sandy loam
28 to 60 inches: sandy loam

Minor Components

Valent

Percent of map unit: 10 percent

Remmit

Percent of map unit: 5 percent

Map Unit Description

Weld County, Colorado, Northern Part

49 Paoli fine sandy loam, 0 to 6 percent slopes

Setting

Elevation: 3500 to 6500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 150 days

Composition

Paoli and similar soils: 90 percent
Minor components: 10 percent

Description of Paoli

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Properties and Qualities

Slope: 0 to 6 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.1 inches)

Interpretive Groups

Land capability classification (irrigated): 3e
Land capability (non irrigated): 3e
Ecological site: Sandy Plains (R067BY024CO)

Typical Profile

0 to 15 inches: fine sandy loam
15 to 45 inches: sandy loam
45 to 60 inches: sandy loam

Minor Components

Haverson

Percent of map unit: 8 percent

Fluvaquentic haplustolls

Percent of map unit: 2 percent
Landform: Terraces