

Map Unit Description

Weld County, Colorado, Southern Part

47 Olney fine sandy loam, 1 to 3 percent slopes

Setting

Elevation: 4600 to 5200 feet
Mean annual precipitation: 11 to 15 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 125 to 175 days

Composition

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

Description of Olney

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed deposit outwash

Properties and Qualities

Slope: 1 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 2.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 7.0 inches)

Interpretive Groups

Land capability classification (irrigated): 3e
Land capability (non irrigated): 4c
Ecological site: Sandy Plains (R067BY024CO)

Typical Profile

0 to 10 inches: fine sandy loam
10 to 20 inches: sandy clay loam
20 to 25 inches: sandy clay loam
25 to 60 inches: fine sandy loam

Minor Components

Zigweid

Percent of map unit: 10 percent

Vona

Percent of map unit: 5 percent

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

73 Vona loamy sand, 3 to 5 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: Terraces, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Properties and Qualities

Slope: 3 to 5 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): 3e
Land capability (non irrigated): 4e
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

Remmit

Percent of map unit: 8 percent

Valent

Percent of map unit: 7 percent