

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

Rangeland Productivity and Plant Composition

Weld County, Colorado, Southern Part

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/Ac	Lb/Ac	Lb/Ac	Pct	
47:						
Olney	Sandy Plains	1,500	1,100	600	Sideoats grama	20
					Sand dropseed	10
					Thickspike wheatgrass	10
					Prairie sandreed	5

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

Rangeland Productivity and Plant Composition

Weld County, Colorado, Southern Part

Map symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/Ac	Lb/Ac	Lb/Ac	Pct	
74:						
Vona	Sandy Plains	2,000	1,700	1,200	Prairie sandreed	20
					Sand bluestem	10
					Switchgrass	10
					Little bluestem	5
					Needleandthread	5
					Sand sagebrush	5
					Sideoats grama	5
					Western wheatgrass	5