

## Weld County, Colorado, Southern Part

### 47—Olney fine sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*Elevation:* 4,600 to 5,200 feet  
*Mean annual precipitation:* 11 to 15 inches  
*Mean annual air temperature:* 46 to 54 degrees F  
*Frost-free period:* 125 to 175 days

#### Map Unit 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  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water*  
*(Ksat):* Moderately high to high (0.57 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Available water capacity:* Moderate (about 7.0 inches)

##### Interpretive groups

*Farmland classification:* Prime farmland if irrigated and the product of  
I (soil erodibility) x C (climate factor) does not exceed 60  
*Land capability classification (irrigated):* 3e  
*Land capability (nonirrigated):* 4c  
*Hydrologic Soil Group:* B  
*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*

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 12, Jan 3, 2014

## Weld County, Colorado, Southern Part

### 52—Otero sandy loam, 3 to 5 percent slopes

#### Map Unit Setting

*Elevation:* 4,700 to 5,250 feet  
*Mean annual precipitation:* 12 to 15 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 130 to 180 days

#### Map Unit Composition

*Otero and similar soils:* 85 percent  
*Minor components:* 15 percent

#### Description of Otero

##### Setting

*Landform:* Plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Eolian deposits and/or mixed outwash

##### Properties and qualities

*Slope:* 3 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water*  
*(Ksat):* Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 4.0 mmhos/  
cm)  
*Available water capacity:* Moderate (about 7.7 inches)

##### Interpretive groups

*Farmland classification:* Farmland of statewide importance  
*Land capability classification (irrigated):* 3e  
*Land capability (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Sandy Plains (R067BY024CO)

##### Typical profile

*0 to 12 inches:* Sandy loam  
*12 to 60 inches:* Fine sandy loam

#### Minor Components

##### Kim

*Percent of map unit:* 12 percent

**Vona**

*Percent of map unit: 3 percent*

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 12, Jan 3, 2014