

## Weld County, Colorado, Southern Part

### 51—Otero sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3630

*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

*Farmland classification:* Prime farmland if irrigated and the product of I  
(soil erodibility) x C (climate factor) does not exceed 60

#### Map Unit Composition

*Otero and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### Description of Otero

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits and/or mixed outwash

##### Typical profile

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*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 in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0  
mmhos/cm)

*Available water storage in profile:* Moderate (about 7.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Plains (R067BY024CO)

*Hydric soil rating:* No

### **Minor Components**

#### **Kim**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### **Vona**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

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

#### Map Unit Setting

*National map unit symbol:* 362v

*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

*Farmland classification:* Prime farmland if irrigated and the product of I  
(soil erodibility) x C (climate factor) does not exceed 60

#### Map Unit Composition

*Olney and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### Description of Olney

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed deposit outwash

##### Typical profile

*H1 - 0 to 10 inches:* fine sandy loam

*H2 - 10 to 20 inches:* sandy clay loam

*H3 - 20 to 25 inches:* sandy clay loam

*H4 - 25 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*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 in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to  
2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* Sandy Plains (R067BY024CO)

*Hydric soil rating:* No

#### **Minor Components**

##### **Zigweid**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

##### **Vona**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

### **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015