

## 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

##### 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

*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 (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* 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 classification (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* Sandy Plains (R067BY024CO)

#### 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