

## 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 11, Aug 27, 2009

## Weld County, Colorado, Southern Part

### 82—Wiley-Colby complex, 1 to 3 percent slopes

#### Map Unit Setting

*Elevation:* 4,850 to 5,000 feet  
*Mean annual precipitation:* 12 to 16 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 135 to 170 days

#### Map Unit Composition

*Wiley and similar soils:* 60 percent  
*Colby and similar soils:* 30 percent  
*Minor components:* 10 percent

#### Description of Wiley

##### Setting

*Landform:* Plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Calcareous eolian deposits

##### 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 (0.60 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:* High (about 11.7 inches)

##### Interpretive groups

*Farmland classification:* Prime farmland if irrigated  
*Land capability classification (irrigated):* 2e  
*Land capability (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Loamy Plains (R067BY002CO)

##### Typical profile

*0 to 11 inches:* Silt loam  
*11 to 60 inches:* Silty clay loam  
*60 to 64 inches:* Silty clay loam

#### Description of Colby

##### Setting

*Landform:* Plains  
*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Calcareous eolian deposits

**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

*Available water capacity:* High (about 10.6 inches)

**Interpretive groups**

*Farmland classification:* Prime farmland if irrigated

*Land capability classification (irrigated):* 3e

*Land capability (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* Loamy Plains (R067BY002CO)

**Typical profile**

*0 to 7 inches:* Loam

*7 to 60 inches:* Silt loam

**Minor Components**

**Heldt**

*Percent of map unit:* 4 percent

**Weld**

*Percent of map unit:* 4 percent

**Keith**

*Percent of map unit:* 2 percent

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 11, Aug 27, 2009