

## 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

##### Typical profile

*H1 - 0 to 28 inches:* silt loam

*H2 - 28 to 152 inches:* silty clay loam

*H3 - 152 to 163 inches:* silty clay 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 (0.60 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

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

*Available water storage in profile:* High (about 11.7 inches)

##### Interpretive groups

*Farmland classification:* Prime farmland if irrigated

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* Loamy Plains (R067BY002CO)

#### Description of Colby

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

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

**Typical profile**

*H1 - 0 to 18 inches:* loam  
*H2 - 18 to 152 inches:* silt 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  
*Available water storage in profile:* High (about 10.6 inches)

**Interpretive groups**

*Farmland classification:* Prime farmland if irrigated  
*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Loamy Plains (R067BY002CO)

**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 12, Jan 3, 2014