

## Weld County, Colorado, Southern Part

### 79—Weld loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 363z

*Elevation:* 4,850 to 5,000 feet

*Mean annual precipitation:* 13 to 17 inches

*Mean annual air temperature:* 46 to 55 degrees F

*Frost-free period:* 100 to 155 days

*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Weld and similar soils:* 80 percent

*Minor components:* 20 percent

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

#### Description of Weld

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits

##### Typical profile

*H1 - 0 to 8 inches:* loam

*H2 - 8 to 15 inches:* clay

*H3 - 15 to 60 inches:* silt loam

*H4 - 60 to 64 inches:* silt 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 low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 6 percent

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

*Available water storage in profile:* High (about 10.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C

*Ecological site:* Loamy Plains (R067BY002CO)

### **Minor Components**

#### **Keith**

*Percent of map unit: 7 percent*

#### **Wiley**

*Percent of map unit: 7 percent*

#### **Adena**

*Percent of map unit: 6 percent*

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

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

#### Map Unit Setting

*National map unit symbol:* 3643

*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

*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Wiley and similar soils:* 60 percent

*Colby and similar soils:* 30 percent

*Minor components:* 10 percent

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

#### Description of Wiley

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Calcareous eolian deposits

##### Typical profile

*H1 - 0 to 11 inches:* silt loam

*H2 - 11 to 60 inches:* silty clay loam

*H3 - 60 to 64 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

*Runoff class:* Low

*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 to very slightly saline (0.0 to 2.0 mmhos/cm)

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

##### Interpretive groups

*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 7 inches:* loam  
*H2 - 7 to 60 inches:* silt 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  
*Available water storage in profile:* High (about 10.6 inches)

### Interpretive groups

*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 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

### 83—Wiley-Colby complex, 3 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3644

*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

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Wiley and similar soils:* 55 percent

*Colby and similar soils:* 30 percent

*Minor components:* 15 percent

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

#### Description of Wiley

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Calcareous eolian deposits

##### Typical profile

*H1 - 0 to 11 inches:* silt loam

*H2 - 11 to 60 inches:* silty clay loam

*H3 - 60 to 64 inches:* silty clay loam

##### Properties and qualities

*Slope:* 3 to 5 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 (0.60 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 to very slightly saline (0.0 to 2.0 mmhos/cm)

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

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*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 7 inches:* loam

*H2 - 7 to 60 inches:* silt loam

### Properties and qualities

*Slope:* 3 to 5 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

*Available water storage in profile:* High (about 10.6 inches)

### Interpretive groups

*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:* 9 percent

### Weld

*Percent of map unit:* 6 percent

## Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015