

Weld County, Colorado, Southern Part

81—Wiley-Colby complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 3642

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: 0 to 1 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): 1

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Ecological site: Loamy Plains (R067BY002CO)

Hydric soil rating: No

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: 0 to 1 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): 4c

Hydrologic Soil Group: B

Ecological site: Loamy Plains (R067BY002CO)

Hydric soil rating: No

Minor Components

Keith

Percent of map unit: 6 percent

Hydric soil rating: No

Weld

Percent of map unit: 4 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 17, Sep 10, 2018