

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

47—Olney fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 362v

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

Farmland classification: Prime farmland if irrigated and the product of I
(soil erodibility) x C (climate factor) does not exceed 60

Map Unit Composition

Olney and similar soils: 85 percent

Minor components: 15 percent

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

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

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

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

Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

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 14, Sep 22, 2015