

Cheyenne County, Colorado

39—Satanta-Colby complex, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 354v
Elevation: 3,000 to 6,500 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 130 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Satanta and similar soils: 50 percent
Colby and similar soils: 20 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Satanta

Setting

Landform: Paleoterraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 8 inches: loam
Bt - 8 to 16 inches: clay loam
Bk - 16 to 60 inches: 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: 10 percent
Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: Loamy plains (R067BY002CO)

Description of Colby

Setting

Landform: Hills

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loess

Typical profile

A - 0 to 3 inches: silt loam

C - 3 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 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Ecological site: Loamy plains (R067BY002CO)

Minor Components

Manter

Percent of map unit: 15 percent

Sampson

Percent of map unit: 15 percent

Data Source Information

Soil Survey Area: Cheyenne County, Colorado

Survey Area Data: Version 13, Dec 23, 2013