

## 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