Logan County, Colorado

98—Rosebud-Escabosa-Iliff complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 35f4
Elevation: 3,600 to 4,100 feet
Mean annual precipitation: 17 to 19 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 120 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Rosebud and similar soils: 45 percent
Escabosa and similar soils: 30 percent
Iliff and similar soils: 20 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rosebud

Setting

Landform: Cuestas
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium and/or eolian deposits over cemented calcareous sandstone

Typical profile

H1 - 0 to 5 inches: loam
H2 - 5 to 18 inches: loam
H3 - 18 to 33 inches: loam
H4 - 33 to 37 inches: weathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
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: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 3c

Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C
Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Description of Escabosa

Setting

Landform: Ridges, flats
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium and/or calcareous loamy eolian deposits over cemented calcareous sandstone

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 32 inches: loam
H3 - 32 to 36 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
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: 40 percent
Available water storage in profile: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 3c
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C
Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Description of Iliff

Setting

Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous silty eolian deposits over calcareous sandstone

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 22 inches: silty clay loam
H3 - 22 to 34 inches: silt loam
H4 - 34 to 38 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
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: 10 percent
Available water storage in profile: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Minor Components

Canyon

Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Logan County, Colorado
Survey Area Data: Version 13, Sep 10, 2018