Weld County, Colorado, Northern Part

27—Epping silt loam, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 35zb
Elevation: 3,600 to 5,500 feet
Mean annual precipitation: 12 to 17 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 120 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Epping and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Epping

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy residuum weathered from siltstone

Typical profile

H1 - 0 to 3 inches: silt loam
H2 - 3 to 17 inches: silt loam
H3 - 17 to 20 inches: weathered bedrock

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
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
Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: Shallow Siltstone (R067BY039CO)
Hydric soil rating: No

Minor Components

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

Thedalund
Percent of map unit: 4 percent
Hydric soil rating: No

Mitchell
Percent of map unit: 3 percent
Hydric soil rating: No

Kim
Percent of map unit: 3 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 13, Sep 10, 2018

Weld County, Colorado, Northern Part

40—Nunn loam, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2tlpt
Elevation: 4,500 to 6,200 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 135 to 160 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Nunn and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nunn

Setting

Landform: Terraces, alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Pleistocene aged alluvium and/or eolian deposits

Typical profile

Ap - 0 to 6 inches: loam
Bt1 - 6 to 10 inches: clay loam
Bt2 - 10 to 26 inches: clay loam
Btk - 26 to 31 inches: clay loam
Bk - 31 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
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: 5 percent
Salinity, maximum in profile: Nonsaline (0.1 to 1.0 mmhos/cm)
Available water storage in profile: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C

Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Minor Components

Manzanst

Percent of map unit: 8 percent
Landform: Alluvial fans, terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Clayey Plains (R067BY042CO)
Hydric soil rating: No

Avar

Percent of map unit: 7 percent
Landform: Swales on terraces, swales on terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: Salt Flat (R067BY033CO)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 13, Sep 10, 2018

Weld County, Colorado, Northern Part

66—Thedalund-Keota loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 360q
Elevation: 3,500 to 6,500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Thedalund and similar soils: 45 percent
Keota and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Thedalund

Setting

Landform: Alluvial fans, plains, ridges
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy residuum weathered from sandstone and shale and/or residuum weathered from siltstone

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 25 inches: loam
H3 - 25 to 29 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 high (0.06 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 moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C

Ecological site: Loamy Plains (R067BY002CO)
Hydric soil rating: No

Description of Keota

Setting

Landform: Plains, ridges, alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy residuum weathered from siltstone

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 35 inches: silt loam
H3 - 35 to 39 inches: unweathered 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: 10 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): 4s
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: Siltstone Plains (R067BY009CO)
Hydric soil rating: No

Minor Components

Epping

Percent of map unit: 10 percent
Hydric soil rating: No

Shingle

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

Mitchell

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

Kim

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 13, Sep 10, 2018

Report—Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition–Weld County, Colorado, Northern Part								
Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition		
		Favorable year	Normal year	Unfavorable year			Rangeland	Forest understory
		Lb/ac	*Lb/ac*	*Lb/ac*			*Pct dry wt*	*Pct dry wt*
27—Epping silt loam, 0 to 9 percent slopes								
Epping	Shallow Siltstone (R067BY039CO)	900	800	700	needleandthread	15		
					threadleaf sedge	15		
					little bluestem	10		
					sideoats grama	10		
					other shrubs	5		
					other perennial forbs	5		
					other perennial grasses	5		
					prairie sandreed	5		
					western wheatgrass	5		
					blue grama			
40—Nunn loam, 0 to 6 percent slopes								
Nunn	Loamy Plains (R067BY002CO)	1,800	1,300	600	western wheatgrass	40		
					blue grama	30		
					green needlegrass	20		
					alkali sacaton			
					fourwing saltbush			
					winterfat			

Rangeland and Forest Vegetation Classification, Productivity, and Plant Composition–Weld County, Colorado, Northern Part								
Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition		
		Favorable year	Normal year	Unfavorable year			Rangeland	Forest understory
		Lb/ac	*Lb/ac*	*Lb/ac*			*Pct dry wt*	*Pct dry wt*
66—Thedalund-Keota loams, 0 to 3 percent slopes								
Thedalund	Loamy Plains (R067BY002CO)	1,600	1,100	800	sideoats grama	10		
					western wheatgrass	10		
					bottlebrush squirreltail	5		
					Fendler threeawn	5		
					needleandthread	5		
					fourwing saltbush	3		
					sand dropseed	2		
					blue grama			
Keota	Siltstone Plains (R067BY009CO)	1,800	1,200	300	western wheatgrass	12		
					fourwing saltbush	5		
					green needlegrass	4		
					winterfat	3		
					sideoats grama	1		
					blue grama			

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 13, Sep 10, 2018