

Weld County, Colorado, Northern Part

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

Map Unit Setting

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

Map Unit Composition

Thedalund and similar soils: 45 percent
Keota and similar soils: 30 percent
Minor components: 25 percent

Description of Thedalund

Setting

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
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 content: 15 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 8.0 mmhos/cm)
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability classification (irrigated): 4s
Land capability (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: Loamy Plains (R067BY002CO)

Typical profile

0 to 3 inches: Loam
3 to 25 inches: Loam
25 to 29 inches: Weathered bedrock

Description of Keota

Setting

Landform: Alluvial fans, plains, ridges

Associated Wells:

Elway State LD01-74-1AHN, 74HN,
75-1AHN, 75-1BHN, 75HN, 76-1BHN

McGaffrey State LD12-74-1AHN,
74HN, 75-1AHN, 75-1BHN, 75HN,
76-1BHN

Morton State LD01-78-1AHN, 78HN,
79-1AHN, 79-1BHN, 79HN

Griffith State LD12-71-1AHN, 71HN

Nalen State LD12-78-1BHN, 76-1AHN,
76HN, 77-1AHN, 77-1BHN, 77HN

Atwater State LD01-76-1AHN, 76HN,
77-1AHN, 77-1BHN, 77HN, 78-1BHN

Smith State LD12-72-1AHN, 72HN,
73-1AHN, 73-1BHN, 73HN, 74-1BHN

Mecklenburg State LD01-72-1AHN, 72HN,
73-1AHN, 73-1BHN, 73HN, 74-1BHN

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
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 content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability classification (irrigated): 4s
Land capability (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: Siltstone Plains (R067BY009CO)

Typical profile

0 to 4 inches: Loam
4 to 35 inches: Silt loam
35 to 39 inches: Unweathered bedrock

Minor Components

Epping

Percent of map unit: 10 percent

Shingle

Percent of map unit: 5 percent

Mitchell

Percent of map unit: 5 percent

Kim

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 8, Apr 30, 2009

Weld County, Colorado, Northern Part

Associated Wells:

31—Kim-Mitchell complex, 0 to 6 percent slopes

Map Unit Setting

Elevation: 3,500 to 6,500 feet
Mean annual precipitation: 11 to 17 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 120 to 160 days

Map Unit Composition

Kim and similar soils: 45 percent
Mitchell and similar soils: 40 percent
Minor components: 15 percent

Description of Kim

Setting

Landform: Plains, alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/
cm)
Available water capacity: High (about 9.7 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability classification (irrigated): 4e
Land capability (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: Loamy Plains (R067BY002CO)

Typical profile

0 to 3 inches: Loam
3 to 7 inches: Clay loam
7 to 60 inches: Loam

Description of Mitchell

Setting

Landform: Alluvial fans, plains

Elway State LD01-74-1AHN,
74HN, 75-1AHN, 75-1BHN,
75HN, 76-1BHN,
McCaffrey State LD12-74-1AHN,
74HN, 75-1AHN, 75-1BHN,
75HN, 76-1BHN,
Morton State LD01-78-1AHN,
78HN, 79-1AHN, 79-1BHN,
79HN,
Griffith State LD12-79-1AHN, 79HN,
Nalen State LD12-78-1BHN,
76-1AHN, 76HN, 77-1AHN,
77-1BHN, 77HN,
Atwater State LD01-76-1AHN,
76HN, 77-1AHN, 77-1BHN, 77HN,
78-1BHN
Smith State LD12-72-1AHN,
72HN, 73-1AHN, 73-1BHN,
73HN, 74-1BHN
Mecklenburg State LD01-72-1AHN,
72HN, 73-1AHN, 73-1BHN,
73HN, 74-1BHN

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Properties and qualities

Slope: 0 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: High (about 10.8 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability classification (irrigated): 4e
Land capability (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: Siltstone Plains (R067BY009CO)

Typical profile

0 to 7 inches: Silt loam
7 to 60 inches: Silt loam

Minor Components

Haverson

Percent of map unit: 5 percent

Thedalund

Percent of map unit: 5 percent

Keota

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 8, Apr 30, 2009