

Map Unit Description

Weld County, Colorado, Northern Part

31 Kim-Mitchell complex, 0 to 6 percent slopes

Setting

Elevation: 3500 to 6500 feet
Mean annual precipitation: 11 to 17 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 120 to 160 days

Composition

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

Description of Kim

Setting

Landform: Alluvial fans, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Properties and Qualities

Slope: 0 to 6 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.7 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 4e
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
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy alluvium

Properties and Qualities

Slope: 0 to 6 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 5.95 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 10.8 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 4e
Ecological site: Siltstone Plains (R067BY009CO)

Typical Profile

0 to 7 inches: silt loam
7 to 60 inches: silt loam

Map Unit Description

Weld County, Colorado, Northern Part

Minor Components

Haverson

Percent of map unit: 5 percent

Thedalund

Percent of map unit: 5 percent

Keota

Percent of map unit: 5 percent

Rangeland Productivity and Plant Composition

Weld County, Colorado, Northern Part

| Map symbol and soil name | Ecological site | Total dry-weight production | | | Characteristic vegetation | Rangeland composition |
|-----------------------------|------------------|-----------------------------|----------------|---------------------|---|--------------------------|
| | | Favorable year | Normal year | Unfavorable year | | |
| | | Lb/Ac | Lb/Ac | Lb/Ac | | Pct |
| 31: | | | | | | |
| Kim | Loamy Plains | 1,500 | 1,000 | 500 | Western wheatgrass | 25 |
| Mitchell | Siltstone Plains | 1,500 | 900 | 400 | Western wheatgrass Fourwing saltbush | 25 15 |

Map Unit Description

Weld County, Colorado, Northern Part

66 Thedalund-Keota loams, 0 to 3 percent slopes

Setting

Elevation: 3500 to 6500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 160 days

Composition

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

Description of Thedalund

Setting

Landform: Plains, ridges, alluvial fans
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 or high (0.06 to 2.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.3 inches)

Interpretive Groups

Land capability classification (irrigated): 4s
Land capability (non irrigated): 4e
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
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 or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 5.3 inches)

Interpretive Groups

Land capability classification (irrigated): 4s
Land capability (non irrigated): 4e
Ecological site: Siltstone Plains (R067BY009CO)

Typical Profile

Map Unit Description

Weld County, Colorado, Northern Part

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

Rangeland Productivity and Plant Composition

Weld County, Colorado, Northern Part

| Map symbol and soil name | Ecological site | Total dry-weight production | | | Characteristic vegetation | Rangeland composition |
|-----------------------------|------------------|-----------------------------|----------------|---------------------|---------------------------|--------------------------|
| | | Favorable year | Normal year | Unfavorable year | | |
| | | Lb/Ac | Lb/Ac | Lb/Ac | | Pct |
| 66: | | | | | | |
| Thedalund | Loamy Plains | 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 |
| Keota | Siltstone Plains | 1,800 | 1,200 | 300 | Western wheatgrass | 12 |
| | | | | | Fourwing saltbush | 5 |
| | | | | | Green needlegrass | 4 |
| | | | | | Winterfat | 3 |
| | | | | | Sideoats grama | 1 |

Map Unit Description

Weld County, Colorado, Northern Part

67 Thedalund-Keota loams, 3 to 9 percent slopes

Setting

Elevation: 3500 to 6500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 130 to 160 days

Composition

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

Description of Thedalund

Setting

Landform: Plains, ridges, alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from siltstone and/or calcareous loamy residuum weathered from sandstone and shale

Properties and Qualities

Slope: 3 to 9 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 or high (0.06 to 2.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.1 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 6e
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 3 inches: loam
3 to 24 inches: loam
24 to 28 inches: weathered bedrock

Description of Keota

Setting

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

Properties and Qualities

Slope: 3 to 9 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 or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 5.3 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 6e
Ecological site: Siltstone Plains (R067BY009CO)

Typical Profile

Map Unit Description

Weld County, Colorado, Northern Part

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

Rangeland Productivity and Plant Composition

Weld County, Colorado, Northern Part

| Map symbol and soil name | Ecological site | Total dry-weight production | | | Characteristic vegetation | Rangeland composition |
|-----------------------------|------------------|-----------------------------|----------------|---------------------|---------------------------|--------------------------|
| | | Favorable year | Normal year | Unfavorable year | | |
| | | Lb/Ac | Lb/Ac | Lb/Ac | | Pct |
| 67: | | | | | | |
| Thedalund | Loamy Plains | 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 |
| Keota | Siltstone Plains | 1,200 | 700 | 300 | Winterfat | 15 |
| | | | | | Western wheatgrass | 8 |
| | | | | | Sideoats grama | 5 |
| | | | | | Fourwing saltbush | 3 |