

Weld County, Colorado, Northern Part

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

Associated Wells:

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

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

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

Associated Wells:

McCaffrey State LD 12-76-18HN,
75HN, 75-1AHN, 75-18HN,
74HN, 74-1AHN
Elway State LD 01-76-18HN,
75HN, 75-1AHN, 75-18HN,
74HN, 74-1AHN

Weld County, Colorado, Northern Part

44—Olney fine sandy loam, 0 to 6 percent slopes

Map Unit Setting

Elevation: 3,500 to 5,800 feet
Mean annual precipitation: 11 to 15 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 125 to 175 days

Map Unit Composition

Olney and similar soils: 85 percent
Minor components: 15 percent

Description of Olney

Setting

Landform: Plains
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 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 (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

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

Typical profile

0 to 6 inches: Fine sandy loam
6 to 18 inches: Sandy clay loam
18 to 60 inches: Sandy loam
60 to 64 inches: Sandy loam

Minor Components

Stoneham

Percent of map unit: 9 percent

Ascalon

Percent of map unit: 6 percent

Data Source Information

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

McCaffrey State LD 12-76-18HW
T9N-R58W

Section: 1 SWSE
Weld, Co, CO

Associated Wells:

McCaffrey State LD 12-76-18HW,
75HW, 75-1AHW, 75-18HW,
74HW, 74-1AHW
Elway State LD 01-76-18HW,
75HW, 75-1AHW, 75-18HW,
74HW, 74-1AHW

Map Unit Description: Renohill-Shingle complex, 3 to 9 percent slopes---Weld County, Colorado,
Northern Part

Weld County, Colorado, Northern Part

57—Renohill-Shingle complex, 3 to 9 percent slopes

Map Unit Setting

Elevation: 3,600 to 6,200 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Renohill and similar soils: 50 percent
Shingle and similar soils: 35 percent
Minor components: 15 percent

Description of Renohill

Setting

Landform: Ridges, plains, breaks
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous, clayey loamy residuum weathered from
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 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: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.0 inches)

Interpretive groups

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

Typical profile

0 to 4 inches: Fine sandy loam
4 to 13 inches: Clay
13 to 29 inches: Clay loam
29 to 33 inches: Unweathered bedrock

Description of Shingle

Setting

Landform: Ridges, breaks, plains

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

Properties and qualities

Slope: 3 to 9 percent
Depth to restrictive feature: 10 to 20 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: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very low (about 2.1 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability classification (irrigated): 6s
Land capability (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: Shaly Plains (R067BY045CO)

Typical profile

0 to 4 inches: Clay loam
4 to 11 inches: Clay loam
11 to 15 inches: Unweathered bedrock

Minor Components

Midway

Percent of map unit: 8 percent

Tassel

Percent of map unit: 7 percent

Data Source Information

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

Associated Wells:

Weld County, Colorado, Northern Part

McCaffrey State LD12-76-1BHN,
75HN, 75-1AHN, 75-1BHN,
74HN, 74-1AHN
Elway State LD01-76-1BHN,
75HN, 75-1AHN, 75-1BHN,
74HN, 74-1AHN

4—Ascalon fine sandy loam, 0 to 6 percent slopes

Map Unit Setting

Elevation: 4,500 to 6,500 feet
Mean annual precipitation: 13 to 17 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 130 to 160 days

Map Unit Composition

Ascalon and similar soils: 85 percent
Minor components: 15 percent

Description of Ascalon

Setting

Landform: Plains
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 (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.9 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: Loamy Plains (R067BY002CO)

Typical profile

0 to 8 inches: Fine sandy loam
8 to 22 inches: Sandy clay loam
22 to 60 inches: Sandy loam

Minor Components

Olney

Percent of map unit: 8 percent

Otero

Percent of map unit: 7 percent

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 8, Apr 30, 2009

McCaffrey State LD 12-76-18HN,
79N-R58W
Section 1: SWSE
Weld Co, CO

Weld County, Colorado, Northern Part

60—Shingle clay loam, 0 to 9 percent slopes

Map Unit Setting

Elevation: 3,600 to 5,500 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 140 days

Map Unit Composition

Shingle and similar soils: 80 percent
Minor components: 20 percent

Description of Shingle

Setting

Landform: Breaks, ridges, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous, clayey loamy residuum weathered from shale

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 10 to 20 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: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very low (about 2.1 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: Shaly Plains (R067BY045CO)

Typical profile

0 to 4 inches: Clay loam
4 to 11 inches: Clay loam
11 to 15 inches: Unweathered bedrock

Minor Components

Renohill

Percent of map unit: 10 percent

Associated Wells:

McCaffrey State LD 12-76-18HN,
75HN, 75-1AHN, 75-18HN, 74HN,
74-1AHN
Elway State LD 01-76-18HN,
75HN, 75-1AHN, 75-18HN, 74HN,
74-1AHN

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