

Gradishar State LD11-73HN  
T4N- R58W- SEC 2- SESE

## 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:* Alluvial fans, ridges, 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:* Ridges, alluvial fans, plains

*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

**Kim**

*Percent of map unit:* 5 percent

**Shingle**

*Percent of map unit:* 5 percent

**Mitchell**

*Percent of map unit:* 5 percent

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part  
Survey Area Data: Version 9, Dec 23, 2013

Gridstar State LD11-73HN  
T9N-R58W-SE2-SESE

## 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:* Alluvial fans, 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 (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

*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 9, Dec 23, 2013