

## Weld County, Colorado, Southern Part

### 35—Loup-Boel loamy sands, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 362f  
*Elevation:* 4,550 to 4,750 feet  
*Mean annual precipitation:* 11 to 15 inches  
*Mean annual air temperature:* 46 to 52 degrees F  
*Frost-free period:* 130 to 180 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Loup and similar soils:* 55 percent  
*Boel and similar soils:* 35 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Loup

##### Setting

*Landform:* Swales, drainageways, streams  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy alluvium

##### Typical profile

*H1 - 0 to 16 inches:* loamy sand  
*H2 - 16 to 40 inches:* loamy sand  
*H3 - 40 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* About 0 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Available water storage in profile:* Low (about 5.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4w  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* A/D  
*Ecological site:* Sandy Meadow (R067BY029CO)  
*Hydric soil rating:* Yes

## Description of Boel

### Setting

*Landform:* Drainageways, streams, swales

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Stratified sandy alluvium

### Typical profile

*H1 - 0 to 14 inches:* loamy sand

*H2 - 14 to 60 inches:* loamy sand

### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* About 18 to 36 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 5 percent

*Available water storage in profile:* Low (about 4.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4w

*Land capability classification (nonirrigated):* 6w

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Meadow (R067BY029CO)

*Hydric soil rating:* No

## Minor Components

### Osgood

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

### Valent

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

### 72—Vona loamy sand, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 363r  
*Elevation:* 4,600 to 5,200 feet  
*Mean annual precipitation:* 13 to 15 inches  
*Mean annual air temperature:* 48 to 55 degrees F  
*Frost-free period:* 130 to 160 days  
*Farmland classification:* Farmland of local importance

#### Map Unit Composition

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

#### Description of Vona

##### Setting

*Landform:* Terraces, plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium and/or eolian deposits

##### Typical profile

*H1 - 0 to 6 inches:* loamy sand  
*H2 - 6 to 28 inches:* fine sandy loam  
*H3 - 28 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 6.00 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 slightly saline (0.0 to 4.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 6.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

### **Minor Components**

#### **Remmit**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### **Valent**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

### 76—Vona sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 363w

*Elevation:* 4,600 to 5,200 feet

*Mean annual precipitation:* 13 to 15 inches

*Mean annual air temperature:* 48 to 55 degrees F

*Frost-free period:* 130 to 160 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Vona and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Vona

##### Setting

*Landform:* Terraces, plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium and/or eolian deposits

##### Typical profile

*H1 - 0 to 6 inches:* sandy loam

*H2 - 6 to 28 inches:* fine sandy loam

*H3 - 28 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 6.00 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 slightly saline (0.0 to 4.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Plains (R067BY024CO)

*Hydric soil rating:* No

### **Minor Components**

#### **Remmit**

*Percent of map unit:* 9 percent

*Hydric soil rating:* No

#### **Olney**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### **Julesburg**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015