

017CS—Clime-Sogn complex, 3 to 25 percent slopes

Map Unit Composition

Clime: 47 percent
Sogn: 20 percent
Minor components: 33 percent

Component Descriptions

Clime

MLRA: -
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from calcareous shale
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 9 inches; silty clay
H2—9 to 33 inches; silty clay
Cr—33 to 37 inches; unweathered bedrock

Sogn

MLRA: -
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone
Slope: 3 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe30-36)

Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 6 inches; silty clay loam
R—6 to 10 inches; unweathered bedrock

Minor Components

Labette

Composition: About 13 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Dwight

Composition: About 10 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Zaar

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe30-36)

017IV—Ivan silt loam, occasionally flooded

Map Unit Composition

Ivan: 85 percent
Minor components: 15 percent

Component Descriptions

Ivan

MLRA: -
Landform: Flood plain on river valley
Parent material: Calcareous fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 13.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low

Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 32 inches; silt loam
 H2—32 to 60 inches; silt loam

Minor Components

Kahola

Composition: About 8 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

**017KA—Kahola silt loam,
occasionally flooded**

Map Unit Composition

Kahola: 85 percent
 Minor components: 15 percent

Component Descriptions

Kahola

MLRA: -
Landform: Flood plain on river valley
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 25 inches; silt loam
 H2—25 to 60 inches; loam

Minor Components

Ivan

Composition: About 8 percent
Slope: 0 to 2 percent

Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

**041CD—Clime-Sogn complex, 5 to
20 percent slopes**

Map Unit Composition

Clime: 70 percent
 Sogn: 30 percent

Component Descriptions

Clime

MLRA: -
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 H2—10 to 19 inches; silty clay loam
 H3—19 to 27 inches; silty clay
 Cr—27 to 31 inches; weathered bedrock

Sogn

MLRA: -
Landform: Upland, hillslope
Parent material: Loamy residuum weathered from limestone, unspecified
Slope: 5 to 10 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained

Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.8 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe30-36)
Land capability (nonirrigated): 6s

Typical Profile:
 H1—0 to 14 inches; silt loam
 R—14 to 18 inches; unweathered bedrock

041HB—Hobbs silt loam, channeled

Map Unit Composition

Hobbs: 75 percent

Component Descriptions

Hobbs
MLRA: -
Landform: Flood plain on meander belt
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe25-34)
Land capability (nonirrigated): 5w

Typical Profile:
 A—0 to 8 inches; silt loam
 C1—8 to 24 inches; silt loam
 C2—24 to 44 inches; silt loam
 C3—44 to 60 inches; silt loam

Minor Components

Unnamed Hydric Soil (ponding)
Slope: 0 to 1 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Slope: 0 to 1 percent
Drainage class: Poorly drained

041SC—Sutphen silty clay loam, occasionally flooded

Map Unit Composition

Sutphen: 100 percent

Component Descriptions

Sutphen
MLRA: -
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.5 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Lowland (pe25-34)
Land capability (nonirrigated): 2w

Typical Profile:
 H1—0 to 12 inches; silty clay loam
 H2—12 to 48 inches; silty clay
 H3—48 to 60 inches; silty clay

079CM—Clime complex, 6 to 12 percent slopes

Map Unit Composition

Clime: 100 percent

Component Descriptions

Clime
MLRA: -
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from shale, calcareous

Slope: 6 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 3.9 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:
 H1—0 to 9 inches; silty clay
 H2—9 to 27 inches; silty clay
 Cr—27 to 27 inches; unweathered bedrock

Minor Components
Unnamed Wet Soils
Phase: Clayey, Drainageway

079RS—Rosehill silty clay, 3 to 6 percent slopes

Map Unit Composition

Rosehill: 100 percent

Component Descriptions

Rosehill
MLRA: -
Landform: Hillslope on upland
Parent material: Residium
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 4.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:
 H1—0 to 9 inches; silty clay
 H2—9 to 34 inches; silty clay
 Cr—34 to 34 inches; unweathered bedrock

Minor Components
Unnamed Wet Soils
Phase: Clayey, Drainageway

113CB—Cass fine sandy loam, rarely flooded

Map Unit Composition

Cass: 100 percent

Component Descriptions

Cass
MLRA: -
Landform: Flood plain
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 9.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe26-30)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
 H1—0 to 7 inches; fine sandy loam
 H2—7 to 51 inches; fine sandy loam
 H3—51 to 60 inches; loamy fine sand

Minor Components
Bridgeport
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Overflow

Carwile

113ED—Edalgo silt loam, 5 to 12 percent slopes

Map Unit Composition

Edalgo: 100 percent

Component Descriptions

Edalgo

MLRA: -

Landform: Hillslope on upland

Parent material: Residuum

Slope: 5 to 12 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Slowest permeability: Impermeable (About 0.00 in/hr)

Available water capacity: Low (About 5.1 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Clay Upland (pe26-30)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; silt loam

H2—6 to 15 inches; silty clay loam

H3—15 to 30 inches; silty clay loam

Cr—30 to 30 inches; weathered bedrock

Minor Components

Unnamed Wet Soils

Phase: Clayey, Drainageway

Clime

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Limy Upland (pe25-34)

Lancaster

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe26-30)

AED—Arents, Earthen Dam

Ca—Cass fine sandy loam, occasionally flooded

Map Unit Composition

Cass: 90 percent

Minor components: 10 percent

Component Descriptions

Cass

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Flood plain on river valley

Parent material: Coarse-loamy alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)

Available water capacity: High (About 9.6 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very low

Ecological site: Sandy Lowland (pe26-30)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 18 inches; fine sandy loam

H2—18 to 60 inches; fine sandy loam

Minor Components

Lancaster

Composition: About 5 percent

Slope: 3 to 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe26-30)

Verdigris

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-36)

Ch—Chase silty clay loam, occasionally flooded

Map Unit Composition

Chase: 95 percent

Minor components: 5 percent

Component Descriptions

Chase

MLRA: 75 - Central Loess Plains

Landform: Flood plain on river valley

Parent material: Silty and clayey alluvium

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.7 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 24 to 48 inches

Runoff class: Medium

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 12 inches; silty clay loam

H2—12 to 60 inches; silty clay

Minor Components

Verdigris

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-36)

Cm—Clime silty clay loam, 1 to 3 percent slopes

Map Unit Composition

Clime: 90 percent

Minor components: 10 percent

Component Descriptions

Clime

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Silty and clayey residuum weathered from shale, calcareous

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Low (About 5.2 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Limy Upland (pe25-34)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 30 inches; silty clay loam

Cr—30 to 30 inches; unweathered bedrock

Minor Components

Irwin

Composition: About 10 percent

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Cp—Clime silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Clime: 90 percent

Minor components: 10 percent

Component Descriptions

Clime

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Silty and clayey residuum weathered from shale, calcareous

Slope: 3 to 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Low (About 5.2 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Limy Upland (pe25-34)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 30 inches; silty clay loam

Cr—30 to 34 inches; unweathered bedrock

Minor Components

Irwin

Composition: About 10 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Ecological site: Loamy Upland (pe25-34)
**Cs—Clime-Sogn silty clay loams,
 3 to 20 percent slopes**

Cr—Clime stony silty clay loam, 15 to 30 percent slopes

Map Unit Composition

Clime: 80 percent
 Minor components: 20 percent

Component Descriptions

Clime

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from calcareous shale
Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Very slow (About 0.01 in/hr)
Available water capacity: Low (About 4.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe25-34)
Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 7 inches; stony silty clay loam
 H2—7 to 15 inches; silty clay
 H3—15 to 23 inches; silty clay
 Cr—23 to 27 inches; silty clay

Minor Components

Sogn

Composition: About 10 percent
Slope: 0 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe25-34)

Tully

Composition: About 10 percent
Slope: 3 to 6 percent
Drainage class: Well drained

Map Unit Composition

Clime: 65 percent
 Sogn: 20 percent
 Minor components: 15 percent

Component Descriptions

Clime

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from calcareous shale
Slope: 8 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 27 inches; silty clay
 Cr—27 to 31 inches; unweathered bedrock

Sogn

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone
Slope: 3 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe25-34)

Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 8 inches; silty clay loam
R—8 to 12 inches; unweathered bedrock

Minor Components

Labette

Composition: About 10 percent
Slope: 2 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Tully

Composition: About 5 percent
Slope: 3 to 6 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Dw—Dwight silt loam, 0 to 2 percent slopes

Map Unit Composition

Dwight: 90 percent
Minor components: 10 percent

Component Descriptions

Dwight

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from cherty limestone
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe30-36)
Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 6 inches; silt loam
H2—6 to 56 inches; silty clay
R—56 to 60 inches; unweathered bedrock

Minor Components

Labette

Composition: About 10 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Ed—Edalgo silty clay loam, 3 to 12 percent slopes

Map Unit Composition

Edalgo: 90 percent
Minor components: 10 percent

Component Descriptions

Edalgo

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Clayey residuum weathered from clayey shale
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Very slow (About 0.01 in/hr)
Available water capacity: Moderate (About 6.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silty clay loam
H2—10 to 34 inches; silty clay
Cr—34 to 38 inches; weathered bedrock

Minor Components

Lancaster

Composition: About 5 percent
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Hedville

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

Fc—Florence silt loam, 2 to 15 percent slopes

Map Unit Composition

Florence: 85 percent
 Minor components: 15 percent

Component Descriptions

Florence

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Clayey residuum weathered from clayey shale and/or clayey residuum weathered from cherty limestone
Slope: 2 to 15 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 16 inches; gravelly silty clay loam
 H3—16 to 45 inches; extremely gravelly clay
 R—45 to 49 inches; unweathered bedrock

Minor Components

Dwight

Composition: About 5 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Labette

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Tully

Composition: About 5 percent
Slope: 3 to 6 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Go—Goessel silty clay, 0 to 2 percent slopes

Map Unit Composition

Goessel: 90 percent
 Minor components: 10 percent

Component Descriptions

Goessel

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Old clayey alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.6 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 36 inches
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 13 inches; silty clay
 H2—13 to 42 inches; clay
 H3—42 to 60 inches; clay

Minor Components

Wells

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Rosehill

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches
 to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe25-34)

HO—Hobbs silt loam, occasionally flooded**Map Unit Composition**

Hobbs: 100 percent

Component Descriptions**Hobbs**

MLRA: -
Landform: Flood plain on valley
Parent material: Fine-silty alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe25-34)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 8 inches; silt loam
 H2—8 to 46 inches; stratified silt loam
 H3—46 to 60 inches; silt loam

Minor Components**Unnamed Hydric Soils**

Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil

Slope: 0 to 2 percent
Drainage class: Poorly drained

Ib—Irwin silty clay loam, 1 to 3 percent slopes**Map Unit Composition**

Irwin: 90 percent
 Minor components: 10 percent

Component Descriptions**Irwin**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Old clayey alluvium
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 13 inches; silty clay loam
 H2—13 to 40 inches; silty clay
 H3—40 to 60 inches; silty clay

Minor Components**Clime**

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches
 to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe25-34)

Dwight

Composition: About 5 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches
 to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Ic—Irwin silty clay loam, 3 to 6 percent slopes**Map Unit Composition**

Irwin: 90 percent
Minor components: 10 percent

Component Descriptions**Irwin**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Old clayey alluvium
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 13 inches; silty clay loam
H2—13 to 40 inches; silty clay
H3—40 to 60 inches; silty clay

Minor Components**Clime**

Composition: About 5 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe25-34)

Labette

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

IV—Ivan silt loam, channeled**Map Unit Composition**

Ivan: 80 percent
Minor components: 20 percent

Component Descriptions**Ivan**

MLRA: -
Landform: Flood plain on river valley
Parent material: Calcareous fine-silty alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.7 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 32 inches; silty clay loam
H2—32 to 60 inches; silty clay loam

Minor Components**Reading**

Composition: About 20 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Kp—Kipson silty clay loam, 10 to 25 percent slopes**Map Unit Composition**

Kipson: 90 percent
Minor components: 10 percent

Component Descriptions**Kipson**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Shoulder

Parent material: Calcareous loamy residuum weathered from shale
Slope: 10 to 25 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.7 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Limy Upland (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:
 H1—0 to 9 inches; silty clay loam
 H2—9 to 20 inches; gravelly silty clay loam
 Cr—20 to 24 inches; weathered bedrock

Minor Components

Hedville

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

La—Labette silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Labette: 90 percent
 Minor components: 10 percent

Component Descriptions

Labette

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from limestone and shale
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 6.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 36 inches; silty clay
 R—36 to 40 inches; unweathered bedrock

Minor Components

Dwight

Composition: About 5 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Sogn

Composition: About 5 percent
Slope: 8 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe25-34)

Ld—Labette-Dwight complex, 1 to 3 percent slopes

Map Unit Composition

Labette: 60 percent
 Dwight: 35 percent
 Minor components: 5 percent

Component Descriptions

Labette

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from limestone-shale
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.0 inches)

Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 36 inches; silty clay
 R—36 to 40 inches; unweathered bedrock

Dwight

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from limestone, cherty
Slope: 1 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; silt loam
 H2—6 to 56 inches; silty clay
 R—56 to 60 inches; unweathered bedrock

Minor Components

Sogn

Composition: About 3 percent
Slope: 8 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe25-34)

Rock outcrop

Composition: About 2 percent

Lg—Labette-Sogn silty clay loams, 2 to 15 percent slopes

Map Unit Composition

Labette: 65 percent
 Sogn: 25 percent
 Minor components: 10 percent

Component Descriptions

Labette

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from limestone and shale
Slope: 2 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 36 inches; silty clay
 R—36 to 40 inches; unweathered bedrock

Sogn

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone
Slope: 8 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe25-34)

Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 10 inches; silty clay loam
R—10 to 14 inches; unweathered bedrock

Minor Components

Dwight

Composition: About 8 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Rock outcrop

Composition: About 2 percent

Lm—Ladysmith silty clay loam, 0 to 2 percent slopes

Map Unit Composition

Ladysmith: 90 percent
Minor components: 10 percent

Component Descriptions

Ladysmith

MLRA: 75 - Central Loess Plains
Landform: Paleoterrace on upland
Parent material: Clayey alluvium
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.6 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 9 inches; silty clay loam
H2—9 to 52 inches; silty clay
H3—52 to 60 inches; silty clay

Minor Components

Wells

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 3 percent

Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Ls—Lancaster loam, 1 to 3 percent slopes

Map Unit Composition

Lancaster: 90 percent
Minor components: 10 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 6.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe26-30)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 7 inches; loam
H2—7 to 25 inches; sandy clay loam
H3—25 to 35 inches; clay loam
Cr—35 to 35 inches; weathered bedrock

Minor Components

Hedville

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

Irwin

Composition: About 5 percent
Slope: 1 to 3 percent

Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

Lt—Lancaster loam, 3 to 7 percent slopes

Map Unit Composition

Lancaster: 90 percent
 Minor components: 10 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 6.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe26-30)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 7 inches; loam
 H2—7 to 25 inches; sandy clay loam
 H3—25 to 35 inches; sandy clay loam
 Cr—35 to 39 inches; weathered bedrock

Minor Components

Edalgo

Composition: About 5 percent
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe26-30)

Hedville

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Lv—Lancaster-Hedville complex, 3 to 20 percent slopes

Map Unit Composition

Lancaster: 60 percent
 Hedville: 25 percent
 Minor components: 15 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 6.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; loam
 H2—7 to 25 inches; sandy clay loam
 H3—25 to 35 inches; sandy clay loam
 Cr—35 to 35 inches; weathered bedrock

Hedville

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 3 to 20 percent
Surface fragments: About 0 to 0 percent subrounded stones
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Sandstone (pe26-30)
Land capability (nonirrigated): 7s

Typical Profile:

A1—0 to 10 inches; gravelly loam
 A2—10 to 17 inches; gravelly loam
 R—17 to 17 inches; unweathered bedrock

Minor Components

Cass

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Sandy Lowland (pe26-30)

Edalgo

Composition: About 5 percent
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe26-30)

M-W—Miscellaneous Water

Os—Osage silty clay, occasionally flooded

Map Unit Composition

Osage: 90 percent
 Minor components: 10 percent

Component Descriptions

Osage

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: Moderate (About 6.5 inches)

Shrink-swell potential: Very high (About 17.0 LEP)

Flooding hazard: Occasional

Ponding hazard: Occasional

Depth to seasonal water saturation: About 0 to 12 inches

Runoff class: Negligible

Ecological site: Clay Lowland (pe30-36)

Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 21 inches; silty clay
 H2—21 to 60 inches; silty clay

Minor Components

Chase

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe30-36)

Solomon

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe30-36)

Pt—Pits, Quarries

General Considerations: Pits are open excavations from which soil and commonly underlying material have been removed, exposing either rock or other material. Kinds include Pits, mine; Pits, gravel; and Pits, quarry. Commonly, pits are closely associated with Dumps.

Re—Reading silt loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Reading: 90 percent
 Minor components: 10 percent

Component Descriptions

Reading

MLRA: 76 - Bluestem Hills
Landform: Stream terrace on valley
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent

Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 1

Typical Profile:
 H1—0 to 6 inches; silt loam
 H2—6 to 60 inches; silty clay loam

Minor Components

Chase

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe25-34)

Wells

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Rh—Rosehill silty clay, 1 to 3 percent slopes

Map Unit Composition

Rosehill: 90 percent
 Minor components: 10 percent

Component Descriptions

Rosehill

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Clayey residuum weathered from clayey shale
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 3.4 inches)
Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 8 inches; silty clay
 H2—8 to 28 inches; silty clay
 Cr—28 to 32 inches; unweathered bedrock

Minor Components

Irwin

Composition: About 10 percent
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

So—Sogn silty clay loam, 0 to 15 percent slopes

Map Unit Composition

Sogn: 95 percent
 Minor components: 5 percent

Component Descriptions

Sogn

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone, unspecified
Slope: 0 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe25-34)
Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 8 inches; silty clay loam
 R—8 to 12 inches; unweathered bedrock

Minor Components

Clime

Composition: About 2 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches
 to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe25-34)

Labette

Composition: About 2 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches
 to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Rock outcrop

Composition: About 1 percent

Drainage class: Poorly drained

Unnamed Hydric Soil

Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Wet Soils

Phase: Loamy, Depression

Unnamed Wet Soils

Phase: Loamy, Drainageway

Tu—Tully silty clay loam, 2 to 6 percent slopes**Map Unit Composition**

Tully: 90 percent
 Minor components: 10 percent

Component Descriptions**Tully**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Clayey colluvium
Slope: 3 to 6 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 17 inches; silty clay loam
 H2—17 to 60 inches; silty clay

Minor Components**Clime**

Composition: About 5 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches
 to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe25-34)

Labette

Composition: About 5 percent
Slope: 1 to 4 percent

TO—Tobin silt loam, occasionally flooded**Map Unit Composition**

Tobin: 100 percent

Component Descriptions**Tobin**

MLRA: -
Landform: Flood plain on upland
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe26-30)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 20 inches; silt loam
 H2—20 to 32 inches; silt loam
 H3—32 to 60 inches; silt loam

Minor Components**Unnamed Hydric Soils**

Slope: 0 to 2 percent

Depth to restrictive feature: 20 to 40 inches
to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Vb—Verdigris silt loam, occasionally flooded

Map Unit Composition

Verdigris: 90 percent
Minor components: 10 percent

Component Descriptions

Verdigris

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 22 inches; silt loam
H2—22 to 60 inches; silt loam

Minor Components

Chase

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe30-36)

Vc—Verdigris silt loam, channeled

Map Unit Composition

Verdigris: 95 percent
Minor components: 5 percent

Component Descriptions

Verdigris

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 22 inches; silt loam
H2—22 to 60 inches; silt loam

Minor Components

Chase

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe30-36)

W—Water

Map Unit Composition

Water: 100 percent

Component Descriptions

Water

MLRA: 75 - Central Loess Plains
Depth to seasonal water saturation: More than 6 feet

Wb—Wells loam, 1 to 3 percent slopes

Map Unit Composition

Wells: 90 percent

Minor components: 10 percent

Component Descriptions

Wells

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Fine-loamy residuum weathered from sandstone

Slope: 1 to 3 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 10.2 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 15 inches; loam

H2—15 to 36 inches; sandy clay loam

H3—36 to 60 inches; sandy loam

Minor Components

Clime

Composition: About 5 percent

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Limy Upland (pe25-34)

Irwin

Composition: About 5 percent

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Fine-loamy residuum

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 10.2 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 15 inches; loam

H2—15 to 36 inches; sandy clay loam

H3—36 to 60 inches; sandy loam

Minor Components

Clime

Composition: About 5 percent

Slope: 3 to 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Limy Upland (pe25-34)

Irwin

Composition: About 5 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Wd—Wells clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Wells: 90 percent

Minor components: 10 percent

Component Descriptions

Wells

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Fine-loamy residuum

Slope: 3 to 7 percent

Drainage class: Well drained

Wc—Wells loam, 3 to 7 percent slopes

Map Unit Composition

Wells: 90 percent

Minor components: 10 percent

Component Descriptions

Wells

MLRA: 75 - Central Loess Plains

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 9.8 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; clay loam

H2—9 to 36 inches; sandy clay loam

H3—36 to 60 inches; sandy loam

Minor Components

Irwin

Composition: About 5 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Lancaster

Composition: About 5 percent

Slope: 3 to 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe26-30)