

085MA—Martin silty clay loam, 3 to 8 percent slopes

Map Unit Composition

Martin: 90 percent
Minor components: 10 percent

Component Descriptions

Martin

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Silty and clayey colluvium derived from limestone and shale over silty and

clayey residuum weathered from limestone and shale

Slope: 3 to 8 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.9 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 22 to 26 inches

Runoff class: Very high

Ecological site: Loamy Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 11 inches; silty clay loam
H2—11 to 17 inches; silty clay loam
H3—17 to 60 inches; silty clay

Minor Components

Clime

Composition: About 3 percent

Slope: 5 to 20 percent

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

Drainage class: Well drained

Ecological site: Limy Upland (pe30-37)

Pawnee

Composition: About 3 percent

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Sogn

Composition: About 2 percent

Slope: 5 to 15 percent

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Somewhat excessively drained

Ecological site: Shallow Limy (pe30-37)

Vinland

Composition: About 2 percent

Slope: 5 to 20 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Somewhat excessively drained

Ecological site: Loamy Upland (pe30-37)

117SA—Shelby clay loam, 6 to 10 percent slopes

Map Unit Composition

Shelby: 91 percent
Minor components: 9 percent

Component Descriptions

Shelby

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Fine-loamy drift

Slope: 6 to 10 percent

Drainage class: Moderately well drained

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

Available water capacity: High (About 10.0 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: Loamy Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 17 inches; clay loam
H2—17 to 48 inches; clay loam
H3—48 to 60 inches; clay loam

Minor Components

Pawnee

Composition: About 3 percent

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe30-37)

Morrill

Composition: About 3 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Steinauer

Composition: About 3 percent
Slope: 14 to 25 percent
Drainage class: Well drained
Ecological site: Limy Upland (pe30-37)

117SC—Steinauer-Shelby clay loams, 10 to 14 percent slopes**Map Unit Composition**

Steinauer: 60 percent
 Shelby: 25 percent
 Minor components: 15 percent

Component Descriptions**Steinauer**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland
Parent material: Calcareous fine-loamy drift
Slope: 10 to 14 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.0 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 (pe30-37)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 5 inches; clay loam
 H2—5 to 18 inches; clay loam
 H3—18 to 60 inches; clay loam

Shelby

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Hillslope on upland
Parent material: Fine-loamy drift
Slope: 10 to 14 percent

Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 17 inches; clay loam
 H2—17 to 48 inches; clay loam
 H3—48 to 60 inches; clay loam

Minor Components**Olmitz**

Composition: About 8 percent
Slope: 1 to 4 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Pawnee

Composition: About 7 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe30-37)

131BS—Burchard-Steinauer clay loams, 6 to 12 percent slopes**Map Unit Composition**

Burchard: 63 percent
 Steinauer: 27 percent
 Minor components: 10 percent

Component Descriptions**Burchard**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Hillslope on upland
Parent material: Fine-loamy drift
Slope: 5 to 11 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.2 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: Loamy Upland (pe30-37)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; clay loam
 H2—10 to 17 inches; clay loam
 H3—17 to 60 inches; clay loam

Steinauer

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Calcareous fine-loamy drift

Slope: 8 to 12 percent

Drainage class: Well drained

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

Available water capacity: High (About 10.1 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 (pe30-37)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; clay loam
 H2—6 to 60 inches; clay loam

Minor Components

Kipson

Composition: About 4 percent

Landform: hillslope on upland

Slope: 5 to 25 percent

Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)

Drainage class: Somewhat excessively drained

Ecological site: Limy Upland (pe30-37)

Pawnee

Composition: About 3 percent

Landform: hillslope on upland

Slope: 4 to 8 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe30-37)

Wymore

Composition: About 3 percent

Landform: hillslope on upland

Slope: 4 to 8 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

131CH—Chase silty clay loam, occasionally flooded

Map Unit Composition

Chase: 89 percent

Minor components: 11 percent

Component Descriptions

Chase

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

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 10.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 24 to 48 inches

Runoff class: High

Ecological site: Loamy Lowland (pe30-37)

Land capability (nonirrigated): 2w

Typical Profile:

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

Minor Components

Kennebec

Composition: About 10 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-37)

Unnamed Hydric Soil

Composition: About 1 percent

Drainage class: Poorly drained

177KS—Kipson-Sogn complex, 3 to 25 percent slopes

Map Unit Composition

Kipson: 50 percent
Sogn: 35 percent
Minor components: 15 percent

Component Descriptions

Kipson

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Calcareous loamy residuum weathered from shale

Slope: 3 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 3.1 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 (pe30-37)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam

H2—8 to 17 inches; silty clay loam

Cr—17 to 21 inches; weathered bedrock

Sogn

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Loamy residuum weathered from limestone

Slope: 0 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 2.0 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 (pe30-37)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silty clay loam

R—10 to 14 inches; unweathered bedrock

Minor Components

Martin

Composition: About 5 percent

Slope: 7 to 11 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Elmont

Composition: About 5 percent

Slope: 7 to 12 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Limy Upland (pe35-42)

Labette

Composition: About 5 percent

Slope: 3 to 6 percent

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

Drainage class: Well drained

Ecological site: Limy Upland (pe35-42)

177MC—Martin silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Martin: 85 percent

Minor components: 15 percent

Component Descriptions

Martin

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale

Slope: 3 to 7 percent

Drainage class: Moderately well 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: None
Depth to seasonal water saturation: About 21 to 26 inches
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 9 inches; silty clay loam
 H2—9 to 14 inches; silty clay loam
 H3—14 to 60 inches; silty clay

Minor Components

Sogn

Composition: About 3 percent
Landform: hillslope on upland
Slope: 7 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-37)

Pawnee

Composition: About 3 percent
Landform: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Oska

Composition: About 3 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Gymer

Composition: About 3 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Vinland

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Ecological site: Loamy Upland (pe35-42)

Sibleyville

Phase: Eroded

Composition: About 1 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 (pe35-42)

197SA—Sarpy loamy sand, frequently flooded

Map Unit Composition

Sarpy: 85 percent
 Minor components: 15 percent

Component Descriptions

Sarpy

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 4 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe30-36)
Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 5 inches; loamy sand
 H2—5 to 60 inches; sand

Minor Components

Haynie

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Paxico

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained

Eudora

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

197SC—Sarpy-Haynie complex, occasionally flooded

Map Unit Composition

Sarpy: 45 percent
Haynie: 30 percent
Minor components: 25 percent

Component Descriptions

Sarpy

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 2 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe30-36)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 6 inches; loamy sand
H2—6 to 60 inches; sand

Haynie

MLRA: 76 - Bluestem Hills
Landform: Flood-plain step on river valley
Parent material: Coarse-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 12.4 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 (pe30-36)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 7 inches; fine sandy loam
H2—7 to 60 inches; silt loam

Minor Components

Eudora

Composition: About 15 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Kimo

Composition: About 9 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-36)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

600AD—Ivan silt loam, channeled

Map Unit Composition

Ivan: 99 percent
Minor components: 1 percent

Component Descriptions

Ivan

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Flood plain on alluvial plain
Parent material: Loamy alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.3 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 (pe25-34)
Land capability (nonirrigated): 5w

Typical Profile:

A1—0 to 7 inches; silt loam
A2—7 to 26 inches; silty clay loam
AC—26 to 39 inches; silty clay loam
C—39 to 64 inches; silty clay loam

Minor Components

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent

Drainage class: Poorly drained

600CA—Carr-Sarpy complex, occasionally flooded

Map Unit Composition

Carr: 45 percent
Sarpy: 40 percent
Minor components: 15 percent

Component Descriptions

Carr

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley

Parent material: 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 9.9 inches)

Shrink-swell potential: Low (About 0.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sandy Lowland (pe30-36)

Land capability (nonirrigated): 3w

Typical Profile:

A1—0 to 9 inches; fine sandy loam

A2—9 to 17 inches; fine sandy loam

AC—17 to 28 inches; fine sandy loam

C—28 to 60 inches; very fine sandy loam

Sarpy

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 1 percent

Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.3 inches)

Shrink-swell potential: Low (About 0.0 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sands (pe30-36)

Land capability (nonirrigated): 3w

Typical Profile:

A—0 to 5 inches; loamy fine sand

C—5 to 60 inches; fine sand

Minor Components

Haynie

Composition: About 13 percent

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

600SA—Sarpy loamy fine sand, 0 to 4 percent slopes, occasionally flooded

Map Unit Composition

Sarpy: 98 percent
Minor components: 2 percent

Component Descriptions

Sarpy

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 5 percent

Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.1 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sands (pe30-36)

Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 5 inches; loamy fine sand

H2—5 to 60 inches; fine sand

Minor Components

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

AED—Arents, Earthen Dam

Map Unit Composition

Arents, Earthen Dam: 100 percent

Component Descriptions

Arents, Earthen Dam

MLRA: -
Depth to seasonal water saturation: More than 6 feet
Land capability (nonirrigated): 8

Bd—Benfield silty clay loam, 2 to 5 percent slopes

Map Unit Composition

Benfield: 85 percent
 Minor components: 15 percent

Component Descriptions

Benfield

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Calcareous clayey shale
Slope: 2 to 5 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: 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): 3e

Typical Profile:

H1—0 to 6 inches; silty clay loam
 H2—6 to 30 inches; silty clay
 Cr—30 to 34 inches; unweathered bedrock

Minor Components

Pawnee

Composition: About 5 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Sogn

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Wymore

Composition: About 5 percent
Landform: hillslope on upland
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-36)

Bf—Benfield-Florence complex, 3 to 15 percent slopes

Map Unit Composition

Benfield: 70 percent
 Florence: 15 percent
 Minor components: 15 percent

Component Descriptions

Benfield

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Calcareous clayey shale
Slope: 3 to 15 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: 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 6 inches; silty clay loam
H2—6 to 30 inches; silty clay
Cr—30 to 34 inches; unweathered bedrock

Florence

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Parent material: Clayey residuum weathered from cherty limestone

Slope: 3 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 3.8 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: Loamy Upland (pe30-36)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 14 inches; gravelly silty clay loam
H2—14 to 42 inches; very gravelly silty clay loam
R—42 to 46 inches; unweathered bedrock

Minor Components

Pawnee

Composition: About 5 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Sogn

Composition: About 5 percent

Slope: 5 to 20 percent

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Somewhat excessively drained

Ecological site: Shallow Limy (pe30-36)

Tully

Composition: About 3 percent

Landform: hillslope on upland

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Wymore

Composition: About 2 percent

Landform: hillslope on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Ce—Chase silty clay loam, rarely flooded

Map Unit Composition

Chase: 85 percent

Minor components: 15 percent

Component Descriptions

Chase

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills, 76 - Bluestem Hills

Landform: Terrace on river valley

Parent material: Silty and clayey alluvium

Slope: 0 to 1 percent

Drainage class: Poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: About 24 to 48 inches

Runoff class: High

Ecological site: Loamy Lowland (pe30-37)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 16 inches; silty clay loam
H2—16 to 48 inches; silty clay
H3—48 to 60 inches; silty clay loam

Minor Components

Wabash

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe30-37)

Kennebec

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Reading

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Cm—Clime silty clay loam, 20 to 40 percent slopes, stony

Map Unit Composition

Clime: 90 percent
Minor components: 10 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from calcareous shale
Slope: 20 to 40 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 4.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 6 inches; silty clay loam
H2—6 to 26 inches; silty clay loam
Cr—26 to 30 inches; unweathered bedrock

Minor Components

Sogn

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Tully

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Cs—Clime-Sogn silty clay loams, 5 to 20 percent slopes

Map Unit Composition

Clime: 70 percent
Sogn: 15 percent
Minor components: 15 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from calcareous shale
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 4.4 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 8 inches; silty clay loam
H2—8 to 26 inches; silty clay loam
Cr—26 to 30 inches; unweathered bedrock

Sogn

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone
Slope: 5 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 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): 6e

Typical Profile:

H1—0 to 14 inches; silty clay loam

R—14 to 18 inches; unweathered bedrock

Minor Components

Rock outcrop

Composition: About 4 percent

Kennebec

Composition: About 3 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Pawnee

Composition: About 3 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Tully

Composition: About 3 percent

Landform: hillslope on upland

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Unnamed Hydric Soils

Composition: About 1 percent

Drainage class: Poorly drained

Unnamed Hydric Soil

Composition: About 1 percent

Drainage class: Poorly drained

Em—Elmont silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Elmont: 85 percent

Minor components: 15 percent

Component Descriptions

Elmont

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Silty and clayey residuum weathered from shale and siltstone

Slope: 3 to 7 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

Drainage class: Well drained

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

Available water capacity: High (About 9.7 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: Loamy Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 50 inches; silty clay loam

Cr—50 to 54 inches; unweathered bedrock

Minor Components

Pawnee

Composition: About 8 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Wamego

Composition: About 7 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 (pe30-36)

Eo—Elmont silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Elmont: 80 percent

Minor components: 20 percent

Component Descriptions

Elmont

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Silty and clayey residuum weathered from shale and siltstone

Slope: 3 to 7 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.0 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 (pe30-37)
Land capability (nonirrigated): 3e

Typical Profile:
 H1—0 to 5 inches; silty clay loam
 H2—5 to 47 inches; silty clay loam
 Cr—47 to 51 inches; unweathered bedrock

Minor Components

Pawnee

Composition: About 10 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Wamego

Composition: About 10 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 (pe30-36)

Eu—Eudora silt loam, rarely flooded

Map Unit Composition

Eudora: 90 percent
 Minor components: 10 percent

Component Descriptions

Eudora

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Rare

Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-37)
Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 72 inches; silt loam

Minor Components

Kimo

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-37)

Sarpy

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Somewhat excessively drained
Ecological site: Sandy Lowland (pe30-37)

Unnamed Hydric Soil

Drainage class: Poorly drained

Ex—Eudora-Kimo complex, rarely flooded

Map Unit Composition

Eudora: 60 percent
 Kimo: 30 percent
 Minor components: 10 percent

Component Descriptions

Eudora

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills, 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Coarse-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 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-37)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 12 inches; silt loam
H2—12 to 72 inches; silt loam

Kimo

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills, 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Clayey over loamy alluvium

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 11.3 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: About 22 to 26 inches

Runoff class: Medium

Ecological site: Clay Lowland (pe30-37)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 6 inches; silty clay loam
H2—6 to 28 inches; silty clay
H3—28 to 60 inches; silt loam

Minor Components

Sarpy

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Somewhat excessively drained

Ecological site: Sandy Lowland (pe30-37)

Wabash

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe30-37)

Gm—Gymer silty clay loam, 3 to 8 percent slopes

Map Unit Composition

Gymer: 90 percent

Minor components: 10 percent

Component Descriptions

Gymer

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Fine-silty alluvium and/or fine-silty loess

Slope: 3 to 8 percent

Drainage class: Well drained

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

Available water capacity: High (About 10.7 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: Loamy Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 11 inches; silty clay loam
H2—11 to 43 inches; silty clay loam
H3—43 to 60 inches; silty clay loam

Minor Components

Tully

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Clime

Composition: About 5 percent

Slope: 5 to 20 percent

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

Drainage class: Well drained

Ecological site: Limy Upland (pe30-36)

Hn—Haynie very fine sandy loam, occasionally flooded

Map Unit Composition

Haynie: 85 percent

Minor components: 15 percent

Component Descriptions

Haynie

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood-plain step on river valley

Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 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 (pe30-37)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 9 inches; very fine sandy loam
 H2—9 to 60 inches; silt loam

Minor Components

Sarpy

Composition: About 7 percent
Slope: 0 to 3 percent
Drainage class: Excessively drained
Ecological site: Sandy Lowland (pe30-37)

Eudora

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

**Hs—Haynie-Sarpy complex,
occasionally flooded**

Map Unit Composition

Haynie: 60 percent
 Sarpy: 25 percent
 Minor components: 15 percent

Component Descriptions

Haynie

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Flood-plain step on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained

Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 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 (pe30-37)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 9 inches; very fine sandy loam
 H2—9 to 60 inches; silt loam

Sarpy

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe30-37)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 6 inches; fine sand
 H2—6 to 60 inches; sand

Minor Components

Eudora

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Kimo

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-37)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

**Kc—Kennebec silt loam,
channeled***Drainage class:* Poorly drained**Map Unit Composition**

Kennebec: 85 percent
 Minor components: 15 percent

Component Descriptions**Kennebec**

MLRA: 106 - Nebraska and Kansas Loess-Drift
 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 13.5
 inches)

Shrink-swell potential: Moderate (About 4.5
 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: About 36 to
 60 inches

Runoff class: Low

Ecological site: Loamy Lowland (pe30-37)

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 54 inches; silt loam

H2—54 to 60 inches; silt loam

Minor Components**Reading**

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Chase

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Loamy Lowland (pe30-37)

Tully

Composition: About 4 percent

Landform: hillslope on upland

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

**Kf—Kennebec silt loam,
occasionally flooded****Map Unit Composition**

Kennebec: 95 percent
 Minor components: 5 percent

Component Descriptions**Kennebec**

MLRA: 106 - Nebraska and Kansas Loess-Drift
 Hills

Landform: Flood plain on 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 13.4
 inches)

Shrink-swell potential: Moderate (About 4.5
 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 40 to
 44 inches

Runoff class: Low

Ecological site: Loamy Lowland (pe35-42)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 48 inches; silt loam

H2—48 to 60 inches; silt loam

Minor Components**Wabash**

Composition: About 4 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe30-37)

Unnamed Hydric Soil

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

**Km—Kimo silty clay, rarely
flooded**

Map Unit Composition

Kimo: 90 percent
Minor components: 10 percent

Component Descriptions

Kimo

MLRA: 76 - Bluestem Hills
Landform: Flood-plain step on river valley
Parent material: Clayey alluvium over loamy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: About 22 to 26 inches
Runoff class: High
Ecological site: Clay Lowland (pe30-37)
Land capability (nonirrigated): 2w

Typical Profile:

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

Minor Components

Eudora

Composition: About 4 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Sarpy

Composition: About 3 percent
Slope: 0 to 3 percent
Drainage class: Excessively drained
Ecological site: Sandy Lowland (pe30-37)

Haynie

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Unnamed Hydric Soil

M-W—Miscellaneous Water

Mm—Monona silt loam, 5 to 10 percent slopes

Map Unit Composition

Monona: 90 percent
Minor components: 10 percent

Component Descriptions

Monona

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Fine-silty loess
Slope: 5 to 10 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: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 14 inches; silt loam
H2—14 to 30 inches; silt loam
H3—30 to 60 inches; silt loam

Minor Components

Tully

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Clime

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Mo—Morrill loam, 3 to 7 percent slopes**Map Unit Composition**

Morrill: 90 percent
 Minor components: 10 percent

Component Descriptions**Morrill**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Fine-loamy glaciofluvial deposits

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 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: Medium

Ecological site: Loamy Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 13 inches; loam

H2—13 to 34 inches; clay loam

H3—34 to 60 inches; clay loam

Minor Components**Ortello**

Composition: About 5 percent

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Sandy (pe30-36)

Pawnee

Composition: About 5 percent

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Mr—Morrill clay loam, 3 to 7 percent slopes, eroded**Map Unit Composition**

Morrill: 95 percent
 Minor components: 5 percent

Component Descriptions**Morrill**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Fine-loamy glaciofluvial deposits

Slope: 3 to 7 percent

Drainage class: Well drained

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

Available water capacity: High (About 10.1 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 (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 7 inches; clay loam

H2—7 to 31 inches; clay loam

H3—31 to 60 inches; clay loam

Minor Components**Ortello**

Composition: About 5 percent

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Sandy (pe30-36)

Mt—Morrill loam, 5 to 20 percent slopes, stony**Map Unit Composition**

Morrill: 85 percent
 Minor components: 15 percent

Component Descriptions

Morrill

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Parent material: Fine-loamy glaciofluvial deposits

Slope: 5 to 20 percent

Drainage class: Well drained

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

Available water capacity: High (About 10.1 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: Loamy Upland (pe30-37)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; loam

H2—10 to 41 inches; clay loam

H3—41 to 60 inches; clay loam

Minor Components**Pawnee**

Composition: About 8 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Wymore Variant

Composition: About 7 percent

Landform: hillslope on upland

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe30-37)

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.5 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 Terrace (pe30-36)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 22 inches; silt loam

H2—22 to 44 inches; silt loam

H3—44 to 60 inches; silt loam

Minor Components**Chase**

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Loamy Lowland (pe30-37)

Zook

Composition: About 4 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe30-37)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Op—Ortello fine sandy loam, 3 to 7 percent slopes**Mu—Muir silt loam, rarely flooded****Map Unit Composition**

Muir: 90 percent

Minor components: 10 percent

Component Descriptions**Muir**

MLRA: 76 - Bluestem Hills

Landform: Terrace on river valley

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent

Drainage class: Well drained

Map Unit Composition

Ortello: 80 percent

Minor components: 20 percent

Component Descriptions**Ortello**

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Parent material: Loamy alluvium and/or loamy eolian deposits

Slope: 3 to 7 percent

Drainage class: Well drained

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

Available water capacity: Moderate (About 6.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:
 H1—0 to 19 inches; fine sandy loam
 H2—19 to 27 inches; fine sandy loam
 H3—27 to 60 inches; loamy fine sand

Minor Components

Pawnee

Composition: About 10 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Morrill

Composition: About 10 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Ot—Ortello fine sandy loam, 7 to 12 percent slopes

Map Unit Composition

Ortello: 90 percent
 Minor components: 10 percent

Component Descriptions

Ortello

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Loamy alluvium and/or loamy eolian deposits
Slope: 7 to 12 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 6.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low

Ecological site: Sandy (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 19 inches; fine sandy loam
 H2—19 to 27 inches; fine sandy loam
 H3—27 to 60 inches; loamy fine sand

Minor Components

Pawnee

Composition: About 5 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Morrill

Composition: About 5 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Pe—Pawnee clay loam, 1 to 3 percent slopes

Map Unit Composition

Pawnee: 90 percent
 Minor components: 10 percent

Component Descriptions

Pawnee

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Hillslope on upland
Hillslope position: Backslope, shoulder
Parent material: Clayey drift
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.3 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 9 to 14 inches
Runoff class: High
Ecological site: Clay Upland (pe30-37)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 14 inches; clay loam
 H2—14 to 34 inches; clay
 H3—34 to 72 inches; sandy clay loam

Minor Components**Martin**

Composition: About 5 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Woodson

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Pn—Pawnee clay loam, 3 to 6 percent slopes**Map Unit Composition**

Pawnee: 90 percent
 Minor components: 10 percent

Component Descriptions**Pawnee**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland
Parent material: Clayey drift
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 7.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: High
Ecological site: Clay Upland (pe30-37)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 15 inches; clay loam
 H2—15 to 42 inches; clay
 H3—42 to 60 inches; clay loam

Minor Components**Morrill**

Composition: About 10 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Po—Pawnee clay, 3 to 6 percent slopes, eroded**Map Unit Composition**

Pawnee: 85 percent
 Minor components: 15 percent

Component Descriptions**Pawnee**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland
Parent material: Clayey drift
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: High
Ecological site: Clay Upland (pe30-37)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; clay
 H2—6 to 38 inches; clay
 H3—38 to 60 inches; clay loam

Minor Components**Morrill**

Composition: About 14 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Ps—Paxico silt loam, frequently flooded**Map Unit Composition**

Paxico: 90 percent
 Minor components: 10 percent

Component Descriptions

Paxico

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley

Parent material: Loamy alluvium over sandy alluvium

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 10.4 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Very Rare

Depth to seasonal water saturation: About 18 to 36 inches

Runoff class: Low

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 42 inches; silt loam

H2—42 to 60 inches; loamy fine sand

Minor Components

Haynie

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-37)

Sarpy

Composition: About 5 percent

Slope: 0 to 3 percent

Drainage class: Excessively drained

Ecological site: Sandy Lowland (pe30-37)

Pt—Pits, Quarries

Map Unit Composition

Pits, Quarries: 100 percent

Component Descriptions

Pits, Quarries

MLRA: 76 - Bluestem Hills

Depth to seasonal water saturation: More than 6 feet

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 silty clay loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Reading: 85 percent

Minor components: 15 percent

Component Descriptions

Reading

MLRA: 76 - Bluestem Hills

Landform: Terrace on river valley

Parent material: Fine-silty alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

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

Available water capacity: High (About 11.7 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 20 inches; silty clay loam

H2—20 to 53 inches; silty clay loam

H3—53 to 60 inches; silty clay loam

Minor Components

Tully

Composition: About 7 percent

Landform: hillslope on upland

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Chase

Composition: About 7 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Loamy Lowland (pe30-37)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent
Drainage class: Poorly drained

Sf—Sarpy sand, frequently flooded

Map Unit Composition

Sarpy: 90 percent
 Minor components: 10 percent

Component Descriptions

Sarpy

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 2 percent

Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.1 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sandy Lowland (pe30-37)

Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 6 inches; sand

H2—6 to 60 inches; sand

Minor Components

Eudora

Composition: About 4 percent

Slope: 0 to 2 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-37)

Haynie

Composition: About 3 percent

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-37)

Kimo

Composition: About 3 percent

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Lowland (pe30-37)

Sg—Sharpsburg silt loam, 1 to 4 percent slopes

Map Unit Composition

Sharpsburg: 88 percent
 Minor components: 12 percent

Component Descriptions

Sharpsburg

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Summit

Parent material: Silty and clayey loess

Slope: 1 to 4 percent

Drainage class: Moderately well drained

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

Available water capacity: High (About 11.6 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe30-37)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 12 inches; silt loam

H2—12 to 27 inches; silty clay loam

H3—27 to 36 inches; silty clay loam

H4—36 to 60 inches; silty clay loam

Minor Components

Gymer

Composition: About 3 percent

Landform: terrace on river valley

Slope: 3 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-37)

Morrill

Composition: About 3 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-37)

Pawnee

Composition: About 3 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Woodson

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Th—Thurman loamy fine sand, 3 to 8 percent slopes**Map Unit Composition**

Thurman: 85 percent
 Minor components: 15 percent

Component Descriptions**Thurman**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Sandy eolian sands
Slope: 3 to 8 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 17 inches; loamy fine sand
 H2—17 to 60 inches; loamy fine sand

Minor Components**Morrill**

Composition: About 8 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Pawnee

Composition: About 7 percent
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Tu—Tully silty clay loam, 3 to 7 percent slopes**Map Unit Composition**

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions**Tully**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey colluvium
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.4 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): 3e

Typical Profile:

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

Minor Components**Reading**

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

Kennebec

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Clime

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Tx—Tully silty clay, 3 to 7 percent slopes, eroded**Map Unit Composition**

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions**Tully**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey colluvium
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.0 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 (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; silty clay
 H2—9 to 38 inches; silty clay
 H3—38 to 60 inches; silty clay

Minor Components**Reading**

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

Kennebec

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Clime

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Tz—Tuttle channery silty clay loam, 20 to 40 percent slopes, stony**Map Unit Composition**

Tuttle: 85 percent
 Minor components: 15 percent

Component Descriptions**Tuttle**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills, 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey colluvium
Slope: 20 to 40 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.0 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
Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 15 inches; channery silty clay loam
 H2—15 to 24 inches; channery silty clay loam
 H3—24 to 46 inches; channery silty clay loam
 Cr—46 to 50 inches; unweathered bedrock

Minor Components**Clime**

Composition: About 5 percent
Slope: 20 to 40 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Sogn

Composition: About 5 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Tully

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe30-37)

W—Water**Wb—Wabash silty clay, occasionally flooded****Map Unit Composition**

Wabash: 90 percent
 Minor components: 10 percent

Component Descriptions**Wabash**

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Terrace 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 6.4 inches)

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

Flooding hazard: Occasional

Depth to seasonal water saturation: About 2 to 9 inches

Runoff class: Very high

Ecological site: Clay Lowland (pe30-37)

Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 16 inches; silty clay
 H2—16 to 70 inches; silty clay

Minor Components**Reading**

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe35-42)

Wabash**Wd—Wamego silt loam, 3 to 7 percent slopes****Map Unit Composition**

Wamego: 85 percent
 Minor components: 15 percent

Component Descriptions**Wamego**

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Parent material: Sandy and silty residuum weathered from shale

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 5.0 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 (pe30-36)

Land capability (nonirrigated): 4e

Typical Profile:

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

Minor Components**Pawnee**

Composition: About 5 percent

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Wymore

Composition: About 5 percent

Landform: hillslope on upland

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe30-37)

Elmont

Composition: About 5 percent

Slope: 3 to 7 percent
Depth to restrictive feature: 40 to 60 inches
 to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

We—Wamego silt loam, 7 to 20 percent slopes

Map Unit Composition

Wamego: 85 percent
 Minor components: 15 percent

Component Descriptions

Wamego

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Sandy and silty residuum weathered from shale
Slope: 7 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 5.0 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 (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

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

Minor Components

Clime

Composition: About 5 percent
Slope: 20 to 40 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Elmont

Composition: About 5 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Sogn

Composition: About 4 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Rock outcrop

Composition: About 1 percent

Wg—Wann fine sandy loam, channeled

Map Unit Composition

Wann: 85 percent
 Minor components: 15 percent

Component Descriptions

Wann

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills
Landform: Flood plain on river valley
Parent material: Stratified coarse-loamy alluvium
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 18 to 42 inches
Runoff class: Low
Ecological site: Subirrigated (pe30-37)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 11 inches; fine sandy loam
 H2—11 to 45 inches; sandy loam
 H3—45 to 60 inches; stratified sandy clay loam to fine sand

Minor Components

Paxico

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained

Kennebec

Composition: About 7 percent
Slope: 0 to 2 percent

Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Wk—Wymore silty clay loam, 0 to 1 percent slopes

Map Unit Composition

Wymore: 100 percent

Component Descriptions

Wymore

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Summit

Parent material: Silty and clayey loess

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: High

Ecological site: Clay Upland (pe30-36)

Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 35 inches; silty clay

H3—35 to 60 inches; silty clay loam

Wm—Wymore silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Wymore: 90 percent

Minor components: 10 percent

Component Descriptions

Wymore

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey loess

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: High

Ecological site: Clay Upland (pe30-37)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 35 inches; silty clay

H3—35 to 60 inches; silty clay loam

Minor Components

Benfield

Composition: About 10 percent

Slope: 2 to 5 percent

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

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Wn—Wymore silty clay loam, 4 to 7 percent slopes

Map Unit Composition

Wymore: 90 percent

Minor components: 10 percent

Component Descriptions

Wymore

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey loess

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: High

Ecological site: Clay Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 35 inches; silty clay

H3—35 to 60 inches; silty clay loam

Minor Components

Benfield

Composition: About 10 percent

Slope: 2 to 5 percent

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

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Ws—Wymore Variant fine sandy loam, 1 to 3 percent slopes

Map Unit Composition

Wymore Variant: 85 percent

Minor components: 15 percent

Component Descriptions

Wymore Variant

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey loess

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.2 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: High

Ecological site: Loamy Upland (pe30-37)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 17 inches; fine sandy loam

H2—17 to 42 inches; silty clay

H3—42 to 60 inches; silty clay loam

Minor Components

Morrill

Composition: About 8 percent

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-37)

Ortello

Composition: About 7 percent

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Sandy (pe30-36)

Zo—Zook silty clay loam, occasionally flooded

Map Unit Composition

Zook: 90 percent

Minor components: 10 percent

Component Descriptions

Zook

MLRA: 106 - Nebraska and Kansas Loess-Drift Hills

Landform: Terrace on river valley

Parent material: Clayey alluvium

Slope: 0 to 1 percent

Drainage class: Poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 7.9 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 0 to 36 inches

Runoff class: Very high

Ecological site: Clay Lowland (pe30-37)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 8 inches; silty clay loam

H2—8 to 60 inches; silty clay

Minor Components

Eudora

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-37)

Muir

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Well drained

Ecological site: Loamy Terrace (pe30-36)