

Nontechnical Soil Descriptions
Shawnee County, Kansas

Nontechnical soil descriptions describe soil properties or management considerations specific to a soil map unit or group of map units, shown in the NonTechnical Descriptions report. These descriptions are written in terminology that Non-technical users of soil survey information can understand. Nontechnical soil descriptions are a powerful tool for creating reports. These high quality, easy to read reports can be generated by conservation planners and other NRCS employees for distribution to land users. Soil map unit descriptions and National Soil Information System records are the basis for these descriptions.

0450E Oska Silty Clay Loam, 3 To 6 Percent Slopes

Oska soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone and shale. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

045SV Sibleyville Complex, 7 To 15 Percent Slopes

Sibleyville soil makes up 50 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping to moderately steep hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from sandstone and shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderate. It has a low available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

045SX Vinland-Rock Outcrop Complex, 20 To 40 Percent Slopes

Vinland soil makes up 26 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a steep to steep hillslope on upland. The runoff class is high. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

045VM Vinland-Martin Complex, 7 To 15 Percent Slopes

Vinland soil makes up 40 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping to moderately steep hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Martin soil makes up 25 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

045WS Woodson Silt Loam, 1 To 3 Percent Slopes

Woodson soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping divide on upland. The runoff class is very high. The parent material consists of silty and clayey alluvium over silty and clayey residuum weathered from clayey shale. This soil is somewhat poorly drained. The slowest permeability is very slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

085KB Kennebec Soils, 0 To 3 Percent Slopes, Occasionally Flooded

Kennebec soil makes up 86 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 42 inches. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

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085MC Martin-Vinland Silty Clay Loams, 5 To 10 Percent Slopes

Martin soil makes up 48 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

Vinland soil makes up 40 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

085ZA Zook Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Zook soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is high. The parent material consists of silty and clayey alluvium. This soil is poorly drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

087EC Eudora-Bismarckgrove Fine Sandy Loams, 0 To 3 Percent Slopes, Overwash, Occasionally Flooded

Eudora soil makes up 65 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood-plain step on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Bismarckgrove soil makes up 20 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood-plain step on river valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

087HC Haig Silty Clay Loam, 0 To 2 Percent Slopes

Haig soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey loess. This soil is poorly drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

087KV Konawa Complex, 4 To 10 Percent Slopes

Konawa soil makes up 91 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy eolian deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Savannah (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

087RS Rossville Silt Loam, 0 To 2 Percent Slopes, Very Rarely Flooded

Rossville soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping terrace on river valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is very rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 1.

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087SO Shelby-Pawnee Complex, 8 To 12 Percent Slopes

Shelby soil makes up 65 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy till. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

Pawnee soil makes up 25 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of clayey till. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

087WC Wabash Silty Clay Loam, 0 To 1 Percent Slopes, Very Rarely Flooded

Wabash soil makes up 94 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level terrace on river valley. The runoff class is very high. The parent material consists of clayey alluvium. This soil is poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a very high shrink swell potential. This soil is very rare flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3w.

139ED Elmont Loam, 3 To 7 Percent Slopes

Elmont soil makes up 85 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

149KM Kimo Silty Clay, Rarely Flooded

Kimo soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood-plain step on river valley. The runoff class is high. The parent material consists of clayey alluvium over loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

197IB Irwin Silty Clay Loam, 1 To 3 Percent Slopes

Irwin soil makes up 80 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping shoulder hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from clayey shale. This soil is moderately well drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

197IV Ivan Silt Loam, Occasionally Flooded

Ivan soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of calcareous fine-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Loamy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 2w.

197IX Ivan Silty Clay Loam, Channeled

Ivan soil makes up 80 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of calcareous fine-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Loamy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 5w.

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197MR Morrill Loam, 4 To 7 Percent Slopes

Morrill soil makes up 75 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

197MS Morrill Loam, 5 To 12 Percent Slopes, Very Stony

Morrill, very stony, soil makes up 75 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping backslope hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

197SA Sarpy Loamy Sand, Frequently Flooded

Sarpy soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to moderately sloping flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is frequently flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 4s.

197WF Wamego Silty Clay Loam, 7 To 15 Percent Slopes

Wamego soil makes up 75 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping to moderately steep backslope hillslope on upland. The runoff class is very high. The parent material consists of sandy and silty residuum weathered from shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is slow. It has a low available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

197WY Wymore Silty Clay Loam, 2 To 6 Percent Slopes

Wymore soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping backslope, shoulder hillslope on upland. The runoff class is high. The parent material consists of silty and clayey loess. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

2797 Morrill Gravelly Loam, 4 To 20 Percent Slopes, Stony

Morrill, stony, soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

An Kennebec Silt Loam, Channeled

Kennebec soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 42 inches. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 5w.

Bk Martin-Kennebec Complex, 0 To 12 Percent Slopes

Martin soil makes up 54 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

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Kennebec soil makes up 43 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 42 inches. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 5w.

Br Fluvents, Channeled, Frequently Flooded

Fluvents soil makes up 97 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a moderate available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 36 inches. It is in the nonirrigated land capability classification 6w.

Dm Dwight-Martin Silty Clay Loams, 1 To 3 Percent Slopes

Dwight soil makes up 60 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from cherty limestone. This soil is moderately well drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clay Pan (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Martin soil makes up 30 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Ds Dwight Silty Clay Loam, 0 To 1 Percent Slopes

Dwight soil makes up 97 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from cherty limestone. This soil is moderately well drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clay Pan (pe35-42) range site. It is in the nonirrigated land capability classification 4s.

Dw Dwight Silty Clay Loam, 1 To 3 Percent Slopes

Dwight soil makes up 85 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from cherty limestone. This soil is moderately well drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clay Pan (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

E1 Elmont Silt Loam, 3 To 7 Percent Slopes

Elmont soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Em Elmont Silt Loam, 3 To 7 Percent Slopes, Eroded

Elmont, eroded, soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

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En Elmont Silt Loam, 7 To 12 Percent Slopes

Elmont soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Eo Elmont Silt Loam, 7 To 12 Percent Slopes, Eroded

Elmont, eroded, soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Ep Elmont-Dwight Silty Clay Loams, 3 To 7 Percent Slopes, Eroded

Elmont, eroded, soil makes up 75 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey residuum weathered from shale and siltstone. The soil is 40 to 60 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Dwight soil makes up 25 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to gently sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey loess. This soil is moderately well drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil contains a slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clay Pan (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Es Eudora Fine Sandy Loam, 1 To 3 Percent Slopes

Eudora soil makes up 95 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping fan terrace on river valley. The runoff class is low. The parent material consists of coarse-loamy colluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2e.

Et Eudora Silt Loam, Rarely Flooded

Eudora soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 1.

Eu Eudora Soils, 6 To 12 Percent Slopes, Eroded

Eudora soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping flood plain on river valley. The runoff class is medium. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Ev Eudora-Kimo Complex, Rarely Flooded

Eudora soil makes up 60 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Kimo soil makes up 30 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is medium. The parent material consists of clayey over loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Ew Eudora-Kimo Complex, Overwash, Rarely Flooded

Eudora soil makes up 60 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Kimo soil makes up 30 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is high. The parent material consists of clayey over loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Gm Gymer Silt Loam, 3 To 8 Percent Slopes

Gymer soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping backslope terrace on river valley. The runoff class is high. The parent material consists of fine-silty alluvium. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Gy Gymer Silt Loam, 3 To 8 Percent Slopes, Eroded

Gymer soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping backslope hillslope on upland. The runoff class is high. The parent material consists of fine-silty loess. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

INL Aquolls

Aquolls soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level river valley, -- Error in Exists On --. The runoff class is negligible. <parent material is missing> This soil is very poorly drained. It has a very low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is frequent ponded. The top of the seasonal high water table is at 1 inches. It is in the nonirrigated land capability classification 5w.

Kb Kennebec Silt Loam, Occasionally Flooded

Kennebec soil makes up 95 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 42 inches. This soil is in the Loamy Lowland (pe35-42) range site. It is in the nonirrigated land capability classification 2w.

Kc Chase Silt Loam, Occasionally Flooded

Chase soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping terrace on river valley. The runoff class is high. The parent material consists of silty and clayey alluvium. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a moderate shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

KF Kennebec Silt Loam, 0 To 2 Percent Slopes, Channeled, Frequently Flooded

Kennebec soil makes up 98 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is low. The parent material consists of silty alluvium. This soil is moderately well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 42 inches. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 5w.

Km Kimo Silty Clay Loam, Rarely Flooded

Kimo soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is medium. The parent material consists of clayey over loamy alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high available water capacity and a low shrink swell potential. This soil is rarely flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 2w.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Ko Kimo Soils, Depressional, Occasionally Flooded

Kimo soil makes up 95 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is negligible. The parent material consists of clayey over loamy alluvium. This soil is poorly drained. The slowest permeability is slow. It has a high available water capacity and a low shrink swell potential. This soil is occasionally flooded and is frequent ponded. The top of the seasonal high water table is at 1 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 5w.

Ks Kipson-Sogn Complex, 3 To 25 Percent Slopes

Kipson soil makes up 50 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to steep hillslope on upland. The runoff class is medium. The parent material consists of calcareous loamy residuum weathered from shale. The soil is 7 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 60 percent calcium carbonate. This soil is in the Limy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

Sogn soil makes up 35 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to moderately steep hillslope on upland. The runoff class is medium. The parent material consists of loamy residuum weathered from limestone. The soil is 4 to 20 inches deep to bedrock (lithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a very low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Shallow Limy (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

Ku Konawa Fine Sandy Loam, 4 To 8 Percent Slopes

Konawa soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Savannah (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Kw Konawa Fine Sandy Loam, 8 To 12 Percent Slopes

Konawa soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Savannah (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

La Labette Silty Clay Loam, 1 To 3 Percent Slopes

Labette soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone and shale. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 2e.

Lb Labette Silty Clay Loam, 3 To 6 Percent Slopes

Labette soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone and shale. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Lc Labette Silty Clay Loam, 3 To 6 Percent Slopes, Eroded

Labette, eroded, soil makes up 95 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone and shale. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is slow. It has a low available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Ld Ladysmith Silty Clay Loam, 0 To 1 Percent Slopes

Ladysmith soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level paleoterrace on upland. The runoff class is very high. The parent material consists of clayey alluvium. This soil is somewhat poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 2s.

Lm Ladysmith Silty Clay Loam, 1 To 3 Percent Slopes

Ladysmith soil makes up 85 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping paleoterrace on upland. The runoff class is very high. The parent material consists of clayey alluvium. This soil is somewhat poorly drained. The slowest permeability is impermeable. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Ls Ladysmith Silty Clay Loam, 1 To 3 Percent Slopes, Eroded

Ladysmith, eroded, soil makes up 100 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping paleoterrace on upland. The runoff class is very high. The parent material consists of clayey alluvium. This soil is somewhat poorly drained. The slowest permeability is impermeable. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Mb Martin Silty Clay Loam, 1 To 3 Percent Slopes

Martin soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 2e.

Mc Martin Silty Clay Loam, 3 To 7 Percent Slopes

Martin soil makes up 85 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Me Martin Silty Clay Loam, 3 To 7 Percent Slopes, Eroded

Martin, eroded, soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Mf Martin Silty Clay Loam, 7 To 11 Percent Slopes

Martin soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Mh Martin Silty Clay Loam, 7 To 11 Percent Slopes, Eroded

Martin, eroded, soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Mk Martin Soils, 3 To 7 Percent Slopes, Severely Eroded

Martin soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone and shale over silty and clayey residuum weathered from limestone and shale. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 24 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Mm Morrill Clay Loam, 3 To 8 Percent Slopes

Morrill soil makes up 91 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Mn Morrill Clay Loam, 3 To 8 Percent Slopes, Eroded

Morrill, eroded, soil makes up 91 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Mo Morrill Clay Loam, 8 To 12 Percent Slopes

Morrill soil makes up 91 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

MOO Morrill Loam, 3 To 7 Percent Slopes

Morrill soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Mp Morrill-Gravelly Land Complex, 4 To 12 Percent Slopes

Morrill soil makes up 55 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

Mr Muir Silt Loam, Rarely Flooded

Muir soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping terrace on river valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a very high available water capacity and a moderate shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. This soil is in the irrigated land capability class 1. It is in the nonirrigated land capability classification 1.

MRR Morrill Clay Loam, 3 To 7 Percent Slopes

Morrill soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Pa Pawnee Clay Loam, 0 To 3 Percent Slopes

Pawnee soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping hillslope on upland. The runoff class is high. The parent material consists of clayey drift. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 2e.

Pc Pawnee Clay Loam, 3 To 7 Percent Slopes

Pawnee soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope hillslope on upland. The runoff class is high. The parent material consists of clayey drift. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Pe Pawnee Clay Loam, 3 To 7 Percent Slopes, Eroded

Pawnee, eroded, soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope hillslope on upland. The runoff class is high. The parent material consists of clayey drift. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Pn Pawnee Clay Loam, 7 To 11 Percent Slopes

Pawnee soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is very high. The parent material consists of clayey drift. This soil is moderately well drained. The slowest permeability is slow. It has a moderate available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The top of the seasonal high water table is at 12 inches. The soil contains a maximum amount of 5 percent calcium carbonate. This soil is in the Clay Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

RD Reading Silt Loam, 0 To 2 Percent Slopes, Rarely Flooded

Reading soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping terrace on river valley. The runoff class is low. The parent material consists of fine-silty alluvium. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe35-42) range site. It is in the nonirrigated land capability classification 1.

Re Reading Silty Clay Loam, 0 To 2 Percent Slopes, Rarely Flooded

Reading soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping stream terrace on valley. The runoff class is medium. The parent material consists of silty alluvium. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is rarely flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 1.

Sa Sarpy Sand, Frequently Flooded

Sarpy soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is frequently flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 6s.

Se Sarpy-Eudora Complex, Overwash, Occasionally Flooded

Sarpy soil makes up 55 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is negligible. The parent material consists of sandy alluvium. This soil is excessively drained. The slowest permeability is rapid. It has a low available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3w.

Eudora soil makes up 45 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level flood plain on river valley. The runoff class is low. The parent material consists of coarse-silty alluvium. This soil is well drained. The slowest permeability is moderate. It has a high available water capacity and a low shrink swell potential. This soil is occasionally flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3w.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Sg Sharpsburg Silty Clay Loam, 1 To 3 Percent Slopes

Sharpsburg soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey loess. This soil is moderately well drained. The slowest permeability is moderately slow. It has a very high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 2e.

Sh Sharpsburg Silty Clay Loam, 3 To 6 Percent Slopes

Sharpsburg soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of silty and clayey loess. This soil is moderately well drained. The slowest permeability is moderately slow. It has a very high available water capacity and a high shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Sk Shelby Clay Loam, 1 To 3 Percent Slopes

Shelby soil makes up 95 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a gently sloping hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy drift. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 2e.

Sm Shelby Clay Loam, 3 To 8 Percent Slopes

Shelby soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy drift. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Sn Shelby Clay Loam, 3 To 8 Percent Slopes, Eroded

Shelby, eroded, soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy drift. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

So Shelby Clay Loam, 8 To 12 Percent Slopes

Shelby soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy drift. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. The soil contains a maximum amount of 30 percent calcium carbonate. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

Sp Morrill Fine Sandy Loam, 3 To 8 Percent Slopes

Morrill soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Sr Morrill Fine Sandy Loam, 3 To 8 Percent Slopes, Eroded

Morrill, eroded, soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy (pe30-37) range site. It is in the nonirrigated land capability classification 3e.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Ss Morrill Fine Sandy Loam, 8 To 12 Percent Slopes

Morrill soil makes up 85 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is high. The parent material consists of fine-loamy glaciofluvial deposits. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Sandy (pe30-37) range site. It is in the nonirrigated land capability classification 4e.

St Sibleyville Loam, 3 To 7 Percent Slopes

Sibleyville soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from sandstone and shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

Su Sibleyville Loam, 7 To 11 Percent Slopes

Sibleyville soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Cherokee Prairies Major Land Resource Area. This soil occurs on a strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from sandstone and shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderate. It has a moderate available water capacity and a low shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 4e.

Sv Sogn-Vinland Complex, 3 To 25 Percent Slopes

Sogn soil makes up 55 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep hillslope on upland. The runoff class is medium. The parent material consists of loamy residuum weathered from limestone. The soil is 4 to 20 inches deep to bedrock (lithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a very low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Shallow Limy (pe35-42) range site. It is in the nonirrigated land capability classification 7s.

Vinland soil makes up 25 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to steep hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6s.

Sw Vinland-Rock Outcrop Complex, 15 To 45 Percent Slopes

Vinland soil makes up 26 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately steep to steep hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-37) range site. It is in the nonirrigated land capability classification 6e.

Vn Vinland Silty Clay Loam, 4 To 10 Percent Slopes

Vinland soil makes up 100 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of sandy and silty residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderate. It has a low available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Limy Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Wa Wabash Silty Clay, Occasionally Flooded

Wabash soil makes up 90 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level terrace on river valley. The runoff class is very high. The parent material consists of clayey alluvium. This soil is poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a very high shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3w.

Nontechnical Soil Descriptions--Continued
Shawnee County, Kansas

Wb Wabash Silty Clay Loam, Occasionally Flooded

Wabash soil makes up 88 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a nearly level terrace on river valley. The runoff class is very high. The parent material consists of clayey alluvium. This soil is poorly drained. The slowest permeability is very slow. It has a moderate available water capacity and a very high shrink swell potential. This soil is occasionally flooded and is not ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe30-37) range site. It is in the nonirrigated land capability classification 3w.

We Welda Silt Loam, 4 To 10 Percent Slopes

Welda soil makes up 95 percent of the map unit. This map unit is in the Nebraska and Kansas Loess-Drift Hills Major Land Resource Area. This soil occurs on a moderately sloping to strongly sloping hillslope on upland. The runoff class is high. The parent material consists of silty and clayey sediments. This soil is well drained. The slowest permeability is moderately slow. It has a high available water capacity and a moderate shrink swell potential. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. This soil is in the Savannah (pe30-37) range site. It is in the nonirrigated land capability classification 3e.