

Nontechnical Soil Descriptions Elk 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.

015CS Clime-Sogn Complex, 3 To 15 Percent Slopes

Clime soil makes up 67 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, calcareous. 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. The soil contains a maximum amount of 10 percent calcium carbonate. This soil is in the Limy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Sogn soil makes up 30 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep summit hillslope on upland. The runoff class is medium. The parent material consists of loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification .

015LA Labette Silty Clay Loam, 1 To 3 Percent Slopes

Labette soil makes up 90 percent of the map unit. This map unit is in the Bluestem 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 residuum weathered from limestone-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 (pe30-36) range site. It is in the nonirrigated land capability classification 2e.

015LD Labette-Dwight Complex, 1 To 3 Percent Slopes

Labette soil makes up 50 percent of the map unit. This map unit is in the Bluestem 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 residuum weathered from limestone-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 (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

Dwight soil makes up 40 percent of the map unit. This map unit is in the Bluestem 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 limestone, cherty. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is moderately well drained. The slowest permeability is very 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 contains a very slightly saline horizon, it has a horizon that is moderately sodic. This soil is in the Clay Pan (pe30-36) range site. It is in the nonirrigated land capability classification .

015LS Ladysmith Silty Clay Loam, 0 To 2 Percent Slopes

Ladysmith soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping paleoterrace on upland. The runoff class is 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 seasonal high water table is at a depth of more than 6 feet. This soil is in the Clay Upland (pe25-34) range site. It is in the nonirrigated land capability classification 3e.

035FA Florence Cherty Silt Loam, 5 To 15 Percent Slopes

Florence soil makes up 85 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope, summit hillslope on upland. The runoff class is high. The parent material consists of clayey residuum weathered from clayey shale and/or clayey residuum weathered from cherty limestone. The soil is 40 to 60 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is moderately 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 (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

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035SD Sogn Silty Clay Loam, 0 To 10 Percent Slopes

Sogn soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 7s.

073CA Chase Silty Clay Loam, Occasionally Flooded

Chase soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain on river valley. The runoff class is medium. The parent material consists of silty and clayey alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high 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 36 inches. This soil is in the Loamy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 2w.

073EB Eram Silty Clay Loam, 1 To 4 Percent Slopes

Eram soil makes up 85 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping summit, backslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

073RE 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 Bluestem 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.

125BF Bates-Collinsville Complex, 1 To 4 Percent Slopes

Bates soil makes up 50 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping hillslope on upland. The runoff class is low. The parent material consists of sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-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 4e.

Collinsville soil makes up 40 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping backslope, summit hillslope on upland. The runoff class is low. The parent material consists of sandstone residuum. The soil is 4 to 20 inches deep to bedrock (lithic). This soil is somewhat excessively drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Sandstone (pe35-42) range site. It is in the nonirrigated land capability classification 6s.

125ET Eram-Talihina Silty Clay Loams, 6 To 20 Percent Slopes

Eram soil makes up 50 percent of the map unit. This map unit is in the Cherokee Prairies 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 residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6e.

Talihina soil makes up 35 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope hillslope on upland. The runoff class is very high. The parent material consists of residuum weathered from shale. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is slow. It has a very low 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 15 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 6s.

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1250S Osage Silty Clay, Occasionally Flooded

Osage soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level to gently sloping flood plain 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 occasionally ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe35-42) range site. It is in the nonirrigated land capability classification 3w.

205BA Bates Loam, 1 To 4 Percent Slopes

Bates soil makes up 99 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping hillslope on upland. The runoff class is low. The parent material consists of sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-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 2e.

205EB Eram Silt Loam, 1 To 3 Percent Slopes

Eram soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping summit, backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

205ND Niotaze-Darnell Complex, 4 To 30 Percent Slopes

Niotaze soil makes up 50 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to steep hillslope on upland. The runoff class is very high. The parent material consists of clayey residuum weathered from sandstone and shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is somewhat poorly 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 top of the seasonal high water table is at 18 inches. This soil is in the Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 35 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope hillslope on upland. The runoff class is medium. The parent material consists of loamy residuum weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6.

205PE Prue Loam, 2 To 5 Percent Slopes

Prue soil makes up 90 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping footslope hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy residuum weathered from sandstone and shale. This soil is moderately well drained. The slowest permeability is moderately slow. It has a 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 (pe35-42) range site. It is in the nonirrigated land capability classification 3e.

205SC Shidler-Catoosa Complex, 1 To 8 Percent Slopes

Shidler soil makes up 70 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to strongly sloping hillslope on upland. The runoff class is medium. The parent material consists of residuum weathered from limestone. The soil is 4 to 20 inches deep to bedrock (lithic). This soil is well 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 6e.

Catoosa soil makes up 15 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level to gently sloping summit hillslope on upland. The runoff class is low. The parent material consists of residuum weathered from limestone. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well 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 2.

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205SF Steedman Gravelly Silt Loam, 4 To 25 Percent Slopes, Stony

Steedman soil makes up 90 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to steep hillslope on upland. The runoff class is very high. The parent material consists of clayey residuum weathered from clayey shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 18 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

205SM Stephenville-Darnell Fine Sandy Loams, 2 To 6 Percent Slopes

Stephenville soil makes up 60 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping hillslope on upland. The runoff class is low. The parent material consists of fine-loamy residuum weathered from sandstone. 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 Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 30 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping shoulder, summit hillslope on upland. The runoff class is very low. The parent material consists of loamy residuum weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 4.

205WO Woodson Silt Loam, 0 To 1 Percent Slopes

Woodson soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level divide on upland. The runoff class is high. The parent material consists of silty and clayey alluvium over silty and clayey residuum weathered from shale, clayey. 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 15 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 2s.

Ba Bates Fine Sandy Loam, 1 To 4 Percent Slopes

Bates soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping hillslope on upland. The runoff class is low. The parent material consists of sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-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 (pe24-32) range site. It is in the nonirrigated land capability classification 2e.

Bb Bates Loam, 4 To 7 Percent Slopes

Bates soil makes up 90 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 sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-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 (pe24-32) range site. It is in the nonirrigated land capability classification 3e.

Bf Benfield Cherty Silt Loam, 4 To 10 Percent Slopes

Benfield soil makes up 85 percent of the map unit. This map unit is in the Bluestem 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 calcareous clayey 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 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 (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Cd Catoosa Silt Loam, 0 To 2 Percent Slopes

Catoosa soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level to gently sloping backslope hillslope on upland. The runoff class is low. The parent material consists of residuum weathered from limestone. The soil is 20 to 40 inches deep to bedrock (lithic). 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 Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 2e.

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Cf Catoosa-Sogn Complex, 0 To 8 Percent Slopes

Catoosa soil makes up 55 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level to strongly sloping summit hillslope on upland. The runoff class is low. The parent material consists of residuum weathered from limestone. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is well 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 (pe30-36) 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 Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level to strongly sloping hillslope on upland. The runoff class is low. The parent material consists of loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 7s.

Ck Clime Stony Silty Clay Loam, 20 To 30 Percent Slopes

Clime soil makes up 100 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a steep to steep backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from shale, calcareous. 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. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Limy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 7e.

Cm Clime Silty Clay, 3 To 7 Percent Slopes

Clime soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping summit, backslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, calcareous. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Limy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 4e.

Cs Clime-Sogn Complex, 5 To 20 Percent Slopes

Clime soil makes up 65 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from shale, calcareous. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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. The soil contains a maximum amount of 15 percent calcium carbonate. This soil is in the Limy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Sogn soil makes up 20 percent of the map unit. This map unit is in the Bluestem 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 loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 7s.

Cv Collinsville-Bates Fine Sandy Loams, 2 To 8 Percent Slopes

Collinsville soil makes up 55 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to strongly sloping summit, backslope hillslope on upland. The runoff class is very low. The parent material consists of sandstone residuum. The soil is 4 to 20 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Sandstone (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Bates soil makes up 35 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping hillslope on upland. The runoff class is low. The parent material consists of sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-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 (pe24-32) range site. It is in the nonirrigated land capability classification 3e.

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De Dennis Silt Loam, 1 To 4 Percent Slopes

Dennis soil makes up 100 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping backslope, summit hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. 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 15 inches. This soil is in the Loamy Upland (pe24-32) range site. It is in the nonirrigated land capability classification 2e.

Df Dennis Silt Loam, 4 To 7 Percent Slopes

Dennis soil makes up 100 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a moderately sloping backslope, footslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. 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 15 inches. This soil is in the Loamy Upland (pe24-32) range site. It is in the nonirrigated land capability classification 3e.

Dg Dennis Silty Clay Loam, 3 To 7 Percent Slopes, Eroded

Dennis, eroded, soil makes up 100 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping backslope, footslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. 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 15 inches. This soil is in the Loamy Upland (pe24-32) range site. It is in the nonirrigated land capability classification 4e.

Dw Dwight Silt Loam, 0 To 2 Percent Slopes

Dwight soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from limestone, cherty. The soil is 40 to 60 inches deep to bedrock (lithic). This soil is moderately well drained. The slowest permeability is very 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 contains a slightly saline horizon. This soil is in the Clay Pan (pe30-36) range site. It is in the nonirrigated land capability classification 4s.

Em Eram Silt Loam, 1 To 4 Percent Slopes

Eram soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping backslope, summit hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

En Eram Silty Clay Loam, 4 To 7 Percent Slopes

Eram soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 4e.

Eo Eram Silty Clay Loam, 3 To 7 Percent Slopes, Eroded

Eram, eroded, soil makes up 90 percent of the map unit. This map unit is in the Bluestem 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 silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Es Eram-Dwight Silt Loams, 1 To 4 Percent Slopes

Eram soil makes up 70 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping summit, footslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from shale, unspecified. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 12 inches. This soil is in the Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

Nontechnical Soil Descriptions--Continued
Elk County, Kansas

Dwight soil makes up 30 percent of the map unit. This map unit is in the Bluestem 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 limestone, cherty. The soil is 40 to 60 inches deep to bedrock (lithic). This soil is moderately well drained. The slowest permeability is very 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 contains a very slightly saline horizon. This soil is in the Clay Pan (pe30-36) range site. It is in the nonirrigated land capability classification 4s.

Fe Fiat Silty Clay Loam, 1 To 3 Percent Slopes

Fiat soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping summit, backslope hillslope on upland. The runoff class is high. The parent material consists of clayey material weathered from limestone and shale. The soil is 20 to 40 inches deep to bedrock (lithic). This soil is somewhat poorly 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 top of the seasonal high water table is at 9 inches. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

Fm Florence-Martin Complex, 2 To 12 Percent Slopes

Florence soil makes up 60 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to strongly sloping backslope, summit hillslope on upland. The runoff class is high. The parent material consists of limestone, cherty. The soil is 40 to 60 inches deep to bedrock (lithic). This soil is well drained. The slowest permeability is moderately 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 (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Martin soil makes up 30 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently 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 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 seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 4e.

Iv Ivan Silt Loam, Channeled

Ivan soil makes up 85 percent of the map unit. This map unit is in the Bluestem 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 calcareous 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. This soil is in the Loamy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 5w.

Iw Ivan Silt Loam, Occasionally Flooded

Ivan soil makes up 90 percent of the map unit. This map unit is in the Bluestem 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 calcareous 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 5 percent calcium carbonate. This soil is in the Loamy Lowland (pe30-36) range site. It is in the nonirrigated land capability classification 2w.

Kd Kenoma Silt Loam, 1 To 3 Percent Slopes

Kenoma soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping summit hillslope on upland. The runoff class is very high. The parent material consists of loess over ancient clayey alluvium and/or residuum weathered from limestone and shale. This soil is well 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 72 inches. This soil contains a very slightly saline horizon. This soil is in the Clay Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

La Labette Silty Clay Loam, 1 To 4 Percent Slopes

Labette soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping summit, backslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone-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 Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 2e.

Nontechnical Soil Descriptions--Continued
Elk County, Kansas

Ld Labette-Dwight Complex, 0 To 3 Percent Slopes

Labette soil makes up 65 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping summit hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone-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 Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

Dwight soil makes up 35 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey residuum weathered from limestone, cherty. The soil is 40 to 60 inches deep to bedrock (lithic). This soil is moderately well drained. The slowest permeability is very 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 contains a slightly saline horizon. This soil is in the Clay Pan (pe30-36) range site. It is in the nonirrigated land capability classification 4s.

Lg Labette-Sogn Silty Clay Loams, 0 To 8 Percent Slopes

Labette soil makes up 55 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to moderately sloping summit, backslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey residuum weathered from limestone-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 Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 2e.

Sogn soil makes up 35 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to strongly sloping shoulder hillslope on upland. The runoff class is low. The parent material consists of loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 6e.

Ln Lanton Silty Clay Loam, Occasionally Flooded

Lanton soil makes up 100 percent of the map unit. This map unit is in the Cross Timbers 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 silty and clayey alluvium. This soil is somewhat poorly drained. The slowest permeability is slow. It has a high 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 18 inches. This soil is in the Loamy Lowland (pe35-38) range site. It is in the nonirrigated land capability classification 2w.

Mb Martin Silty Clay Loam, 1 To 4 Percent Slopes

Martin soil makes up 85 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a gently sloping to 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. The soil is 40 to 60 inches deep to bedrock (paralithic). 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 30 inches. This soil is in the Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 2e.

Mc Martin Silty Clay Loam, 4 To 7 Percent Slopes

Martin soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope hillslope on upland. The runoff class is very high. The parent material consists of silty and clayey colluvium derived from limestone-shale over silty and clayey residuum weathered from limestone-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 seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 3e.

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

Martin, eroded, soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a moderately sloping backslope, footslope hillslope on upland. The runoff class is high. The parent material consists of silty and clayey colluvium derived from limestone-shale over silty and clayey residuum weathered from limestone-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 seasonal high water table is at a depth of more than 6 feet. This soil is in the Loamy Upland (pe30-36) range site. It is in the nonirrigated land capability classification 4e.

Nontechnical Soil Descriptions--Continued
Elk County, Kansas

Mn Mason Silt Loam, Rarely Flooded

Mason soil makes up 90 percent of the map unit. This map unit is in the Cherokee Prairies Major Land Resource Area. This soil occurs on a nearly level stream terrace on river valley. The runoff class is low. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 1.

Nc Newtonia Silt Loam, 1 To 3 Percent Slopes

Newtonia soil makes up 100 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping summit hillslope on upland. The runoff class is low. The parent material consists of silty and clayey residuum weathered from limestone and shale. This soil is well drained. The slowest permeability is moderately slow. It has a 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 (pe24-32) range site. It is in the nonirrigated land capability classification 2e.

Nd Niotaze-Darnell Complex, 6 To 35 Percent Slopes

Niotaze soil makes up 75 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to steep backslope, summit hillslope on upland. The runoff class is very high. The parent material consists of clayey residuum weathered from sandstone and shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is somewhat poorly 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 top of the seasonal high water table is at 18 inches. This soil is in the Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 15 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope, summit hillslope on upland. The runoff class is low. The parent material consists of loamy material weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

NDD Niotaze-Darnell Complex, 8 To 20 Percent Slopes

Niotaze soil makes up 55 percent of the map unit. This map unit is in the Cross Timbers 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 residuum weathered from sandstone over residuum weathered from shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is somewhat poorly 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 top of the seasonal high water table is at 18 inches. This soil is in the Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 35 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a strongly sloping to moderately steep backslope hillslope on upland. The runoff class is low. The parent material consists of residuum weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6.

Os Osage Silty Clay Loam, Occasionally Flooded

Osage soil makes up 100 percent of the map unit. This map unit is in the Cherokee Prairies 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 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 occasional ponded. The top of the seasonal high water table is at 6 inches. This soil is in the Clay Lowland (pe35-38) range site. It is in the nonirrigated land capability classification 2w.

Pr Prue Fine Sandy Loam, 2 To 6 Percent Slopes

Prue soil makes up 100 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping footslope hillslope on upland. The runoff class is medium. The parent material consists of fine-loamy residuum weathered from sandstone and shale. This soil is moderately 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 (pe24-32) range site. It is in the nonirrigated land capability classification 3e.

Sh Sogn Silty Clay Loam, 0 To 3 Percent Slopes

Sogn soil makes up 85 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping summit hillslope on upland. The runoff class is low. The parent material consists of loamy residuum weathered from limestone, unspecified. 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 (pe30-36) range site. It is in the nonirrigated land capability classification 7s.

Nontechnical Soil Descriptions--Continued
Elk County, Kansas

St Steedman Stony Loam, 5 To 20 Percent Slopes

Steedman soil makes up 85 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a moderately sloping to moderately steep backslope hillslope on upland. The runoff class is very high. The parent material consists of clayey residuum weathered from clayey shale. The soil is 20 to 40 inches deep to bedrock (paralithic). This soil is moderately 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 top of the seasonal high water table is at 18 inches. The soil contains a maximum amount of 1 percent calcium carbonate. This soil is in the Loamy Upland (pe24-32) range site. It is in the nonirrigated land capability classification 6e.

Sv Stephenville Fine Sandy Loam, 1 To 4 Percent Slopes

Stephenville soil makes up 95 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping summit hillslope on upland. The runoff class is low. The parent material consists of fine-loamy material weathered from sandstone. 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 Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 2e.

Sw Stephenville-Darnell Fine Sandy Loams, 1 To 6 Percent Slopes

Stephenville soil makes up 50 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping summit hillslope on upland. The runoff class is low. The parent material consists of fine-loamy material weathered from sandstone. 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 Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 40 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping shoulder, backslope hillslope on upland. The runoff class is very low. The parent material consists of loamy material weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is well drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 4e.

SXX Stephenville-Darnell Fine Sandy Loams, 1 To 5 Percent Slopes

Stephenville soil makes up 50 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping shoulder ridge on upland. The runoff class is low. The parent material consists of residuum weathered from sandstone. 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 Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 6e.

Darnell soil makes up 40 percent of the map unit. This map unit is in the Cross Timbers Major Land Resource Area. This soil occurs on a gently sloping to moderately sloping shoulder ridge on upland. The runoff class is very low. The parent material consists of residuum weathered from sandstone. The soil is 10 to 20 inches deep to bedrock (paralithic). This soil is somewhat excessively drained. The slowest permeability is moderately rapid. It has a very 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 Shallow Savannah (pe35-38) range site. It is in the nonirrigated land capability classification 4.

Vd Verdigris Silt Loam, Channeled

Verdigris soil makes up 85 percent of the map unit. This map unit is in the Bluestem 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 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. This soil is in the Loamy Lowland (pe35-38) range site. It is in the nonirrigated land capability classification 5w.

Vf Verdigris Silt Loam, Occasionally Flooded

Verdigris soil makes up 100 percent of the map unit. This map unit is in the Cross Timbers 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 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. This soil is in the Loamy Lowland (pe35-38) range site. It is in the nonirrigated land capability classification 2w.

NONTECHNICAL SOIL DESCRIPTIONS--Continued
Elk County, Kansas

Wo Woodson Silt Loam, 0 To 2 Percent Slopes

Woodson soil makes up 90 percent of the map unit. This map unit is in the Bluestem Hills Major Land Resource Area. This soil occurs on a nearly level to gently sloping divide on upland. The runoff class is 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 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 15 inches. This soil is in the Clay Upland (pe35-42) range site. It is in the nonirrigated land capability classification 2s.

