

WATER MANAGEMENT  
Stafford County, Kansas

The soils of the survey area are rated in the Water Management table according to limitations that affect their suitability for water management. Soils are rated for pond reservoir areas, drainage, irrigation, terraces and diversions, and grassed waterways. Restrictive features that affect each soil for the specified use is also provided in the table.

The ratings in the table are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Moderately limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Limited indicates that the soil has one or more features that are significant limitations for the specified use. The limitations can be overcome, but generally require special design, soil reclamation, or installation procedures that may result in additional expense. Fair performance and moderate to high maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Limitation class terms, such as very limited or limited, etc., limitation ratings, and numerical ratings are shown for each soil feature listed. As many as three soil features may be listed for each soil component if applicable. The overall limitation rating for the soil component is based on the most severe limitation.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects traffic ability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, to a cemented pan, or to other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and the potential for frost action. Excavating and grading and the stability of ditch banks are affected by depth to bedrock or to a cemented pan, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage is adversely affected by extreme acidity or by toxic substances in the root zone, such as salts, sodium, and sulfur. Availability of drainage outlets is not considered in the ratings.

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock or to a cemented pan. The performance of a system is affected by the depth of the root zone, the amount of salts or sodium, and soil reaction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to control erosion and conserve moisture by intercepting runoff. Slope, wetness, large stones, and depth to bedrock or to a cemented pan affect the construction of terraces and diversions. A restricted rooting depth, a very limited hazard of wind erosion or water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Grassed waterways are natural or constructed channels, generally broad and shallow, which conduct surface water to outlets at a non-erosive velocity. Large stones, wetness, slope, and depth to bedrock or to a cemented pan affect the construction of grassed waterways. A hazard of wind erosion, low available water capacity, restricted rooting depth, toxic substances such as salts and sodium, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

WATER MANAGEMENT--Continued  
Stafford County, Kansas

(The information in this report indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
009DT: Dillwyn-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
009TV: Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
047CS: Carwile-----	Limitation: percs slowly	Limitation: percs slowly wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly rooting depth
Drummond-----	Limitation: excess sodium percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily excess sodium droughty
151KP: Kanza-----	Limitation: flooding cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Plevna-----	Limitation: flooding	Limitation: flooding wetness soil blowing	Limitation: wetness soil blowing	Limitation: wetness
159DP: Dillwyn-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Plevna-----	Limitation: flooding cutbanks cave	Limitation: fast intake wetness soil blowing	Limitation: too sandy wetness soil blowing	Limitation: wetness
159DT: Dillwyn-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
159DU: Drummond-----	Limitation: excess sodium percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily excess sodium droughty
159PE: Plevna-----	Limitation: flooding cutbanks cave	Limitation: flooding wetness soil blowing	Limitation: too sandy wetness soil blowing	Limitation: wetness
990: Abbyville-----	Limitation: excess sodium	Limitation: excess sodium excess salt wetness	Limitation: wetness	Limitation: excess sodium
991: Abbyville, rarely flooded-	Limitation: excess sodium	Limitation: excess sodium excess salt wetness	Limitation: wetness	Limitation: excess sodium
Kisiwa, occasionally flooded-----	Limitation: excess sodium percs slowly ponding	Limitation: excess sodium percs slowly ponding	Limitation: erodes easily percs slowly ponding	Limitation: erodes easily excess sodium wetness
1005: Albion-----	Limitation: deep to water	Limitation: soil blowing	Limitation: too sandy soil blowing	Favorable
1011: Albion-----	Limitation: deep to water	Limitation: soil blowing	Limitation: too sandy soil blowing	Favorable

WATER MANAGEMENT--Continued  
Stafford County, Kansas

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Shellabarger----	Limitation: deep to water	Favorable	Limitation: soil blowing	Favorable
1324: Carway-----	Limitation: percs slowly	Limitation: wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly wetness
Carbika-----	Limitation: percs slowly ponding	Limitation: percs slowly soil blowing ponding	Limitation: erodes easily soil blowing ponding	Limitation: erodes easily percs slowly wetness
1359: Clark-----	Limitation: deep to water	Favorable	Favorable	Favorable
Ost-----	Limitation: deep to water	Favorable	Favorable	Favorable
1553: Darlow-----	Limitation: deep to water	Limitation: excess sodium excess salt percs slowly	Limitation: percs slowly	Limitation: excess sodium percs slowly
Elmer-----	Limitation: deep to water	Limitation: excess sodium soil blowing	Limitation: erodes easily soil blowing	Limitation: erodes easily excess sodium
1555: Dillhut-----	Favorable	Limitation: wetness droughty	Limitation: wetness soil blowing	Limitation: droughty
Plev-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
1556: Dillhut-----	Favorable	Limitation: wetness droughty	Limitation: wetness soil blowing	Limitation: droughty
Solvay-----	Favorable	Limitation: wetness soil blowing	Limitation: wetness soil blowing	Favorable
1725: Farnum-----	Limitation: deep to water	Favorable	Favorable	Favorable
Funmar-----	Limitation: deep to water	Limitation: percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
1726: Farnum-----	Limitation: deep to water	Favorable	Favorable	Favorable
Funmar-----	Limitation: deep to water	Limitation: percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
1985: Hayes-----	Limitation: deep to water	Limitation: fast intake soil blowing	Limitation: soil blowing	Favorable
1986: Hayes-----	Limitation: deep to water	Limitation: fast intake soil blowing	Limitation: soil blowing	Favorable
Solvay-----	Favorable	Limitation: wetness soil blowing	Limitation: wetness soil blowing	Favorable
1987: Hayes-----	Limitation: deep to water	Limitation: fast intake soil blowing	Limitation: soil blowing	Favorable
Turon-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
1988: Hayes-----	Limitation: deep to water	Limitation: fast intake soil blowing	Limitation: soil blowing	Favorable
2381: Kanza-----	Limitation: flooding cutbanks cave	Limitation: wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
Ninnescah-----	Limitation: flooding cutbanks cave	Limitation: wetness soil blowing	Limitation: too sandy wetness soil blowing	Limitation: wetness

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
2556: Langdon-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
2958: Ninnescah-----	Limitation: flooding cutbanks cave	Limitation: flooding wetness soil blowing	Limitation: too sandy wetness soil blowing	Limitation: wetness
3053: Ost-----	Limitation: deep to water	Favorable	Favorable	Favorable
3180: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
3181: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Turon-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
3511: Saltcreek-----	Limitation: deep to water	Limitation: soil blowing	Limitation: erodes easily percs slowly soil blowing	Limitation: erodes easily percs slowly
Naron, sandy substratum-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
3512: Saltcreek-----	Limitation: deep to water	Limitation: soil blowing	Limitation: erodes easily percs slowly soil blowing	Limitation: erodes easily percs slowly
Naron-----	Limitation: deep to water	Favorable	Limitation: soil blowing	Favorable
3520: Saxman-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: droughty
3540: Solvay-----	Favorable	Limitation: wetness soil blowing	Limitation: wetness soil blowing	Favorable
3639: Taver-----	Limitation: deep to water	Limitation: percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
3640: Tivin-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
3641: Tivin-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
Dillhut-----	Favorable	Limitation: wetness droughty	Limitation: wetness soil blowing	Limitation: droughty
3644: Turon-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Carway-----	Limitation: percs slowly	Limitation: wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly wetness
3926: Water-----	---	---	---	---
An: Albion-----	Limitation: deep to water	Limitation: soil blowing droughty	Limitation: too sandy soil blowing	Limitation: droughty
At: Attica-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Ba: Blanket-----	Limitation: deep to water	Limitation: erodes easily	Limitation: erodes easily	Limitation: erodes easily
BIG: Big Salt Marsh--	---	---	---	---
Ca: Carwile-----	Limitation: percs slowly	Limitation: percs slowly wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly rooting depth
Cw: Carwile-----	Limitation: percs slowly	Limitation: percs slowly wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly rooting depth
Cx: Clark-----	Limitation: deep to water	Favorable	Favorable	Favorable
Dp: Dillwyn-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Plevna-----	Limitation: flooding	Limitation: flooding wetness soil blowing	Limitation: wetness soil blowing	Limitation: wetness
Dt: Dillwyn-----	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness soil blowing	Limitation: wetness droughty
Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
Fa: Farnum-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
Fr: Farnum-----	Limitation: deep to water	Favorable	Favorable	Favorable
GRP: Gravel Pits----	---	---	---	---
INT: Aquolls-----	---	---	---	---
Kg: Kingman-----	Limitation: flooding	Limitation: flooding wetness	Limitation: wetness	Limitation: wetness
M-W: Miscellaneous Water-----	---	---	---	---
Na: Naron-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
NAA: Naron-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
NBB: Naron-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
Nu: Natrustolls----	Limitation: excess salt flooding percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily excess sodium excess salt
Pa: Plevna-----	Limitation: flooding	Limitation: flooding wetness soil blowing	Limitation: wetness soil blowing	Limitation: wetness
Pc: Plevna-----	Limitation: flooding	Limitation: flooding wetness soil blowing	Limitation: wetness soil blowing	Limitation: wetness
Ph: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Po: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Pr: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Carwile-----	Limitation: percs slowly	Limitation: percs slowly wetness soil blowing	Limitation: erodes easily wetness soil blowing	Limitation: erodes easily percs slowly rooting depth
Pt: Pratt-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
Ta: Tabler-----	Limitation: percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly
TAA: Tabler-----	Limitation: percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly
Tv: Tivoli-----	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
W: Water-----	---	---	---	---
Wa: Waldeck-----	Limitation: flooding cutbanks cave	Limitation: flooding wetness soil blowing	Limitation: too sandy wetness soil blowing	Favorable
Za: Zenda-----	Limitation: flooding	Limitation: flooding wetness	Limitation: wetness	Favorable
Natrustolls----	Limitation: excess salt flooding percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily excess sodium excess salt
ZSS: Drummond-----	Limitation: excess sodium excess salt percs slowly	Limitation: percs slowly wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily excess sodium excess salt
Zenda-----	Limitation: flooding	Limitation: flooding wetness	Limitation: wetness	Favorable

WATER MANAGEMENT--Continued  
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Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer- fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
009DT: Dillwyn-----	60	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.18	Very limited Cutbanks cave Deep to water	1.00 0.00
Tivoli-----	40	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
009TV: Tivoli-----	100	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
047CS: Carwile-----	90	Somewhat limited Seepage	0.57	Very limited Ponding Depth to saturated zone	1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.30 0.10
Drummond-----	10	Not limited		Somewhat limited Seepage	0.09	Somewhat limited Deep to water Cutbanks cave Salty water	0.81 0.10 0.01
151KP: Kanza-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.98	Very limited Cutbanks cave	1.00
Plevna-----	50	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
159DP: Dillwyn-----	60	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.18	Very limited Cutbanks cave Deep to water	1.00 0.00
Plevna-----	40	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
159DT: Dillwyn-----	60	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Cutbanks cave Deep to water	1.00 0.00
Tivoli-----	40	Very limited Seepage Slope	1.00 0.01	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
159DU: Drummond-----	100	Not limited		Not limited		Somewhat limited Deep to water Cutbanks cave Salty water	0.81 0.10 0.01
159PE: Plevna-----	100	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
990: Abbyville-----	95	Not limited		Very limited Piping Depth to saturated zone Seepage	1.00 0.43 0.04	Very limited Slow refill Deep to water Cutbanks cave Salty water	1.00 0.25 0.10 0.01
991: Abbyville, rarely flooded-----	45	Not limited		Very limited		Very limited	

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Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer- fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Kisiwa, occasionally flooded-----	40	Very limited  Seepage	1.00	Very limited  Ponding Depth to saturated zone Seepage Piping	1.00 0.43 0.04 1.00 1.00	Very limited  Slow refill Deep to water Cutbanks cave Salty water	1.00 0.25 0.10 0.01
1005: Albion-----	75	Very limited Seepage	1.00	Somewhat limited Seepage	0.90	Very limited Deep to water	1.00
1011: Albion-----	70	Very limited Seepage	1.00	Somewhat limited Seepage	0.90	Very limited Deep to water	1.00
Shellabarger-----	30	Somewhat limited Seepage	0.70	Somewhat limited Seepage	0.88	Very limited Deep to water	1.00
1324: Carway-----	50	Somewhat limited Seepage	0.70	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Deep to water	1.00
Carbika-----	30	Somewhat limited Seepage	0.70	Very limited Ponding Depth to saturated zone Piping	1.00 1.00 0.40	Very limited Deep to water	1.00
1359: Clark-----	70	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.52	Very limited Deep to water	1.00
Ost-----	30	Somewhat limited Seepage	0.05	Somewhat limited Piping	0.82	Very limited Deep to water	1.00
1553: Darlow-----	70	Somewhat limited Seepage	0.70	Very limited Piping Salinity Seepage	1.00 0.12 0.12	Very limited Deep to water	1.00
Elmer-----	20	Very limited Seepage	1.00	Very limited Piping Seepage	1.00 0.10	Very limited Deep to water	1.00
1555: Dillhut-----	35	Very limited Seepage	1.00	Somewhat limited Seepage	0.13	Very limited Deep to water	1.00
Plev-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Deep to water	1.00
1556: Dillhut-----	30	Very limited Seepage	1.00	Somewhat limited Seepage	0.13	Very limited Deep to water	1.00
Solvay-----	30	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.56 0.43	Very limited Cutbanks cave Deep to water	1.00 0.25
1725: Farnum-----	40	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.01	Very limited Deep to water	1.00
Funmar-----	40	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00



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Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer- fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1726: Farnum-----	40	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.01	Very limited Deep to water	1.00
Funmar-----	40	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
1985: Hayes-----	60	Very limited Seepage	1.00	Somewhat limited Piping	0.42	Very limited Deep to water	1.00
1986: Hayes-----	55	Very limited Seepage	1.00	Somewhat limited Piping	0.42	Very limited Deep to water	1.00
Solvay-----	20	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.44 0.43	Very limited Cutbanks cave Deep to water	1.00 0.25
1987: Hayes-----	40	Very limited Seepage	1.00	Somewhat limited Piping	0.42	Very limited Deep to water	1.00
Turon-----	35	Very limited Seepage	1.00	Somewhat limited Piping Seepage	0.87 0.77	Very limited Deep to water	1.00
1988: Hayes-----	70	Very limited Seepage	1.00	Somewhat limited Piping	0.42	Very limited Deep to water	1.00
2381: Kanza-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.90	Very limited Cutbanks cave	1.00
Ninnescah-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.12	Very limited Cutbanks cave Deep to water	1.00 0.00
2556: Langdon-----	50	Very limited Seepage	1.00	Somewhat limited Seepage	0.50	Very limited Deep to water	1.00
2958: Ninnescah-----	85	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.12	Very limited Cutbanks cave Deep to water	1.00 0.00
3053: Ost-----	85	Somewhat limited Seepage	0.05	Somewhat limited Piping	0.82	Very limited Deep to water	1.00
3180: Pratt-----	85	Very limited Seepage	1.00	Somewhat limited Seepage	0.86	Very limited Deep to water	1.00
3181: Pratt-----	45	Very limited Seepage	1.00	Somewhat limited Seepage	0.86	Very limited Deep to water	1.00
Turon-----	30	Very limited Seepage	1.00	Somewhat limited Piping Seepage	0.87 0.77	Very limited Deep to water	1.00
3511: Saltcreek-----	70	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
Naron, sandy substratum-----	30	Very limited Seepage	1.00	Somewhat limited Seepage	0.90	Very limited Deep to water	1.00
3512: Saltcreek-----	50	Somewhat limited		Not limited		Very limited	

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		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Naron-----	50	Seepage	0.70			Deep to water	1.00
		Very limited Seepage	1.00	Somewhat limited Seepage	0.55	Very limited Deep to water	1.00
3520: Saxman-----	85	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 0.86	Very limited Cutbanks cave Deep to water	1.00 0.06
3540: Solvay-----	90	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.44 0.43	Very limited Cutbanks cave Deep to water	1.00 0.25
3639: Taver-----	90	Somewhat limited Seepage	0.70	Somewhat limited Seepage	0.00	Very limited Deep to water	1.00
3640: Tivin-----	95	Very limited Seepage Slope	1.00 0.03	Very limited Seepage	1.00	Very limited Deep to water	1.00
3641: Tivin-----	45	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Deep to water	1.00
Dillhut-----	40	Very limited Seepage	1.00	Somewhat limited Seepage	0.13	Very limited Deep to water	1.00
3644: Turon-----	65	Very limited Seepage	1.00	Somewhat limited Piping Seepage	0.87 0.77	Very limited Deep to water	1.00
Carway-----	20	Somewhat limited Seepage	0.70	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Deep to water	1.00
3926: Water-----	100	Not rated		Not rated		Not rated	
An: Albion-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.91	Very limited Deep to water	1.00
At: Attica-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.09	Very limited Deep to water	1.00
Ba: Blanket-----	100	Somewhat limited Seepage	0.70	Somewhat limited Hard to pack	0.37	Very limited Deep to water	1.00
BIG: Big Salt Marsh-----	100	Not rated		Not rated		Not rated	
Ca: Carwile-----	100	Somewhat limited Seepage	0.57	Very limited Ponding Depth to saturated zone	1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.30 0.10
Cw: Carwile-----	100	Somewhat limited Seepage	0.57	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.02	Somewhat limited Slow refill Cutbanks cave	0.30 0.10
Cx: Clark-----	100	Somewhat limited		Somewhat limited		Very limited	

WATER MANAGEMENT--Continued  
Stafford County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer- fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Seepage	0.70	Piping	0.12	Deep to water	1.00
Dp: Dillwyn-----	65	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Cutbanks cave	1.00
Plevna-----	35	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Deep to water	0.00
						Very limited Cutbanks cave	1.00
Dt: Dillwyn-----	65	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Cutbanks cave	1.00
						Deep to water	0.00
Tivoli-----	35	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
Fa: Farnum-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.36	Very limited Deep to water	1.00
Fr: Farnum-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.23	Very limited Deep to water	1.00
GRP: Gravel Pits-----	100	Not rated		Not rated		Not rated	
INT: Aquolls-----	100	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Somewhat limited Cutbanks cave	0.10
Kg: Kingman-----	100	Somewhat limited Seepage	0.57	Very limited Depth to saturated zone Seepage Piping	1.00 0.08 0.07	Somewhat limited Slow refill	0.43
						Cutbanks cave	0.10
M-W: Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Na: Naron-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.08	Very limited Deep to water	1.00
NAA: Naron-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.08	Very limited Deep to water	1.00
NBB: Naron-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.08	Very limited Deep to water	1.00
Nu: Natrustolls-----	100	Not limited		Somewhat limited Depth to saturated zone Salinity	0.43 0.12	Somewhat limited Salty water	0.50
						Deep to water	0.25
						Cutbanks cave	0.10
Pa: Plevna-----	100	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Cutbanks cave	1.00
Pc: Plevna-----	100	Very limited		Very limited		Very limited	

WATER MANAGEMENT--Continued  
Stafford County, Kansas

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct of map unit	Pond Reservoir Area		Embankments, Dikes, and Levees		Excavated Ponds (Aquifer- fed)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Seepage	1.00	Seepage Depth to saturated zone	1.00 1.00	Cutbanks cave	1.00
Ph: Pratt-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.57	Very limited Deep to water	1.00
Po: Pratt-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.57	Very limited Deep to water	1.00
Pr: Pratt-----	60	Very limited Seepage	1.00	Somewhat limited Seepage	0.57	Very limited Deep to water	1.00
Carwile-----	40	Somewhat limited Seepage	0.57	Very limited Ponding Depth to saturated zone Seepage	1.00 1.00 0.02	Somewhat limited Slow refill Cutbanks cave	0.30 0.10
Pt: Pratt-----	65	Very limited Seepage	1.00	Somewhat limited Seepage	0.57	Very limited Deep to water	1.00
Tivoli-----	35	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
Ta: Tabler-----	100	Not limited		Somewhat limited Hard to pack	0.19	Very limited Deep to water	1.00
TAA: Tabler-----	100	Not limited		Somewhat limited Hard to pack	0.17	Very limited Deep to water	1.00
Tv: Tivoli-----	100	Very limited Seepage Slope	1.00 0.01	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
W: Water-----	100	Not rated		Not rated		Not rated	
Wa: Waldeck-----	100	Very limited Seepage	1.00	Very limited Seepage Depth to saturated zone	1.00 0.43	Very limited Cutbanks cave Deep to water	1.00 0.25
Za: Zenda-----	80	Somewhat limited Seepage	0.70	Somewhat limited Depth to saturated zone Piping	0.43 0.25	Somewhat limited Slow refill Deep to water Cutbanks cave	0.30 0.25 0.10
Natrustolls-----	20	Not limited		Somewhat limited Depth to saturated zone Salinity	0.43 0.12	Somewhat limited Salty water Deep to water Cutbanks cave	0.50 0.25 0.10
ZSS: Drummond-----	50	Not limited		Somewhat limited Depth to saturated zone Salinity	0.43 0.12	Somewhat limited Salty water Deep to water Cutbanks cave	0.50 0.25 0.10
Zenda-----	50	Somewhat limited Seepage	0.70	Somewhat limited Depth to saturated zone Piping	0.43 0.15	Somewhat limited Slow refill Deep to water Cutbanks cave	0.30 0.25 0.10

