

WATER MANAGEMENT
Jackson 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
Jackson County, Kansas

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
005PD: Pawnee, eroded--	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily wetness droughty
005SS: Shelby, eroded--	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Steinauer-----	Limitation: deep to water	Limitation: rooting depth slope	Limitation: slope	Limitation: rooting depth slope
005VS: Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
013BS: Burchard-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
013BX: Burchard-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Steinauer-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
013MF: Martin-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily slope wetness	Limitation: erodes easily percs slowly slope
013MY: Muscotah-----	Limitation: flooding percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly
013PN: Pawnee-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily slope wetness	Limitation: erodes easily slope wetness
013PO: Pawnee-----	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: erodes easily slope wetness	Limitation: erodes easily slope wetness
013WE: Wamego-----	Limitation: deep to water	Limitation: percs slowly slope depth to rock	Limitation: erodes easily percs slowly depth to rock	Limitation: erodes easily percs slowly depth to rock
013WG: Wamego-----	Limitation: deep to water	Limitation: percs slowly slope depth to rock	Limitation: erodes easily percs slowly depth to rock	Limitation: erodes easily percs slowly depth to rock
Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
013WN: Wymore-----	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
087MO: Martin-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
Oska-----	Limitation: deep to water	Limitation: percs slowly slope depth to rock	Limitation: erodes easily percs slowly depth to rock	Limitation: erodes easily percs slowly depth to rock
087SS: Sibleyville----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
087SW: Sogn-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock

WATER MANAGEMENT--Continued
Jackson County, Kansas

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
087VC: Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily depth to rock	Limitation: erodes easily depth to rock
087VO: Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
131BS: Burchard-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Steinauer-----	Limitation: deep to water	Limitation: rooting depth slope	Limitation: slope	Limitation: rooting depth slope
131OM: Olmitz-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
131ST: Steinauer-----	Limitation: deep to water	Limitation: rooting depth slope	Limitation: slope	Limitation: rooting depth slope
149CE: Chase-----	Limitation: frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly
149CS: Clime-----	Limitation: deep to water	Limitation: percs slowly slope thin layer	Limitation: area reclaim erodes easily slope	Limitation: area reclaim erodes easily slope
Sogn-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim slope depth to rock	Limitation: area reclaim slope depth to rock
149MO: Morrill-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
177EL: Elmont-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
177KS: Kipson-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Sogn-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
177LM: Ladysmith-----	Limitation: percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
177MF: Martin-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily slope wetness	Limitation: erodes easily slope wetness
177MM: Morrill-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
177SK: Shelby-----	Limitation: deep to water	Favorable	Favorable	Favorable
177ST: Sibleyville----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
177SV: Sogn-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
AED: Arents, Earthen Dam-----	---	---	---	---
Ba: Burchard-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Shelby-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope

WATER MANAGEMENT--Continued
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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Bb: Burchard, eroded	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Shelby, eroded--	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Bc: Burchard-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Shelby-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
Ca: Chase-----	Limitation: flooding frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly
Cb: Clime-----	Limitation: deep to water	Limitation: percs slowly slope	Limitation: percs slowly slope	Limitation: percs slowly slope
Sogn-----	Limitation: deep to water	Limitation: slow intake slope depth to rock	Limitation: depth to rock slope depth to rock	Limitation: depth to rock slope depth to rock
Ka: Kennebec-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Kb: Kennebec-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Kc: Kennebec-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
KD: Kennebec-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Ma: Martin-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
MAA: Martin-----	Limitation: frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Mb: Martin, eroded--	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Mc: Martin-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily depth to rock	Limitation: erodes easily depth to rock
Oa: Olmitz-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
Pa: Pawnee-----	Limitation: frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Pb: Pawnee-----	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Pc: Pawnee, eroded--	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Pt: Pits, Quarries--	---	---	---	---
Ra: Reading-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
RE: Reading-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Sa: Shelby-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
Sb: Shelby, eroded--	Limitation: deep to water	Limitation: slope	Favorable	Favorable
Va: Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Vb: Vinland-----	Limitation: slope depth to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Rock Outcrop----	---	---	---	---
Vc: Vinland-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Sogn-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
W: Water-----	---	---	---	---
Wa: Wabash-----	Limitation: flooding percs slowly	Limitation: percs slowly slow intake wetness	Limitation: percs slowly wetness	Limitation: percs slowly wetness
WAA: Wabash-----	Limitation: flooding percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness
Wb: Wymore-----	Limitation: frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily wetness	Limitation: erodes easily percs slowly wetness
Wc: Wymore, eroded--	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily wetness	Limitation: erodes easily percs slowly wetness
Za: Zook-----	Limitation: flooding frost action percs slowly	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily percs slowly wetness

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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
005PD: Pawnee, eroded-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.74	Very limited Slow refill Cutbanks cave	1.00 0.10
005SS: Shelby, eroded-----	55	Somewhat limited Slope Seepage	0.10 0.05	Not limited		Very limited Deep to water	1.00
Steinauer-----	35	Somewhat limited Slope Seepage	0.10 0.05	Not limited		Very limited Deep to water	1.00
005VS: Vinland-----	85	Very limited Seepage Depth to bedrock	1.00 0.50	Very limited Thin layer Piping	1.00 0.50	Very limited Deep to water	1.00
013BS: Burchard-----	85	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
013BX: Burchard-----	55	Somewhat limited Seepage Slope	0.05 0.03	Not limited		Very limited Deep to water	1.00
Steinauer-----	40	Somewhat limited Seepage Slope	0.05 0.03	Not limited		Very limited Deep to water	1.00
013MF: Martin-----	90	Not limited		Very limited Hard to pack Depth to saturated zone	1.00 1.00	Very limited Deep to water	1.00
013MY: Muscotah-----	87	Somewhat limited Seepage	0.05	Very limited Depth to saturated zone Hard to pack	1.00 0.77	Very limited Slow refill Cutbanks cave	1.00 0.10
013PN: Pawnee-----	83	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.69	Very limited Deep to water	1.00
013PO: Pawnee-----	84	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.72	Very limited Deep to water	1.00
013WE: Wamego-----	90	Somewhat limited Depth to bedrock	0.26	Somewhat limited Thin layer	0.96	Very limited Deep to water	1.00
013WG: Wamego-----	50	Somewhat limited Depth to bedrock	0.26	Somewhat limited Thin layer	0.96	Very limited Deep to water	1.00
Vinland-----	40	Somewhat limited Depth to bedrock	0.50	Very limited Thin layer Piping	1.00 0.50	Very limited Deep to water	1.00
013WN: Wymore-----	82	Somewhat limited Seepage	0.05	Very limited Depth to saturated zone Hard to pack	1.00 0.64	Very limited Deep to water	1.00
087MO: Martin-----	40	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.69	Very limited Slow refill Cutbanks cave	1.00 0.10

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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
Oska-----	30	Somewhat limited Depth to bedrock	0.56	Somewhat limited Thin layer Hard to pack	0.56 0.25	Deep to water Very limited Deep to water	0.00 1.00
087SS: Sibleyville-----	60	Somewhat limited Seepage Depth to bedrock	0.70 0.13	Somewhat limited Thin layer Seepage	0.88 0.04	Very limited Deep to water	1.00
087SW: Sogn-----	55	Very limited Seepage Depth to bedrock	1.00 1.00	Very limited Thin layer Piping	1.00 0.12	Very limited Deep to water	1.00
Vinland-----	30	Very limited Seepage Depth to bedrock Slope	1.00 0.61 0.01	Very limited Thin layer Piping	1.00 0.36	Very limited Deep to water	1.00
087VC: Vinland-----	50	Very limited Seepage Depth to bedrock	1.00 0.61	Very limited Thin layer Piping	1.00 0.36	Very limited Deep to water	1.00
087VO: Vinland-----	55	Very limited Seepage Depth to bedrock Slope	1.00 0.61 0.00	Very limited Thin layer Piping	1.00 0.36	Very limited Deep to water	1.00
131BS: Burchard-----	63	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Steinauer-----	27	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
131OM: Olmitz-----	91	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.41	Very limited Deep to water	1.00
131ST: Steinauer-----	90	Somewhat limited Slope Seepage	0.10 0.05	Not limited		Very limited Deep to water	1.00
149CE: Chase-----	85	Not limited		Somewhat limited Depth to saturated zone	0.43	Very limited Deep to water	1.00
149CS: Clime-----	70	Somewhat limited Depth to bedrock Slope	0.23 0.01	Somewhat limited Thin layer Hard to pack	0.95 0.50	Very limited Deep to water	1.00
Sogn-----	15	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.01	Very limited Thin layer Piping	1.00 0.12	Very limited Deep to water	1.00
149MO: Morrill-----	90	Somewhat limited Seepage	0.05	Somewhat limited Piping	0.58	Very limited Deep to water	1.00
177EL: Elmont-----	90	Somewhat limited Seepage Depth to bedrock	0.05 0.00	Somewhat limited Thin layer	0.11	Very limited Deep to water	1.00
177KS: Kipson-----	50	Very limited Seepage Depth to bedrock Slope	1.00 0.58 0.02	Very limited Thin layer Piping	1.00 0.32	Very limited Deep to water	1.00
Sogn-----	35	Very limited Seepage	1.00	Very limited Thin layer	1.00	Very limited Deep to water	1.00

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
		Depth to bedrock	1.00				
177LM: Ladysmith-----	85	Somewhat limited Seepage	0.01	Very limited Depth to saturated zone Hard to pack	1.00 0.99	Somewhat limited Slow refill Cutbanks cave Deep to water	0.99 0.10 0.00
177MF: Martin-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.57	Very limited Slow refill Cutbanks cave	1.00 0.10
177MM: Morrill-----	91	Somewhat limited Seepage	0.57	Somewhat limited Piping	0.58	Very limited Deep to water	1.00
177SK: Shelby-----	95	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
177ST: Sibleyville-----	90	Somewhat limited Seepage Depth to bedrock	0.70 0.02	Somewhat limited Thin layer	0.56	Very limited Deep to water	1.00
177SV: Sogn-----	55	Very limited Seepage Depth to bedrock	1.00 1.00	Very limited Thin layer	1.00	Very limited Deep to water	1.00
Vinland-----	25	Very limited Seepage Depth to bedrock Slope	1.00 0.66 0.02	Very limited Thin layer Piping	1.00 0.50	Very limited Deep to water	1.00
AED: Arents, Earthen Dam-	100	Not rated		Not rated		Not rated	
Ba: Burchard-----	45	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Shelby-----	40	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Bb: Burchard, eroded----	45	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Shelby, eroded-----	40	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Bc: Burchard-----	40	Somewhat limited Seepage Slope	0.05 0.03	Not limited		Very limited Deep to water	1.00
Shelby-----	35	Somewhat limited Slope Seepage	0.10 0.05	Not limited		Very limited Deep to water	1.00
Ca: Chase-----	88	Not limited		Very limited Depth to saturated zone	1.00	Very limited Slow refill Cutbanks cave Deep to water	1.00 0.10 0.00
Cb: Clime-----	50	Somewhat limited Depth to bedrock Slope	0.04 0.01	Somewhat limited Thin layer Hard to pack	0.70 0.28	Very limited Deep to water	1.00
Sogn-----	35	Very limited Seepage	1.00	Very limited Thin layer	1.00	Very limited Deep to water	1.00

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	
Ka: Kennebec-----	90	Depth to bedrock	1.00	Piping	0.12			
		Somewhat limited Seepage	0.70	Somewhat limited Piping Depth to saturated zone	0.71 0.09	Somewhat limited Deep to water Slow refill	0.54 0.30	
						Cutbanks cave	0.10	
Kb: Kennebec-----	86	Somewhat limited Seepage	0.70	Somewhat limited Piping Depth to saturated zone	0.71 0.09	Somewhat limited Deep to water Slow refill	0.54 0.30	
						Cutbanks cave	0.10	
Kc: Kennebec-----	88	Somewhat limited Seepage	0.70	Somewhat limited Piping Depth to saturated zone	0.71 0.09	Somewhat limited Deep to water Slow refill	0.54 0.30	
						Cutbanks cave	0.10	
KD: Kennebec-----	90	Somewhat limited Seepage	0.70	Somewhat limited Piping Depth to saturated zone	0.85 0.09	Somewhat limited Deep to water Slow refill	0.54 0.30	
						Cutbanks cave	0.10	
Ma: Martin-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.57	Very limited Slow refill	1.00	
						Cutbanks cave Deep to water	0.10 0.00	
MAA: Martin-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.57	Very limited Slow refill	1.00	
						Cutbanks cave Deep to water	0.10 0.00	
Mb: Martin, eroded-----	88	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.57	Very limited Slow refill	1.00	
						Cutbanks cave Deep to water	0.10 0.00	
Mc: Martin-----	48	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.57	Very limited Slow refill	1.00	
						Cutbanks cave Deep to water	0.10 0.00	
Vinland-----	40	Very limited Seepage Depth to bedrock	1.00 0.58	Very limited Thin layer Piping	1.00 0.42	Very limited Deep to water	1.00	
Oa: Olmitz-----	85	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.24	Very limited Deep to water	1.00	
Pa: Pawnee-----	88	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.65	Very limited Deep to water	1.00	
Pb: Pawnee-----	88	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.65	Very limited Deep to water	1.00	
Pc: Pawnee, eroded-----	85	Not limited		Very limited		Very limited		

WATER MANAGEMENT--Continued
Jackson County, Kansas

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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
				Depth to saturated zone Hard to pack	1.00 0.65	Deep to water	1.00
Pt: Pits, Quarries-----	100	Not rated		Not rated		Not rated	
Ra: Reading-----	85	Somewhat limited Seepage	0.57	Somewhat limited Piping	0.12	Very limited Deep to water	1.00
RE: Reading-----	85	Somewhat limited Seepage	0.57	Somewhat limited Piping	0.01	Very limited Deep to water	1.00
Sa: Shelby-----	88	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Sb: Shelby, eroded-----	85	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Va: Vinland-----	80	Very limited Seepage Depth to bedrock	1.00 0.58	Very limited Thin layer Piping	1.00 0.42	Very limited Deep to water	1.00
Vb: Vinland-----	35	Very limited Seepage Depth to bedrock Slope	1.00 0.66 0.28	Very limited Thin layer Piping	1.00 0.39	Very limited Deep to water	1.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Vc: Vinland-----	45	Very limited Seepage Depth to bedrock Slope	1.00 0.58 0.01	Very limited Thin layer Piping	1.00 0.42	Very limited Deep to water	1.00
Sogn-----	40	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.01	Very limited Thin layer Piping	1.00 0.12	Very limited Deep to water	1.00
W: Water-----	100	Not rated		Not rated		Not rated	
Wa: Wabash-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Slow refill Cutbanks cave	1.00 0.10
WAA: Wabash-----	85	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Slow refill Cutbanks cave	1.00 0.10
Wb: Wymore-----	85	Somewhat limited Seepage	0.05	Very limited Depth to saturated zone Hard to pack	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
Wc: Wymore, eroded-----	88	Somewhat limited Seepage	0.05	Very limited Depth to saturated zone Hard to pack	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.95 0.10

WATER MANAGEMENT--Continued
Jackson County, Kansas

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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
Za: Zook-----	90	Not limited		Very limited		Somewhat limited Slow refill Cutbanks cave	
				Depth to saturated zone	1.00		0.95
				Hard to pack	1.00		0.10

