

WATER MANAGEMENT
Cloud 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
Cloud 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
027CT: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly slope	Limitation: erodes easily	Limitation: erodes easily percs slowly
027EU: Eudora-----	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
027HE: Haynie-----	Limitation: deep to water	Limitation: erodes easily	Limitation: erodes easily	Limitation: erodes easily
Sarpy-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
027HN: Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
089ND: Nibson-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim slope	Limitation: area reclaim slope
123AB: Armo-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
123AC: Armo-----	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
123HB: Harney-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
123HE: Harney-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Mento-----	Limitation: deep to water	Limitation: erodes easily percs slowly slope	Limitation: erodes easily	Limitation: erodes easily percs slowly
123LA: Lancaster-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim	Limitation: area reclaim
Armo-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
123NA: New Cambria----	Limitation: deep to water	Limitation: percs slowly slow intake	Limitation: percs slowly	Limitation: percs slowly
123NC: Nibson-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim slope	Limitation: area reclaim slope
123RB: Roxbury-----	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
123RC: Roxbury-----	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
123WA: Wakeen-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim erodes easily	Limitation: area reclaim erodes easily
143EE: Edalgo-----	Limitation: deep to water	Limitation: percs slowly slope thin layer	Limitation: area reclaim erodes easily slope	Limitation: area reclaim erodes easily slope
Hedville-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
143GE: Geary-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
143HE: Hedville-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Rock Outcrop----	---	---	---	---
143HP: Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Geary-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope

WATER MANAGEMENT--Continued
Cloud 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
143LA: Lancaster-----	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
143RO: Roxbury-----	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
157BK: Geary-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
157CH: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
157ED: Eudora-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
157KN: Kenesaw-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
157SD: Inavale-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
201CG: Cass-----	Limitation: deep to water	Limitation: flooding soil blowing	Limitation: soil blowing	Favorable
201CS: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly	Limitation: erodes easily	Limitation: erodes easily percs slowly
201SA: Sarpy-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
Aa: Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Ah: Saltine-----	Limitation: flooding frost action percs slowly	Limitation: flooding percs slowly wetness	Limitation: wetness	Limitation: excess sodium excess salt percs slowly
Ar: Armo-----	Limitation: deep to water	Limitation: slope	Favorable	Favorable
Ba: Hastings-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Br: Bridgeport-----	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
Ca: Cozad-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Cass-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
Cb: Cass-----	Limitation: deep to water	Limitation: soil blowing	Limitation: soil blowing	Favorable
Cf: Munjor-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Inavale-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
CLP: Clay Pits-----	---	---	---	---
Cr: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly	Limitation: erodes easily	Limitation: erodes easily percs slowly
Cs: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly

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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Ct: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly slope	Limitation: erodes easily	Limitation: erodes easily percs slowly
Cu: Crete-----	Limitation: deep to water	Limitation: erodes easily percs slowly slope	Limitation: erodes easily	Limitation: erodes easily percs slowly
De: Detroit-----	Limitation: deep to water	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly	Limitation: erodes easily percs slowly
Eu: Eudora-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Ge: Geary-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
GRP: Gravel Pits-----	---	---	---	---
Gs: Geary-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Hb: Hastings-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Hc: Hastings-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
Hd: Hastings-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily	Limitation: erodes easily
He: Hedville-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Ho: Hobbs-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Hr: Hord-----	Limitation: deep to water	Favorable	Favorable	Favorable
Hu: Humbarger-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
Kp: Kipson-----	Limitation: deep to water	Limitation: large stones slope thin layer	Limitation: area reclaim large stones slope	Limitation: area reclaim large stones slope
Lh: Lancaster-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim slope	Limitation: area reclaim slope
Hedville-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Lm: Longford-----	Limitation: deep to water	Limitation: percs slowly	---	Limitation: percs slowly
Ln: Longford-----	Limitation: deep to water	Limitation: percs slowly slope	Limitation: percs slowly	Limitation: percs slowly
Lo: Longford-----	Limitation: deep to water	Limitation: percs slowly slope	Limitation: percs slowly	Limitation: percs slowly
M-W: Miscellaneous Water-----	---	---	---	---
Mc: Mccook-----	Limitation: deep to water	Favorable	Limitation: erodes easily	Limitation: erodes easily
Mr: Muir-----	Limitation: deep to water	Favorable	Favorable	Favorable
Nc: New Cambria-----	Limitation: deep to water	Limitation: percs slowly	Limitation: percs slowly	Limitation: percs slowly

WATER MANAGEMENT--Continued
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Map symbol and soil name	Features affecting--			
	Drainage	Irrigation	Terraces and diversions	Grassed waterways
Nu: Nuckolls-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
Nx: Nuckolls-----	Limitation: deep to water	Limitation: slope	Limitation: erodes easily slope	Limitation: erodes easily slope
QUA: Quarries-----	---	---	---	---
Rx: Roxbury-----	Limitation: deep to water	---	Limitation: erodes easily	Limitation: erodes easily
Sa: Inavale-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
SAP: Sand Pits-----	---	---	---	---
Sd: Inavale-----	Limitation: deep to water	Limitation: fast intake droughty	Limitation: too sandy soil blowing	Limitation: droughty
St: Sutphen-----	Limitation: deep to water	Limitation: flooding percs slowly slow intake	Limitation: percs slowly	Limitation: percs slowly
To: Tobin-----	Limitation: deep to water	Limitation: flooding	Favorable	Favorable
W: Water-----	---	---	---	---
Wa: Wakeen-----	Limitation: deep to water	Limitation: slope thin layer	Limitation: area reclaim erodes easily	Limitation: area reclaim erodes easily

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
027CT: Crete-----	83	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.78	Very limited Deep to water	1.00
027EU: Eudora-----	85	Somewhat limited Seepage	0.70	Very limited Piping Seepage	1.00 0.07	Very limited Deep to water	1.00
027HE: Haynie-----	65	Somewhat limited Seepage	0.70	Very limited Piping Seepage	1.00 0.06	Very limited Deep to water	1.00
Sarpy-----	34	Very limited Seepage	1.00	Somewhat limited Seepage	0.22	Very limited Deep to water	1.00
027HN: Hobbs-----	93	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.92	Very limited Deep to water	1.00
089ND: Nibson-----	100	Very limited Seepage Depth to bedrock Slope	1.00 0.50 0.03	Very limited Thin layer Piping	1.00 0.50	Very limited Deep to water	1.00
123AB: Armo-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.78	Very limited Deep to water	1.00
123AC: Armo-----	100	Somewhat limited Seepage Slope	0.70 0.00	Somewhat limited Piping	0.72	Very limited Deep to water	1.00
123HB: Harney-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.00	Very limited Deep to water	1.00
123HE: Harney-----	80	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.01	Very limited Deep to water	1.00
Mento-----	20	Somewhat limited Depth to bedrock Seepage	0.06 0.05	Somewhat limited Thin layer	0.06	Very limited Deep to water	1.00
123LA: Lancaster-----	70	Somewhat limited Seepage Depth to bedrock	0.70 0.03	Somewhat limited Piping Thin layer	0.75 0.66	Very limited Deep to water	1.00
Armo-----	30	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.72	Very limited Deep to water	1.00
123NA: New Cambria-----	100	Somewhat limited Seepage	0.01	Somewhat limited Hard to pack	0.72	Very limited Deep to water	1.00
123NC: Nibson-----	100	Very limited Seepage Depth to bedrock Slope	1.00 0.53 0.06	Very limited Thin layer Piping	1.00 0.50	Very limited Deep to water	1.00
123RB: Roxbury-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.63	Very limited Deep to water	1.00
123RC: Roxbury-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.61	Very limited Deep to water	1.00
123WA: Wakeen-----	100	Somewhat limited Seepage Depth to bedrock	0.70 0.17	Somewhat limited Thin layer Piping	0.91 0.50	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
143EE: Edalgo-----	60	Somewhat limited Depth to bedrock	0.11	Somewhat limited Thin layer Hard to pack	0.85 0.53	Very limited Deep to water	1.00
Hedville-----	40	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.08	Very limited Thin layer	1.00	Very limited Deep to water	1.00
143GE: Geary-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.08	Very limited Deep to water	1.00
143HE: Hedville-----	70	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.08	Very limited Thin layer	1.00	Very limited Deep to water	1.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
143HP: Hobbs-----	55	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.50	Very limited Deep to water	1.00
Geary-----	45	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.05	Very limited Deep to water	1.00
143LA: Lancaster-----	100	Somewhat limited Seepage Depth to bedrock	0.70 0.11	Somewhat limited Thin layer Piping	0.86 0.58	Very limited Deep to water	1.00
143RO: Roxbury-----	100	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.54	Very limited Deep to water	1.00
157BK: Geary-----	55	Somewhat limited Seepage Slope	0.70 0.03	Somewhat limited Piping Seepage	0.12 0.02	Very limited Deep to water	1.00
Hobbs-----	29	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
157CH: Crete-----	75	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.58	Very limited Deep to water	1.00
157ED: Eudora-----	90	Somewhat limited Seepage	0.70	Very limited Piping Seepage	1.00 0.07	Very limited Deep to water	1.00
157KN: Kenesaw-----	90	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
157SD: Inavale-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
201CG: Cass-----	89	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
201CS: Crete-----	95	Somewhat limited Seepage	0.57	Not limited		Very limited Deep to water	1.00
201SA: Sarpy-----	90	Very limited Seepage	1.00	Somewhat limited Seepage	0.95	Very limited Deep to water	1.00
Aa: Hobbs-----	83	Somewhat limited		Somewhat limited		Very limited	

WATER MANAGEMENT--Continued
Cloud 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
Ah: Saltine-----	98	Seepage	0.70	Piping	0.92	Deep to water	1.00
		Somewhat limited Seepage	0.05	Very limited Piping Depth to saturated zone	1.00 0.86	Somewhat limited Slow refill Salty water	0.95 0.22
						Cutbanks cave Deep to water	0.10 0.06
Ar: Armo-----	75	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.39	Very limited Deep to water	1.00
Ba: Hastings-----	58	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
Hobbs-----	40	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.50	Very limited Deep to water	1.00
Br: Bridgeport-----	98	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.50	Very limited Deep to water	1.00
Ca: Cozad-----	50	Very limited Seepage	1.00	Very limited Piping Seepage	1.00 0.90	Very limited Deep to water	1.00
Cass-----	25	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Deep to water	1.00
Cb: Cass-----	100	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Deep to water	1.00
Cf: Munjor-----	50	Very limited Seepage	1.00	Somewhat limited Seepage	1.00	Very limited Deep to water	1.00
Inavale-----	49	Very limited Seepage	1.00	Somewhat limited Seepage	0.90	Very limited Deep to water	1.00
CLP: Clay Pits-----	100	Not rated		Not rated		Not rated	
Cr: Crete-----	100	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.73	Very limited Deep to water	1.00
Cs: Crete-----	80	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.69	Very limited Deep to water	1.00
Ct: Crete-----	80	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.69	Very limited Deep to water	1.00
Cu: Crete-----	78	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.62	Very limited Deep to water	1.00
De: Detroit-----	83	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Eu: Eudora-----	100	Somewhat limited Seepage	0.70	Very limited Piping	1.00	Very limited Deep to water	1.00
Ge: Geary-----	70	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.25	Very limited Deep to water	1.00
GRP: Gravel Pits-----	100	Not rated		Not rated		Not rated	

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
Gs: Geary-----	70	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.09	Very limited Deep to water	1.00
Hb: Hastings-----	85	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
Hc: Hastings-----	80	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
Hd: Hastings-----	85	Somewhat limited Seepage	0.70	Not limited		Very limited Deep to water	1.00
He: Hedville-----	75	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.08	Very limited Thin layer	1.00	Very limited Deep to water	1.00
Ho: Hobbs-----	73	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.92	Very limited Deep to water	1.00
Hr: Hord-----	79	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.23	Very limited Deep to water	1.00
Hu: Humbarger-----	74	Very limited Seepage	1.00	Somewhat limited Seepage Piping	0.90 0.88	Very limited Deep to water	1.00
Kp: Kipson-----	65	Somewhat limited Depth to bedrock Seepage Slope	0.71 0.70 0.08	Very limited Thin layer Piping	1.00 0.18	Very limited Deep to water	1.00
Lh: Lancaster-----	55	Somewhat limited Seepage Depth to bedrock	0.70 0.04	Somewhat limited Thin layer Piping	0.70 0.24	Very limited Deep to water	1.00
Hedville-----	28	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.12	Very limited Thin layer	1.00	Very limited Deep to water	1.00
Lm: Longford-----	70	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Ln: Longford-----	65	Somewhat limited Seepage	0.05	Not limited		Very limited Deep to water	1.00
Lo: Longford-----	65	Somewhat limited Seepage	0.05	Somewhat limited Hard to pack	0.35	Very limited Deep to water	1.00
M-W: Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Mc: McCook-----	98	Somewhat limited Seepage	0.70	Very limited Piping Seepage	1.00 0.07	Very limited Deep to water	1.00
Mr: Muir-----	84	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.26	Very limited Deep to water	1.00

WATER MANAGEMENT--Continued
Cloud 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
Nc: New Cambria-----	83	Not limited		Somewhat limited Hard to pack	0.94	Very limited Deep to water	1.00
Nu: Nuckolls-----	85	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.95	Very limited Deep to water	1.00
Nx: Nuckolls-----	85	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.96	Very limited Deep to water	1.00
QUA: Quarries-----	100	Not rated		Not rated		Not rated	
Rx: Roxbury-----	78	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.38	Very limited Deep to water	1.00
Sa: Inavale-----	85	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
SAP: Sand Pits-----	100	Not rated		Not rated		Not rated	
Sd: Inavale-----	100	Very limited Seepage	1.00	Somewhat limited Seepage	0.99	Very limited Deep to water	1.00
St: Sutphen-----	85	Not limited		Very limited Ponding Hard to pack	1.00 0.96	Very limited Deep to water	1.00
To: Tobin-----	78	Somewhat limited Seepage	0.70	Somewhat limited Piping	0.21	Very limited Deep to water	1.00
W: Water-----	100	Very limited Seepage Slope	1.00 0.50	Very limited Hard to pack	1.00	Very limited Deep to water	1.00
Wa: Wakeen-----	70	Somewhat limited Seepage Depth to bedrock	0.70 0.17	Somewhat limited Thin layer Piping	0.91 0.05	Very limited Deep to water	1.00

