

Ag. Waste Application and Excavated Ponds
Shannon County, South Dakota

(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 limitation.)

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Aa: Lohmiller-----	85	Very limited Flooding Restricted permeability	1.00 0.89	Very limited Deep to water	1.00
AsB: Anselmo-----	85	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
AsC: Anselmo-----	85	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
AvE: Anselmo-----	50	Very limited Filtering capacity Slope	1.00 0.96	Very limited Deep to water	1.00
Valentine-----	35	Very limited Filtering capacity Slope Leaching limitation Droughty	1.00 0.84 0.45 0.29	Very limited Deep to water	1.00
Ba: Badland-----	35	Not rated		Not rated	
Denby-----	25	Very limited Restricted permeability Sodium content	1.00 1.00	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Interior-----	20	Very limited Flooding Sodium content	1.00 1.00	Very limited Deep to water	1.00
Bk: Bankard-----	90	Very limited Filtering capacity Droughty Leaching limitation	1.00 0.64 0.45	Very limited Deep to water	1.00
Br: Badland-----	80	Not rated		Not rated	
Bu: Buffington-----	85	Somewhat limited Restricted permeability	0.30	Very limited Deep to water	1.00
CaF: Canyon-----	50	Very limited Slope Depth to bedrock Droughty Runoff limitation Low adsorption	1.00 1.00 1.00 0.40 0.07	Very limited Deep to water	1.00
Oglala-----	25	Very limited Slope	1.00	Very limited Deep to water	1.00
Cc: Canyon-----	45	Very limited Slope Depth to bedrock Droughty Runoff limitation Low adsorption	1.00 1.00 1.00 0.40 0.07	Very limited Deep to water	1.00
Rock Outcrop, Sandstone-----	25	Not rated		Not rated	

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Cy: Denby-----	80	Very limited Restricted permeability Sodium content	1.00 1.00	Very limited Deep to water	1.00
DvB: Dunday-----	50	Very limited Filtering capacity Leaching limitation Droughty	1.00 0.45 0.18	Very limited Deep to water	1.00
Valentine-----	40	Very limited Filtering capacity Leaching limitation Droughty	1.00 0.45 0.29	Very limited Deep to water	1.00
Ef: Elsmere-----	60	Very limited Filtering capacity Depth to saturated zone Leaching limitation Droughty	1.00 0.95 0.45 0.01	Very limited Cutbanks cave Deep to water	1.00 0.02
Loup-----	25	Very limited Depth to saturated zone Filtering capacity Runoff limitation	1.00 1.00 0.40	Somewhat limited Cutbanks cave	0.10
EhF: Epping-----	50	Very limited Slope Depth to bedrock Droughty Low adsorption Runoff limitation	1.00 1.00 1.00 0.95 0.40	Very limited Deep to water	1.00
Kadoka-----	30	Somewhat limited Slope Depth to bedrock Droughty	0.63 0.42 0.02	Very limited Deep to water	1.00

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value
EkE: Epping-----	50	Very limited Depth to bedrock Droughty Low adsorption Slope Runoff limitation	1.00 1.00 0.95 0.63 0.40	Very limited Deep to water	1.00
Kadoka-----	40	Somewhat limited Slope Depth to bedrock Droughty	0.63 0.42 0.02	Very limited Deep to water	1.00
Er: Epping-----	50	Very limited Slope Depth to bedrock Droughty Low adsorption Runoff limitation	1.00 1.00 1.00 0.95 0.40	Very limited Deep to water	1.00
Rock Outcrop, Sandstone-----	25	Not rated		Not rated	
GoA: Mobridge-----	90	Not limited		Very limited Deep to water	1.00
Gr: Nihill-----	75	Very limited Slope Droughty	1.00 0.09	Very limited Deep to water	1.00
HhA: Haverson-----	90	Not limited		Very limited Deep to water	1.00
HlA: Haverson-----	94	Somewhat limited Flooding	0.60	Very limited Deep to water	1.00
HoA: Haverson-----	95	Somewhat limited Flooding	0.60	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Hs: Hisle-----	80	Very limited Restricted permeability Sodium content Droughty Depth to bedrock Runoff limitation	1.00 1.00 1.00 0.42 0.40	Very limited Deep to water	1.00
Ht: Hisle-----	50	Very limited Restricted permeability Sodium content Droughty Depth to bedrock Runoff limitation	1.00 1.00 1.00 0.42 0.40	Very limited Deep to water	1.00
Swanboy-----	45	Very limited Restricted permeability Runoff limitation Salinity Droughty	1.00 0.40 0.35 0.05	Very limited Deep to water	1.00
Hv: Hoven-----	90	Very limited Restricted permeability Depth to saturated zone Ponding Sodium content Filtering capacity	1.00 1.00 1.00 1.00 1.00	Very limited Cutbanks cave Salty water	1.00 0.50
KaA: Kadoka-----	90	Somewhat limited Depth to bedrock Droughty	0.42 0.02	Very limited Deep to water	1.00
KaB: Kadoka-----	90	Somewhat limited Depth to bedrock Droughty	0.42 0.02	Very limited Deep to water	1.00
KaC: Kadoka-----	85	Somewhat limited Depth to bedrock Droughty	0.42 0.02	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
KbC: Kadoka-----	50	Somewhat limited Depth to bedrock Droughty	0.42 0.02	Very limited Deep to water	1.00
Epping-----	40	Very limited Depth to bedrock Droughty Low adsorption Runoff limitation	1.00 1.00 0.95 0.40	Very limited Deep to water	1.00
KeA: Keith-----	90	Not limited		Very limited Deep to water	1.00
KeB: Keith-----	85	Not limited		Very limited Deep to water	1.00
KhD: Keith-----	50	Somewhat limited Slope	0.16	Very limited Deep to water	1.00
Colby-----	30	Somewhat limited Slope	0.37	Very limited Deep to water	1.00
KhE: Keith-----	50	Somewhat limited Slope	0.37	Very limited Deep to water	1.00
Colby-----	30	Very limited Slope	1.00	Very limited Deep to water	1.00
KrA: Keith-----	50	Not limited		Very limited Deep to water	1.00
Rosebud-----	45	Somewhat limited Depth to bedrock Droughty	0.42 0.13	Very limited Deep to water	1.00
KuC: Keith-----	45	Not limited		Very limited Deep to water	1.00
Ulysses-----	40	Not limited		Very limited Deep to water	1.00

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value
KyA: Swanboy-----	95	Very limited Restricted permeability Runoff limitation Salinity Droughty	1.00 0.40 0.35 0.05	Very limited Deep to water	1.00
KyB: Swanboy-----	95	Very limited Restricted permeability Runoff limitation Salinity Droughty	1.00 0.40 0.35 0.05	Very limited Deep to water	1.00
KzA: Kyle-----	90	Very limited Restricted permeability Runoff limitation Sodium content	1.00 0.40 0.32	Very limited Deep to water	1.00
Le: Lamo-----	45	Very limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.30	Somewhat limited Slow refill Cutbanks cave Deep to water	0.95 0.10 0.01
Elsmere-----	40	Very limited Filtering capacity Depth to saturated zone Leaching limitation Droughty	1.00 0.95 0.45 0.01	Very limited Cutbanks cave Deep to water	1.00 0.02
Lm: Interior-----	80	Very limited Flooding Sodium content	1.00 1.00	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Ls: Loup-----	75	Very limited Depth to saturated zone Filtering capacity Runoff limitation	1.00 1.00 0.40	Somewhat limited Cutbanks cave	0.10
McB: Manvel-----	85	Somewhat limited Restricted permeability	0.30	Very limited Deep to water	1.00
Me: Minatare-----	80	Very limited Restricted permeability Sodium content Salinity Depth to saturated zone Flooding	1.00 1.00 1.00 1.00 0.60	Somewhat limited Salty water Cutbanks cave Deep to water	0.97 0.10 0.01
MgD: Minnequa-----	80	Somewhat limited Droughty Depth to bedrock Sodium content Restricted permeability Salinity	0.97 0.42 0.32 0.30 0.01	Very limited Deep to water	1.00
Mm: Mosher-----	60	Very limited Restricted permeability Sodium content Runoff limitation	1.00 1.00 0.40	Very limited Cutbanks cave Deep to water Salty water Slow refill	1.00 0.81 0.50 0.43
Minatare-----	25	Very limited Restricted permeability Sodium content Salinity Depth to saturated zone Runoff limitation	1.00 1.00 1.00 1.00 0.40	Somewhat limited Salty water Cutbanks cave Deep to water	0.97 0.10 0.01

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		Rating class and limiting features	Value	Rating class and limiting features	Value
OcE: Oglala-----	50	Very limited Slope	1.00	Very limited Deep to water	1.00
Canyon-----	35	Very limited Depth to bedrock Droughty Slope Runoff limitation Low adsorption	1.00 1.00 0.63 0.40 0.07	Very limited Deep to water	1.00
OeC: Orella-----	80	Very limited Restricted permeability Depth to bedrock Droughty Sodium content Salinity	1.00 1.00 1.00 1.00 0.50	Very limited Deep to water	1.00
Os: Orella-----	55	Very limited Restricted permeability Depth to bedrock Droughty Sodium content Salinity	1.00 1.00 1.00 1.00 0.50	Very limited Deep to water	1.00
Rock Outcrop, Soft--	25	Not rated		Not rated	
PcE: Enning-----	40	Very limited Depth to bedrock Droughty Slope Runoff limitation Low adsorption	1.00 1.00 0.84 0.40 0.01	Very limited Deep to water	1.00
Minnequa-----	40	Somewhat limited Droughty Depth to bedrock Sodium content Restricted permeability Salinity	0.97 0.42 0.32 0.30 0.01	Very limited Deep to water	1.00

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Map symbol and soil name	Pct. of map unit	Application of manure and food- processing waste		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Pd: Enning-----	55	Very limited Slope Depth to bedrock Droughty Runoff limitation Low adsorption	1.00 1.00 1.00 0.40 0.01	Very limited Deep to water	1.00
Rock Outcrop, Soft--	25	Not rated		Not rated	
PeC: Pierre-----	85	Very limited Restricted permeability Droughty Depth to bedrock Runoff limitation Sodium content	1.00 1.00 0.42 0.40 0.18	Very limited Deep to water	1.00
PsE: Pierre-----	60	Very limited Slope Restricted permeability Droughty Depth to bedrock Runoff limitation	1.00 1.00 1.00 0.42 0.40	Very limited Deep to water	1.00
Samsil-----	25	Very limited Restricted permeability Depth to bedrock Droughty Slope Runoff limitation	1.00 1.00 1.00 1.00 0.40	Very limited Deep to water	1.00
RaA: Richfield-----	45	Somewhat limited Restricted permeability	0.30	Very limited Deep to water	1.00
Altvan-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
RaB: Richfield-----	45	Somewhat limited Restricted permeability	0.30	Very limited Deep to water	1.00
Altvan-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
RdA: Richfield-----	55	Somewhat limited Restricted permeability	0.30	Very limited Deep to water	1.00
Dawes-----	35	Not limited		Very limited Deep to water	1.00
ReB: Rosebud-----	50	Somewhat limited Depth to bedrock Droughty	0.42 0.18	Very limited Deep to water	1.00
Canyon-----	35	Very limited Depth to bedrock Droughty Runoff limitation	1.00 1.00 0.40	Very limited Deep to water	1.00
RkC: Rosebud-----	60	Somewhat limited Depth to bedrock Droughty	0.42 0.18	Very limited Deep to water	1.00
Keith-----	30	Not limited		Very limited Deep to water	1.00
Ss: Samsil-----	60	Very limited Slope Restricted permeability Depth to bedrock Droughty Runoff limitation	1.00 1.00 1.00 1.00 0.40	Very limited Deep to water	1.00
Rock Outcrop, Soft--	20	Not rated		Not rated	

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Sw: Swanboy-----	80	Very limited Restricted permeability Runoff limitation Salinity Droughty	1.00 0.40 0.35 0.05	Very limited Deep to water	1.00
TaF: Tassel-----	60	Very limited Depth to bedrock Droughty Slope Runoff limitation	1.00 1.00 1.00 0.40	Very limited Deep to water	1.00
Anselmo-----	30	Very limited Filtering capacity Slope	1.00 0.96	Very limited Deep to water	1.00
Te: Epping-----	50	Very limited Slope Depth to bedrock Droughty Low adsorption Runoff limitation	1.00 1.00 1.00 0.95 0.40	Very limited Deep to water	1.00
Mitchell-----	30	Very limited Slope	1.00	Very limited Deep to water	1.00
TnA: Tuthill-----	45	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Anselmo-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
TnC: Tuthill-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Anselmo-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
TuA: Tuthill-----	45	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Manter-----	45	Not limited		Very limited Deep to water	1.00
TuB: Tuthill-----	45	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Manter-----	40	Not limited		Very limited Deep to water	1.00
TuC: Tuthill-----	45	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Manter-----	40	Not limited		Very limited Deep to water	1.00
UcC: Ulysses-----	40	Not limited		Very limited Deep to water	1.00
Colby-----	30	Not limited		Very limited Deep to water	1.00
VaC: Valentine-----	85	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
		Leaching limitation	0.45		
		Slope	0.37		
		Droughty	0.29		
VaD: Valentine-----	90	Very limited Slope	1.00	Very limited Deep to water	1.00
		Filtering capacity	1.00		
		Leaching limitation	0.45		
		Droughty	0.29		

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Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Vs: Valentine-----	90	Very limited Slope Filtering capacity Leaching limitation Droughty	1.00 1.00 0.45 0.29	Very limited Deep to water	1.00
w: Water (less Than 40 Acres)-----	100	Not rated		Not rated	
wa: Water (greater Than 40 Acres)-----	100	Not rated		Not rated	
Ww: Wortman-----	50	Very limited Restricted permeability Sodium content Droughty Salinity Depth to bedrock	1.00 1.00 0.59 0.50 0.42	Very limited Deep to water	1.00
Wanblee-----	30	Very limited Restricted permeability Droughty Salinity Depth to bedrock Runoff limitation	1.00 0.65 0.50 0.42 0.40	Very limited Deep to water	1.00

