

Ag. Waste Application and Excavated Ponds
Minnehaha 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
AcA: Alcester-----	90	Not limited		Somewhat limited Deep to water Slow refill Cutbanks cave	0.96 0.30 0.10
AcB: Alcester-----	90	Not limited		Very limited Deep to water	1.00
Ar: Arlo-----	80	Very limited Depth to saturated zone Filtering capacity Flooding	1.00 1.00 0.60	Very limited Cutbanks cave	1.00
Ba: Baltic-----	90	Very limited Restricted permeability Ponding Depth to saturated zone Runoff limitation	1.00 1.00 1.00 0.40	Somewhat limited Slow refill Cutbanks cave	0.97 0.10
Bb: Baltic-----	90	Very limited Restricted permeability Ponding Depth to saturated zone Runoff limitation	1.00 1.00 1.00 0.40	Somewhat limited Slow refill Cutbanks cave	0.97 0.10
BCA: Benclare-----	60	Very limited Restricted permeability	1.00	Very limited Slow refill Deep to water Cutbanks cave	1.00 0.81 0.10

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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
Corson-----	30	Somewhat limited Restricted permeability	0.81	Very limited Deep to water	1.00
BeE: Betts-----	45	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00
Ethan-----	35	Very limited Slope	1.00	Very limited Deep to water	1.00
BfA: Blendon-----	85	Not limited		Very limited Deep to water	1.00
BhB: Blendon-----	55	Not limited		Very limited Deep to water	1.00
Henkin-----	25	Not limited		Very limited Deep to water	1.00
Bo: Bon-----	85	Somewhat limited Flooding	0.60	Very limited Cutbanks cave Deep to water	1.00 0.81
Cb: Chancellor-----	80	Very limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Cc: Chancellor-----	50	Very limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.98 0.10

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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
Tetonka-----	30	Very limited Restricted permeability	1.00	Somewhat limited Slow refill	0.30
		Ponding	1.00	Cutbanks cave	0.10
		Depth to saturated zone	1.00	Salty water	0.01
		Leaching limitation	0.50		
Cd: Chaska-----	80	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave	1.00
		Leaching limitation	0.70		
		Flooding	0.60		
Ch: Chaska-----	75	Very limited Flooding	1.00	Very limited Cutbanks cave	1.00
		Depth to saturated zone	1.00	Deep to water	0.01
		Leaching limitation	0.70		
Cm: Clamo-----	90	Very limited Restricted permeability	1.00	Very limited Slow refill	1.00
		Depth to saturated zone	1.00	Cutbanks cave	0.10
		Flooding	0.60		
		Leaching limitation	0.50		
CoB: Corson-----	80	Somewhat limited Restricted permeability	0.81	Very limited Deep to water	1.00
CoC: Corson-----	80	Somewhat limited Restricted permeability	0.81	Very limited Deep to water	1.00
CpC: Corson-----	55	Somewhat limited Restricted permeability	0.81	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Henkin-----	25	Not limited		Very limited Deep to water	1.00
CrD: Crofton-----	45	Somewhat limited Slope	0.63	Very limited Deep to water	1.00
Nora-----	40	Somewhat limited Slope	0.63	Very limited Deep to water	1.00
CrE: Crofton-----	55	Very limited Slope	1.00	Very limited Deep to water	1.00
Nora-----	35	Very limited Slope	1.00	Very limited Deep to water	1.00
CsD: Crofton-----	50	Somewhat limited Slope	0.63	Very limited Deep to water	1.00
Shindler-----	30	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
DcA: Davis-----	85	Not limited		Somewhat limited Deep to water Slow refill Cutbanks cave	0.81 0.30 0.10
DcB: Davis-----	80	Not limited		Very limited Deep to water	1.00
DcC: Davis-----	80	Not limited		Very limited Deep to water	1.00
Dd: Davison-----	45	Somewhat limited Depth to saturated zone	0.68	Very limited Deep to water	1.00
Crossplain-----	40	Very limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.81	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
DeA: Delmont-----	45	Very limited Depth to dense layer Filtering capacity Droughty	1.00 1.00 0.01	Very limited Deep to water	1.00
Enet-----	35	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
DeB: Delmont-----	40	Very limited Depth to dense layer Filtering capacity Droughty	1.00 1.00 0.01	Very limited Deep to water	1.00
Enet-----	40	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
DgC: Delmont-----	45	Very limited Depth to dense layer Filtering capacity Droughty	1.00 1.00 0.01	Very limited Deep to water	1.00
Talmo-----	30	Very limited Filtering capacity Leaching limitation Droughty	1.00 0.45 0.19	Very limited Deep to water	1.00
DgD: Delmont-----	40	Very limited Depth to dense layer Filtering capacity Slope Droughty	1.00 1.00 0.63 0.01	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Talmo-----	35	Very limited Filtering capacity Slope Leaching limitation Droughty	1.00 0.63 0.45 0.19	Very limited Deep to water	1.00
DmA: Dempster-----	80	Not limited		Very limited Deep to water	1.00
DmB: Dempster-----	80	Not limited		Very limited Deep to water	1.00
DtB: Dempster-----	65	Not limited		Very limited Deep to water	1.00
Talmo-----	25	Very limited Filtering capacity Leaching limitation Droughty	1.00 0.45 0.19	Very limited Deep to water	1.00
Dw: Dimo-----	75	Very limited Filtering capacity Depth to saturated zone Flooding	1.00 0.95 0.60	Very limited Cutbanks cave Deep to water	1.00 0.02
DxB: Dobalt-----	85	Somewhat limited Droughty	0.02	Very limited Deep to water	1.00
DyA: Dobalt-----	70	Somewhat limited Droughty	0.02	Very limited Deep to water	1.00
Bonilla-----	25	Not limited		Very limited Deep to water	1.00
EaB: Egan-----	55	Somewhat limited Restricted permeability	0.50	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
Ethan-----	30	Not limited		Very limited Deep to water	1.00
EeB: Egan-----	35	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Ethan-----	25	Not limited		Very limited Deep to water	1.00
Trent-----	25	Not limited		Very limited Deep to water	1.00
EfA: Egan-----	50	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Trent-----	30	Not limited		Very limited Deep to water	1.00
EgB: Egan-----	35	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Wentworth-----	30	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Trent-----	20	Not limited		Very limited Deep to water	1.00
EnA: Enet-----	85	Very limited Filtering capacity	1.00	Very limited Cutbanks cave Deep to water	1.00 0.99
EoA: Enet-----	45	Very limited Filtering capacity	1.00	Very limited Cutbanks cave Deep to water	1.00 0.99

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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
Dimo-----	35	Very limited Filtering capacity Depth to saturated zone Flooding	1.00 0.95 0.60	Very limited Cutbanks cave Deep to water	1.00 0.02
EpD: Ethan-----	45	Somewhat limited Slope	0.63	Very limited Deep to water	1.00
Betts-----	35	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
EsE: Ethan-----	50	Very limited Slope	1.00	Very limited Deep to water	1.00
Clarno-----	30	Very limited Cobble content Large stones on the surface Restricted permeability Slope	1.00 0.92 0.50 0.37	Very limited Deep to water	1.00
EtD: Ethan-----	50	Somewhat limited Slope	0.63	Very limited Deep to water	1.00
Clarno-----	30	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
EuC: Ethan-----	45	Not limited		Very limited Deep to water	1.00
Egan-----	35	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
ExC: Ethan-----	45	Not limited		Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Egan-----	35	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
FaA: Flandreau-----	85	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
FaB: Flandreau-----	85	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
FtB: Flandreau-----	60	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
Thurman-----	25	Very limited Filtering capacity Leaching limitation	1.00 0.45	Very limited Deep to water	1.00
GrA: Graceville-----	80	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
GsB: Grovena-----	80	Somewhat limited Too acid	0.03	Very limited Deep to water	1.00
GvA: Grovena-----	65	Somewhat limited Too acid	0.03	Very limited Deep to water	1.00
Bonilla-----	25	Not limited		Very limited Deep to water	1.00
HoB: Houdek-----	80	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
HsC: Houdek-----	65	Somewhat limited Restricted permeability	0.50	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
Shindler-----	20	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
HsD: Houdek-----	55	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
Shindler-----	25	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
HtD: Houdek-----	45	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Deep to water	1.00
Talmo-----	35	Very limited Filtering capacity Slope Leaching limitation Droughty	1.00 0.63 0.45 0.19	Very limited Deep to water	1.00
HuA: Huntimer-----	85	Very limited Restricted permeability	1.00	Very limited Deep to water	1.00
HuB: Huntimer-----	80	Very limited Restricted permeability	1.00	Very limited Deep to water	1.00
IhA: Ihlen-----	85	Somewhat limited Depth to bedrock Droughty	0.42 0.01	Very limited Deep to water	1.00
IrB: Ihlen-----	60	Somewhat limited Depth to bedrock Droughty	0.42 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
Rock Outcrop, Hard--	25	Not rated		Not rated	
IrE: Ihlen-----	45	Somewhat limited Slope Depth to bedrock Droughty	0.96 0.42 0.01	Very limited Deep to water	1.00
Rock Outcrop, Hard--	40	Not rated		Not rated	
Ja: Janude-----	90	Not limited		Very limited Deep to water	1.00
La: Lamo-----	80	Very limited Depth to saturated zone Flooding Restricted permeability	1.00 0.60 0.50	Somewhat limited Slow refill Cutbanks cave Deep to water	0.97 0.10 0.01
Lb: Lamo-----	75	Very limited Flooding Depth to saturated zone Restricted permeability	1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave Deep to water	0.97 0.10 0.01
MdB: Moody-----	80	Not limited		Very limited Deep to water	1.00
MgA: Moody-----	40	Not limited		Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
Gayville-----	40	Very limited Restricted permeability Sodium content Salinity Depth to saturated zone Runoff limitation	1.00 0.92 0.50 0.43 0.40	Somewhat limited Salty water Slow refill Deep to water Cutbanks cave	0.50 0.47 0.25 0.10
MnB: Moody-----	45	Not limited		Very limited Deep to water	1.00
Nora-----	30	Not limited		Very limited Deep to water	1.00
MnC: Moody-----	50	Not limited		Very limited Deep to water	1.00
Nora-----	25	Not limited		Very limited Deep to water	1.00
MtA: Moody-----	50	Not limited		Very limited Deep to water	1.00
Trent-----	40	Not limited		Very limited Deep to water	1.00
NcC: Nora-----	50	Not limited		Very limited Deep to water	1.00
Crofton-----	30	Not limited		Very limited Deep to water	1.00
Ob: Obert-----	95	Very limited Depth to saturated zone Flooding Ponding Restricted permeability Runoff limitation	1.00 1.00 1.00 0.50 0.40	Somewhat limited Slow refill Cutbanks cave	0.47 0.10

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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
Og: Orthents, Gravelly--	95	Very limited Slope Filtering capacity Leaching limitation	1.00 1.00 0.45	Very limited Deep to water	1.00
Or: Orthents, Loamy-----	90	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Ow: Orthents, Gravelly--	55	Very limited Slope Filtering capacity Leaching limitation	1.00 1.00 0.45	Very limited Deep to water	1.00
Aquents, Gravelly---	35	Very limited Ponding Depth to saturated zone Filtering capacity Leaching limitation Droughty	1.00 1.00 1.00 0.45 0.25	Very limited Cutbanks cave	1.00
Pt: Rock Outcrop, Hard--	90	Not rated		Not rated	
Sa: Salmo-----	75	Very limited Depth to saturated zone Flooding Restricted permeability Salinity Leaching limitation	1.00 1.00 0.81 0.50 0.50	Somewhat limited Salty water Slow refill Cutbanks cave	0.50 0.47 0.10

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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
SdE: Shindler-----	50	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00
Houdek-----	25	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00
SnE: Shindler-----	45	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00
Talmo-----	35	Very limited Slope Filtering capacity Leaching limitation Droughty	1.00 1.00 0.45 0.19	Very limited Deep to water	1.00
SpA: Splitrock-----	90	Somewhat limited Restricted permeability Too acid	0.81 0.02	Very limited Deep to water	1.00
SpB: Splitrock-----	85	Somewhat limited Restricted permeability Too acid	0.81 0.02	Very limited Deep to water	1.00
SsF: Steinauer-----	40	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00
Shindler-----	35	Very limited Slope Restricted permeability	1.00 0.50	Very limited Deep to water	1.00

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		Rating class and limiting features	Value	Rating class and limiting features	Value
TdE: Talmo-----	40	Very limited Slope Filtering capacity Leaching limitation Droughty	1.00 1.00 0.45 0.19	Very limited Deep to water	1.00
Delmont-----	35	Very limited Slope Depth to dense layer Filtering capacity Droughty	1.00 1.00 1.00 0.01	Very limited Deep to water	1.00
Te: Tetonka-----	90	Very limited Restricted permeability Ponding Depth to saturated zone Leaching limitation	1.00 1.00 1.00 0.50	Somewhat limited Slow refill Cutbanks cave Salty water	0.30 0.10 0.01
TfC: Thurman-----	40	Very limited Filtering capacity Leaching limitation	1.00 0.45	Very limited Deep to water	1.00
Flandreau-----	35	Very limited Filtering capacity	1.00	Very limited Deep to water	1.00
TgD: Thurman-----	40	Very limited Filtering capacity Slope Leaching limitation	1.00 0.63 0.45	Very limited Deep to water	1.00
Grovena-----	35	Somewhat limited Slope Too acid	0.63 0.03	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
Tr: Trent-----	80	Not limited		Very limited Deep to water	1.00
W: Water-----	100	Not rated		Not rated	
Wa: Wakonda-----	45	Somewhat limited Restricted permeability Depth to saturated zone	0.50 0.43	Very limited Deep to water	1.00
Chancellor-----	35	Very limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
WcA: Wentworth-----	45	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Chancellor-----	25	Very limited Restricted permeability Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Wakonda-----	20	Somewhat limited Restricted permeability Depth to saturated zone	0.50 0.43	Very limited Deep to water	1.00
WhA: Wentworth-----	55	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Trent-----	30	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
WhB: Wentworth-----	60	Somewhat limited Restricted permeability	0.50	Very limited Deep to water	1.00
Trent-----	25	Not limited		Very limited Deep to water	1.00
Wk: Whitewood-----	80	Very limited Flooding Depth to saturated zone Leaching limitation Restricted permeability	1.00 1.00 0.50 0.50	Somewhat limited Slow refill Cutbanks cave	0.97 0.10
Wo: Worthing-----	95	Very limited Restricted permeability Ponding Depth to saturated zone Runoff limitation	1.00 1.00 1.00 0.40	Somewhat limited Slow refill Cutbanks cave Salty water	0.97 0.10 0.01
Wr: Worthing-----	45	Very limited Restricted permeability Ponding Depth to saturated zone Runoff limitation	1.00 1.00 1.00 0.40	Somewhat limited Slow refill Cutbanks cave Salty water	0.97 0.10 0.01
Davison-----	35	Somewhat limited Depth to saturated zone	0.68	Very limited Deep to water	1.00

