

Highly Erodible Soil Map Unit List - Norman County, MN

C= 0.30

R= 80

This data is only to be used for HEL determinations

This is the "frozen data" based on 01/01/1990 information. Values other than "HEL" should only be used for PHEL.

Mapunit Symbol	Mapunit Name	HEL	T	K	I	Slope Percent	Slope Length	LS
Ad	Alluvial land, occasionally flooded	NHEL	5	0.24	56			
Af	Alluvial land, frequently flooded	NHEL	5	0.24	56			
BaA	Hokans-Svea complex, 1 to 4 percent slopes	NHEL	5	0.28	48			
BaB	Hokans-Buse complex, 2 to 6 percent slopes	NHEL	5	0.28	48			
BaC2	Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	NHEL	5	0.28	48			
Bo	Borup loam, depressional	NHEL	4	0.28	86			
Cb	Cathro muck, occasionally ponded, 0 to 1 percent slopes	HEL	5		134			
DaB	Darnen loam, 1 to 6 percent slopes	NHEL	5	0.28	48			
Fm	Lakepark-Parnell, occasionally ponded, complex, 0 to 2 percent slopes	NHEL	5	0.28	48			
Fv	Flom and Vallers soils, depressional	NHEL	5	0.28	86			
GIa	Glyndon loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
Gp	Gravel pits	HEL	5	0.02	134			
HeA	Hamerly silt loam, 0 to 1 percent slopes	NHEL	5	0.28	86			

HeB	Balaton-Hamerly complex, 1 to 4 percent slopes	NHEL	5	0.28	86			
Hm	Hamerly-Vallers silt loams	NHEL	5	0.28	86			
I2A	Augsburg very fine sandy loam, clayey till substratum, 0 to 1 percent slopes	NHEL	4	0.28	86			
I5A	Borup loam, 0 to 1 percent slopes	NHEL	4	0.28	86			
I6A	Borup very fine sandy loam, 0 to 1 percent slopes	NHEL	4	0.28	86			
I8A	Cathro muck, 0 to 1 percent slopes	HEL	5		134			
I9A	Clearwater clay, 0 to 1 percent slopes	NHEL	5	0.32	86			
I11A	Deerwood muck, 0 to 1 percent slopes	HEL	5		134			
I15A	Hecla loamy fine sand, 0 to 2 percent slopes	HEL	5	0.17	134			
I16F	Fluvaquents,frequently flooded-Hapludolls complex, 0 to 30 percent slopes	NHEL	5	0.28	86			
I19A	Foxhome sandy loam, 0 to 2 percent slopes	NHEL	3	0.2	56			
I20A	Foxlake loam, 0 to 1 percent slopes	NHEL	5	0.32	86			
I24A	Grimstad fine sandy loam, 0 to 2 percent slopes, aspen parkland	NHEL	5	0.2	86			
I25A	Hamar loamy fine sand, Aspen Parkland, 0 to 1 percent slopes	HEL	5	0.17	134			
I28A	Hangaard sandy loam, 0 to 2 percent slopes	HEL	2	0.2	86			
I34A	Huot fine sandy loam, clayey till substratum, 0 to 2 percent slopes	NHEL	5	0.2	86			
I36A	Kittson loam, 0 to 2 percent slopes	NHEL	5	0.24	56			

I36B	Kittson loam, 2 to 6 percent slopes	NHEL	5	0.24	56			
I37A	Kratka and Strathcona soils, 0 to 1 percent slopes	NHEL	5	0.2	86			
I40B	Maddock loamy fine sand, 2 to 6 percent slopes	HEL	5	0.17	134			
I41A	Markey muck, 0 to 1 percent slopes	HEL	4		134			
I43A	Mavie fine sandy loam, 0 to 1 percent slopes	HEL	3	0.24	86			
I47A	Poppleton fine sand, 0 to 2 percent slopes	HEL	5	0.15	134			
I48A	Radium loamy sand, 0 to 2 percent slopes	HEL	5	0.17	134			
I52A	Reis-Clearwater complex, 0 to 1 percent slopes	NHEL	5	0.32	86			
I53A	Roliss loam, 0 to 2 percent slopes	NHEL	5	0.28	48			
I54A	Roliss loam, very poorly drained, 0 to 1 percent slopes	NHEL	5	0.28	48			
I55A	Rosewood fine sandy loam, Aspen Parkland, 0 to 1 percent slopes	HEL	5	0.17	134			
I56A	Rosewood-Venlo complex, 0 to 1 percent slopes	HEL	5	0.17	134			
I57B	Sandberg-Radium complex, 0 to 6 percent slopes	HEL	2	0.2	86			
I58A	Seelyeville muck, 0 to 1 percent slopes	HEL	5		134			
I62A	Syrene sandy loam, 0 to 2 percent slopes	HEL	3	0.2	86			
I65A	Ulen loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.2	86			
I68A	Wheatville very fine sandy loam, clayey till substratum, 0 to 2 percent slopes	NHEL	4	0.28	86			

I109A	Fluvaquents, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.24	56			
I110A	Augsburg, Borup and Colvin soils, very poorly drained, 0 to 1 percent slopes	NHEL	4	0.28	86			
I119A	Bearden silty clay loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I130A	Hegne-Fargo silty clays, 0 to 1 percent slopes	NHEL	5	0.32	86			
I156A	Antler silt loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I170A	Swenoda loam, 0 to 3 percent slopes	NHEL	4	0.2	86			
I171A	Rockwell fine sandy loam, 0 to 1 percent slopes	NHEL	5	0.2	86			
I209A	Swenoda fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86			
I209C	Swenoda fine sandy loam, 2 to 9 percent slopes	NHEL	5	0.2	86			
I229A	Fargo silty clay, 0 to 1 percent slopes	NHEL	5	0.32	86			
I233A	Fargo silty clay loam, 0 to 1 percent slopes	NHEL	5	0.32	38			
I235A	Fargo silty clay, depressional, 0 to 1 percent slopes	NHEL	5	0.32	86			
I248A	Wahpeton silty clay, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	86			
I248B	Wahpeton silty clay, 2 to 6 percent slopes, occasionally flooded	NHEL	5	0.28	86			
I248C	Wahpeton silty clay, 6 to 9 percent slopes, occasionally flooded	NHEL	5	0.28	86			
I293B	Cashel silty clay, 0 to 6 percent slopes, occasionally flooded	NHEL	5	0.32	86			
I309A	Arveson loam, 0 to 1 percent slopes	NHEL	4	0.24	86			

I344A	Venlo fine sandy loam, 0 to 1 percent slopes	HEL	5	0.17	134			
I348F	Serden fine sand, 6 to 35 percent slopes	HEL	5	0.15	250			
I356A	Ulen fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.2	86			
I364A	Hecla-Garborg-Arveson complex, 0 to 2 percent slopes	HEL	5	0.17	134			
I376A	Colvin silty clay loam, 0 to 1 percent slopes	NHEL	5	0.32	86			
I400A	Gilby loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I467A	Bearden silt loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I475B	Sinai silty clay, levees, 0 to 6 percent slopes	NHEL	5	0.32	86			
I507A	Glyndon loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I507B	Glyndon loam, dry, 2 to 6 percent slopes	NHEL	5	0.28	86			
I530A	Colvin silty clay loam, 0 to 1 percent slopes, frequently ponded	NHEL	5	0.32	86			
I594A	LaDelle silt loam, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.28	86			
I624A	Lindaas silty clay loam, 0 to 1 percent slopes	NHEL	5	0.28	86			
I625C	Zell, fine-silty-LaDelle silty clay loams, 1 to 9 percent slopes	NHEL	5	0.28	86			
I627A	Bearden-Fargo complex, 0 to 2 percent slopes	NHEL	5	0.28	86			
I633A	Augsburg and Wheatville soils, 0 to 2 percent slopes	NHEL	4	0.28	86			
I646A	Viking clay loam, 0 to 1 percent slopes	NHEL	5	0.32	86			

I651A	Reis, very-fine-Viking silty clays, 0 to 1 percent slopes	NHEL	5	0.32	86			
I655A	Wheatville loam, 0 to 2 percent slopes	NHEL	4	0.28	86			
I666A	Colvin-Perella silty clay loams, 0 to 1 percent slopes	HEL	2	0.2	86			
I669A	Borup-Glyndon loams, 0 to 2 percent slopes	NHEL	4	0.28	86			
I671A	Sioux gravelly sandy loam, 0 to 2 percent slopes	NHEL	2	0.2				
I671B	Sioux gravelly sandy loam, 2 to 6 percent slopes	NHEL	2	0.2				
I672A	Sioux sandy loam, 0 to 2 percent slopes	HEL	2	0.2	86			
I672B	Sioux sandy loam, 2 to 6 percent slopes	HEL	2	0.2	86			
I673B	Lohnes coarse sandy loam, 2 to 6 percent slopes	HEL	2	0.2	86			
I674A	Lohnes sandy loam, 0 to 2 percent slopes	HEL	2	0.2	86			
I676A	Syrene sandy clay loam, 0 to 2 percent slopes	HEL	3	0.2	86			
I681C	Sandberg loamy sand, 6 to 15 percent slopes	HEL	2	0.2	86			
I683A	Flom clay loam, 0 to 1 percent slopes	NHEL	5	0.28	48			
I690A	Kittson loam, wet, 0 to 2 percent slopes	NHEL	5	0.24	56			
I699A	Rockwell loam, 0 to 1 percent slopes	NHEL	5	0.2	86			
I711A	Glyndon loam, thin surface, 0 to 2 percent slopes	NHEL	5	0.28	86			
I716A	Arveson clay loam, 0 to 1 percent slopes	NHEL	4	0.24	86			

I720A	Arveson-Venlo complex, 0 to 1 percent slopes	HEL	5	0.17	134			
I730A	Gunclub silty clay loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
I731A	Nielsville silty clay loam, 0 to 1 percent slopes	NHEL	5	0.32	86			
I732A	Nielsville-Perella silty clay loams, 0 to 1 percent slopes	NHEL	5	0.32	86			
I748A	Bygland silty clay loam, 0 to 2 percent slopes	NHEL	5	0.32	86			
I759A	Towner loamy fine sand, 0 to 3 percent slopes	HEL	5	0.17	134			
I762A	Vallers loam, lake plain, 0 to 1 percent slopes	NHEL	5	0.28	86			
I773A	Hapludolls-Fluvaquents, occasionally flooded complex, 0 to 6 percent slopes	NHEL	5	0.24	56			
I773E	Hapludolls-Fluvaquents, occasionally flooded complex, 0 to 30 percent slopes	NHEL	5	0.28	86			
I791A	Ulen fine sandy loam, thin surface, 0 to 2 percent slopes	NHEL	5	0.2	86			
I795A	Lamoure silt loam, 0 to 2 percent slopes, frequently flooded	NHEL	5	0.28	86			
I823A	Rockwell and Kratka soils, 0 to 1 percent slopes	NHEL	5	0.2	86			
I849A	Kittson fine sandy loam, wet, 0 to 2 percent slopes	NHEL	5	0.24	56			
I853A	Roliss silt loam, 0 to 1 percent slopes	NHEL	5	0.28	48			
IGp	Pits, gravel and sand	NHEL						
IM-W	Miscellaneous water							
IWa	Water							

KtA	Kittson loam, uplands, 0 to 1 percent slopes	NHEL	5	0.24	56			
KtB	Kittson loam, uplands, 1 to 5 percent slopes	NHEL	5	0.24	56			
LbC2	Langhei-Barnes, moderately eroded, complex, 6 to 12 percent slopes	PHEL	5	0.32	86			
LbD2	Langhei-Barnes, moderately eroded, complex, 12 to 20 percent slopes	HEL	5	0.32	86			
LbE	Langhei loam, 12 to 40 percent slopes	HEL	5	0.32	86			
MaA	Maddock loamy fine sand, 0 to 2 percent slopes	HEL	5	0.17	134			
MaC	Maddock loamy fine sand, 2 to 8 percent slopes	HEL	5	0.17	134			
Me	Markey muck, occasionally ponded, 0 to 1 percent slopes	HEL	4		134			
Mh	Quam, Cathro, and Urness soils, frequently ponded, 0 to 1 percent slopes	NHEL	5					
PB	Pits, borrow	NHEL						
Ru	Rondeau muck	HEL	5		134			
Sc	Seelyeville-Seelyeville, ponded, complex, 0 to 1 percent slopes	HEL	5		134			
SmE	Sioux and Maddock soils, 12 to 36 percent slopes	HEL	2	0.2	86			
SnA	Sverdrup sandy loam, 0 to 2 percent slopes	NHEL	4	0.2	86			
SnC	Sverdrup sandy loam, 2 to 6 percent slopes	NHEL	4	0.2	86			
Va	Vallers clay loam, 0 to 2 percent slopes	NHEL	5	0.28	86			
Vd	Vallers silt loam, depressional	NHEL	5	0.28	86			

W	Water							
WkA	Waukon loam, 0 to 2 percent slopes	NHEL	5	0.24	48			
WkB	Waukon loam, 2 to 6 percent slopes	NHEL	5	0.24	48			
WkB2	Waukon-Langhei complex, 2 to 6 percent slopes	NHEL	5	0.24	48			
WkC	Waukon, moderately eroded-Langhei complex, 6 to 12 percent slopes	NHEL	5	0.24	48			
WkD	Waukon, moderately eroded-Langhei complex, 12 to 20 percent slopes	HEL	5	0.24	48			