

Highly Erodible Soil Map Unit List - Clearwater County, MN

C= 0.20

R= 90

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
20B	Chapett fine sandy loam, 2 to 6 percent slopes	NHEL	5	0.20	86	3	150	0.32
20C2	Chapett fine sandy loam, 6 to 12 percent slopes, eroded	NHEL	5	0.20	86	8	100	0.99
38B	Waukon loam, 2 to 6 percent slopes	NHEL	5	0.24	48	3	150	0.32
38C2	Waukon, moderately eroded-Langhei complex, 6 to 12 percent slopes	NHEL	5	0.24	48	8	100	0.99
38D2	Waukon, moderately eroded-Langhei complex, 12 to 20 percent slopes	HEL	5	0.24	48	16	60	2.6
40B	Nebish loam, 1 to 8 percent slopes	NHEL	5	0.32	56	4	150	0.47
40C	Nebish loam, 3 to 15 percent slopes	PHEL	5	0.32	56	12	100	1.8
40E	Nebish loam, 8 to 30 percent slopes	HEL	5	0.32	56	18	60	2.6
111	Hangaard sandy loam	HEL	2	0.2	86	0.5	150	
117	Cormant loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.17	134	0.5	150	0.11
121	Wykeham fine sandy loam, 1 to 3 percent slopes	NHEL	5	0.2	86	1	150	0.15
125	Beltrami loam, 1 to 3 percent slopes	NHEL	5	0.32	56	1	150	0.15
133B	Dalbo silt loam, 2 to 8 percent slopes	NHEL	3	0.43	48	4	125	0.43

133C	Dalbo silt loam, 8 to 15 percent slopes	HEL	3	0.43	48	12	100	1.8
133E	Dalbo silt loam, 15 to 30 percent slopes	HEL	3	0.43	48	18	60	2.6
167A	Baudette silt loam	NHEL	5	0.37	48	1	150	0.15
169B	Braham loamy fine sand, 2 to 8 percent slopes	NHEL	5	0.17	134	3	150	0.32
169C	Braham loamy fine sand, 8 to 15 percent slopes	NHEL	5	0.17	134	8	100	0.99
169E	Braham loamy fine sand, 15 to 30 percent slopes	PHEL	5	0.17	134	16	60	2.2
180	Gonvick loam, 1 to 4 percent slopes	NHEL	5	0.24	48	1	150	0.15
205	Karlstad sandy loam	HEL	3	0.17	134	1	150	
258B	Sandberg sandy loam, 1 to 6 percent slopes	NHEL	5	0.15	134	3	150	0.32
267B	Snellman sandy loam, 1 to 8 percent slopes	NHEL	5	0.2	86	4	150	0.47
267C	Snellman sandy loam, 8 to 15 percent slopes	PHEL	5	0.2	86	12	100	1.8
267E	Snellman sandy loam, 15 to 30 percent slopes	HEL	5	0.2	86	18	60	2.6
272	Bemidji loamy sand	NHEL	5	0.1	134	1	150	0.15
346	Talmoon loam	NHEL	5	0.28	56	0.5	150	0.15
426	Foldahl loamy fine sand	NHEL	5	0.2	134	1	150	0.15
432	Stranquist loam	NHEL	5	0.17	134	1	150	0.15
435	Syrene sandy loam	NHEL	3	0.2	86	0.5	150	0.11

439	Strathcona fine sandy loam	NHEL	5	0.2	86	0.5	150	0.11
481	Kratka fine sandy loam	NHEL	5	0.17	86	0.5	150	0.11
496B	Andrusia loamy sand, 1 to 6 percent slopes	NHEL	4	0.17	134	3	150	0.32
496C	Andrusia loamy sand, 6 to 12 percent slopes	NHEL	4	0.17	134	6	100	0.99
505B	Debs silt loam, 2 to 8 percent slopes	NHEL	5	0.32	56	4	150	0.47
505C	Debs silt loam, 8 to 15 percent slopes	PHEL	5	0.32	56	12	100	1.8
505E	Debs silt loam, 15 to 30 percent slopes	HEL	5	0.32	56	18	60	2.6
540	Seelyeville-Seelyeville, ponded, complex, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
543	Markey muck, occasionally ponded, 0 to 1 percent slopes	NHEL	4		134	0.5	150	0.11
544	Cathro muck, occasionally ponded, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
547	Deerwood muck	HEL	3		134	0.5	150	
561	Bullwinkle muck	NHEL	5		134	0.5	150	0.11
563	Northwood muck	NHEL	5		134	0.5	150	0.11
564	Friendship loamy sand	NHEL	5	0.17	134	1	150	0.15
565	Eckvoll loamy fine sand	NHEL	5	0.17	134	1	150	0.15
582	Roliss loam, 0 to 2 percent slopes	NHEL	5	0.28	48	0.5	150	0.11
607	Pengilly very fine sandy loam, frequently flooded	NHEL	5	0.24	86	0.5	150	0.11

621	Morph fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.24	86	0.5	150	0.11
627	Tawas muck	NHEL	4		134	0.5	150	0.11
650	Reiner fine sandy loam	NHEL	5	0.24	86	1	150	0.15
672	Willossippi loam	NHEL	5	0.32	56	0.5	150	0.11
676B	Kost loamy fine sand, 0 to 6 percent slopes	NHEL	5	0.17	134	3	150	0.47
702	Bullwinkle-Cathro complex	NHEL	5		134	0.5	150	0.11
709B	Lengby fine sandy loam, 2 to 8 percent slopes	NHEL	5	0.24	86	4	150	0.47
709C	Lengby fine sandy loam, 8 to 15 percent slopes	PHEL	5	0.24	86	12	100	1.8
709E	Lengby fine sandy loam, 15 to 30 percent slopes	HEL	5	0.24	86	18	60	2.6
712	Rosewood fine sandy loam	NHEL	3	0.24	86	0.5	150	0.11
713	Linveltdt fine sandy loam	NHEL	5	0.28	86	1	150	0.15
718B	Naytahwaush loam, 1 to 8 percent slopes	PHEL	3	0.28	48	4	150	0.47
718C	Naytahwaush loam, 3 to 15 percent slopes	HEL	3	0.28	48	12	100	1.8
718E	Naytahwaush loam, 8 to 30 percent slopes	HEL	3	0.28	48	18	60	2.6
733	Berner muck	NHEL	5		134	0.5	150	0.11
737	Mahkonce loam	NHEL	3	0.32	48	1	150	0.15
746	Haslie muck	NHEL	5		134	0.5	150	0.11

765	Smiley loam	NHEL	5	0.24	56	0.5	150	0.11
767	Auganaush loam	NHEL	3	0.32	48	0.5	150	0.11
775B	Sugarbush-Two Inlets complex, 1 to 8 percent slopes	NHEL	4	0.2	86	4	150	0.47
775C	Sugarbush-Two Inlets complex, 3 to 15 percent slopes	PHEL	4	0.2	86	12	100	1.8
776B	Snellman-Sugarbush complex, 2 to 8 percent slopes	NHEL	4	0.2	86	4	150	0.47
776C	Snellman-Sugarbush complex, 8 to 15 percent slopes	PHEL	4	0.2	86	12	100	1.8
776E	Snellman-Sugarbush complex, 15 to 30 percent slopes	HEL	4	0.2	86	18	60	2.6
776F	Snellman-Sugarbush complex, 30 to 45 percent slopes	HEL	4	0.2	86	36	50	6.7
797	Mooselake and Lupton soils, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
799	Seelyeville and Bowstring soils, frequently flooded	NHEL	5		134	0.5	150	0.11
867E	Eagleview-Menahga complex, 15 to 30 percent slopes	HEL	5	0.17	134	18	60	2.6
1033	Aquic Udipsamments-Aquents complex (lake beaches, sandy)	NHEL	5	0.2	86	1	150	0.15
1057	Fluvaquents, frequently flooded-Hapludalfs complex, 0 to 35 percent slopes	PHEL	4	0.2	86	25	30	3
1113	Haslie, Seelyeville, and Cathro soils, frequently ponded, 0 to 1 percent slopes	NHEL	5			0.5	150	0.11
1147	Fordum, Fairdale, and Lamoure soils, frequently flooded	NHEL	5	0.28	86	0.5	150	0.11
1152B	Sugarbush loamy sand, 1 to 8 percent slopes	NHEL	4	0.17	134	3	150	0.32
1152C	Sugarbush loamy sand, 8 to 15 percent slopes	NHEL	4	0.17	134	8	100	0.99

1152E	Sugarbush loamy sand, 15 to 30 percent slopes	PHEL	4	0.17	134	16	60	2.6
1164	Zerke loam	NHEL	5	0.32	56	1	150	0.15
1166B	Moosecreek fine sandy loam, 2 to 8 percent slopes	NHEL	4	0.24	86	4	150	0.47
1191	Sahkahtay sandy loam	NHEL	5	0.2	86	0.5	150	0.11
1200	Egglake loam	NHEL	5	0.28	56	0.5	150	0.11
1238E	Two Inlets-Sugarbush complex, 8 to 30 percent slopes	HEL	4	0.2	86	18	60	2.6
1238F	Two Inlets-Sugarbush complex, 30 to 45 percent slopes	HEL	4	0.2	86	36	50	6.7
1244B	Sol-Sugarbush complex, 2 to 8 percent slopes, very stony	NHEL	4	0.17	134	3	150	0.32
1244C	Sol-Sugarbush complex, 8 to 15 percent slopes, very stony	PHEL	4	0.17	134	10	100	0.99
1244E	Sol-Sugarbush complex, 15 to 30 percent slopes, very stony	HEL	4	0.17	134	18	60	2.6
1244F	Sol-Sugarbush complex, 30 to 45 percent slopes, very stony	HEL	4	0.17	134	36	50	6.7
1272B	Sol fine sandy loam, 2 to 6 percent slopes	NHEL	5	0.24	86	3	150	0.32
1272C	Sol fine sandy loam, 6 to 12 percent slopes	NHEL	5	0.24	86	8	100	0.99
1294	Nary fine sandy loam	NHEL	5	0.2	86	1	150	0.15
1325	Bowstring-Fluvaquents complex, frequently flooded	NHEL	5		134	0.5	150	0.11
1874	Radium loamy sand	NHEL	5	0.17	134	1	150	0.15
1878	Hamre muck	NHEL	5		134	0.5	150	0.11

1943	Roscommon loamy sand	NHEL	5	0.17	134	1	150	0.15
1993B	Snellman-Wykeham complex, 1 to 8 percent slopes	NHEL	5	0.2	86	3	150	0.32
2017B	Zimmerman-Andrusia complex, 1 to 8 percent slopes	NHEL	4	0.17	134	3	150	0.32
2017C	Zimmerman-Andrusia complex, 8 to 15 percent slopes	PHEL	4	0.17	134	12	100	1.8
2017E	Zimmerman-Andrusia complex, 15 to 30 percent slopes	HEL	4	0.17	134	20	60	3
2018B	Eagleview-Two Inlets complex, 1 to 8 percent slopes, pitted	NHEL	5	0.17	134	4	150	0.47
2018E	Eagleview-Two Inlets complex, 15 to 30 percent slopes	HEL	5	0.17	134	18	60	2.6
2020B	Zimmerman-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.2	86	4	150	0.47
2020C	Zimmerman-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.2	86	12	100	1.8
2020E	Zimmerman-Snellman complex, 15 to 30 percent slopes	HEL	5	0.2	86	18	60	2.6
2021B	Debs, till substratum-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.32	56	4	150	0.47
2022B	Wykeham-Baudette, till substratum complex, 1 to 4 percent slopes	NHEL	5	0.37	48	1	150	0.15
2023A	Egglake-Spooner, till substratum complex, 0 to 2 percent slopes	NHEL	5	0.37	56	0.5	150	0.11
2024B	Snellman-Zimmerman complex, 1 to 8 percent slopes, pitted	NHEL	5	0.2	86	4	150	0.47
2026B	Lengby-Snellman complex, 1 to 8 percent slopes	NHEL	5	0.24	86	4	150	0.47
2026C	Lengby-Snellman complex, 8 to 15 percent slopes	PHEL	5	0.24	86	12	100	1.8
2026E	Lengby-Snellman complex, 15 to 30 percent slopes	HEL	5	0.24	86	18	60	2.6

2035A	Epoufette sandy loam, 0 to 2 percent slopes	NHEL	4	0.2	86	0.5	150	0.11
2036A	Meehan loamy sand, 0 to 3 percent slopes	NHEL	5	0.17	134	1	150	0.15
2037A	Karlstad loamy sand, 0 to 3 percent slopes	HEL	3	0.17	134	1	150	
2038B	Marquette loamy sand, 1 to 6 percent slopes	NHEL	3	0.24	86	3	150	0.47
2038C	Marquette loamy sand, 6 to 12 percent slopes	PHEL	3	0.24	86	8	100	0.99
A1B	Eagleview and Menahga soils, 1 to 8 percent slopes	NHEL	5	0.17	134	4	150	0.47
A1C	Eagleview and Menahga soils, 3 to 15 percent slopes	PHEL	5	0.17	134	12	100	1.8
B78B	Graycalm-Grettum complex, 1 to 8 percent slopes	NHEL	5	0.17	134	4	150	0.47
B109A	Bowstring and Fluaquents soils, des moines, 0 to 2 percent slopes, frequently flooded	NHEL	5		134	0.5	150	0.11
B200A	Garnes fine sandy loam, des moines, 0 to 3 percent slopes	NHEL	5	0.32	56	1	150	0.15
B201A	Chilgren fine sandy loam, des moines, 0 to 2 percent slopes	NHEL	5	0.20	86	5	150	0.11
B202A	Cathro muck, occasionally ponded, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
B203A	Northwood muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
B204A	Roliss loam, des moines, 0 to 2 percent slopes	NHEL	5	0.28	48	0.5	150	0.11
B205A	Berner muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5			0.5	150	0.011
B206A	Hamre muck, depressional, des moines, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
B207A	Pelan sandy loam, des moines, 0 to 3 percent slopes	NHEL	3	0.24	86	1	150	0.15

B208A	Grygla loamy fine sand, des moines, 0 to 2 percent slopes	NHEL	5	0.2	134	1	150	0.15
B210A	Eckvoll loamy fine sand, des moines, 0 to 3 percent slopes	NHEL	5	0.17	134	1	150	0.15
B211A	Berner and Cathro soils, ponded, des moines, 0 to 1 percent slopes	NHEL	5			0.5	150	0.11
GP	Pits, gravel-Udipsammments complex	NHEL	5	0.17	134	1	150	0.15
I3A	Berner muck, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
I8A	Cathro muck, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
I11A	Deerwood muck, 0 to 1 percent slopes	HEL	3		134	0.5	150	
I12A	Eckvoll loamy fine sand, 0 to 2 percent slopes	NHEL	5	0.17	134	1	150	0.15
I18A	Foldahl loamy fine sand, loamy till substratum, 0 to 3 percent slopes	NHEL	5	0.2	134	1	150	0.15
I27A	Hamre muck, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
I28A	Hangaard sandy loam, 0 to 2 percent slopes	HEL	2	0.2	86	0.5	150	
I38A	Kratka fine sandy loam, loamy till substratum, 0 to 1 percent slopes	NHEL	5	0.17	86	0.5	150	0.11
I39A	Linveldt fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.28	86	1	150	0.15
I41A	Markey muck, 0 to 1 percent slopes	NHEL	4		134	0.5	150	0.11
I45A	Northwood muck, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
I48A	Radium loamy sand, 0 to 2 percent slopes	NHEL	5	0.17	134	1	150	0.15
I50A	Reiner fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.24	86	1	150	0.15

I53A	Roliss loam, 0 to 2 percent slopes	NHEL	5	0.28	48	0.5	150	0.11
I55A	Rosewood fine sandy loam, Aspen Parkland, 0 to 1 percent slopes	NHEL	3	0.24	86	0.5	150	0.11
I57B	Sandberg-Radium complex, 1 to 6 percent slopes	NHEL	5	0.2	134	3	150	0.32
I58A	Seelyeville muck, 0 to 1 percent slopes	NHEL	5		134	0.5	150	0.11
I59A	Smiley loam, 0 to 1 percent slopes	NHEL	5	0.24	56	0.5	150	0.11
I62A	Syrene sandy loam, 0 to 2 percent slopes	NHEL	3	0.2	86	0.5	150	0.11
I70A	Strathcona fine sandy loam, 0 to 1 percent slopes	NHEL	5	0.2	86	0.5	150	0.11
I362E	Maddock loamy fine sand, 9 to 25 percent slopes	PHEL	5	0.17	134	18	60	2.6
I699A	Rockwell loam, 0 to 1 percent slopes	NHEL	3	0.24	86	0.5	150	0.11
IGp	Pits, gravel and sand	NHEL	5	0.17	134	1	150	0.15
IWa	Water							
M-W	Water, miscellaneous							
W	Water							