

Highly Erodible Soil Map Unit List - ST. LOUIS COUNTY - CRANE LAKE PART, MN								
C=.09								
R=90								
This data is only to be used for HEL determinations. This is the "frozen list" based on 01/01/1990 information. Values other than 'HEL' should only be used for PHEL.								
musym	muname	HEL	T	K	I	slope_%	slope_l	LS
2srqm	Quetico-Insula-Rock Outcrop complex, 35 to 60 percent slopes, very bouldery	HEL						
2srqn	Insula-Conic-Rock Outcrop complex, 8 to 25 percent slopes, very bouldery	PHEL	2	0.17	0	10.0	80	1.20
2srqp	Quetico-Insula, very bouldery-Greenwood complex, 0 to 12 percent slopes	PHEL	1	0.24	0	10	80	1.20
2srqr	Greenwood peat, 0 to 1 percent slopes	NHEL						
2srqs	Insula-Conic-Wahlsten complex, 0 to 12 percent slopes, very stony	PHEL	2	0.17	0	10	80	1.20
2srqv	Baudette, till substratum-Conic, very stony-Littleswan complex, 0 to 12 percent slopes	PHEL	3	0.28	86	12.0	80	1.60
2srqw	Wahlsten, very stony-Spooner-Voyageurs complex, 0 to 8 percent slopes	NHEL						
2srqy	Baudette-Littleswan complex, 0 to 8 percent slopes	NHEL						
2srqz	Canthook-Durkeelake complex, 0 to 12 percent slopes	NHEL						
2srr3	Spooner-Sax complex, 0 to 2 percent slopes	NHEL						
2srr4	Littleswan-Spooner complex, 0 to 3 percent slopes	NHEL						
2srr7	Mooselake mucky peat, 0 to 1 percent slopes	NHEL						
2srr8	Rifle mucky peat, 0 to 1 percent slopes	NHEL						
2srr9	Tacoosh and Sax soils, 0 to 1 percent slopes, frequently flooded	NHEL						
2srrb	Aquents, Sax, and Tacoosh soils, 0 to 1 percent slopes, ponded	NHEL						
2srrh	Greenwood peat, 0 to 1 percent slopes, seasonally ponded	NHEL						
2srrj	Rifle mucky peat, 0 to 1 percent slopes, seasonally ponded	NHEL						
2srrk	Insula-Conic-Wahlsten complex, 0 to 25 percent slopes, very stony	PHEL	2	0.17	0	10.0	80	1.20
2srrl	Tacoosh and Sax soils, 0 to 1 percent slopes, occasionally flooded	NHEL						
2srrm	Brickton-Hassman complex, 0 to 2 percent slopes	NHEL						
2srrn	Brickton-Dalbo complex, 0 to 3 percent slopes	NHEL						
2srrq	Cathro and Tacoosh soils, 0 to 1 percent slopes, ponded	NHEL						
2srrt	Bowstring and Fluvaquents loamy, soils, 0 to 2 percent slopes, frequently flooded	NHEL						
1003B	Udorthents, loamy (cut and fill land)	NHEL						
1007	Udorthents, shallow (sanitary landfill)	NHEL						
1012A	Lobo-Waskish complex, 0 to 2 percent slopes	NHEL	2		0	0.5	80	
1014A	Uskabwanka peat, 0 to 1 percent slopes	NHEL	1		0	0	80	
1020A	Bowstring and Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded	NHEL	1		134	0	80	
1021A	Rifle soils, 0 to 1 percent slopes	NHEL	2		0	0	80	
1022A	Greenwood soils, 0 to 1 percent slopes	NHEL	2		0	0	80	

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musym	muname	HEL	T	K	I	slope_%	slope_l	LS
1035	Urban Land	NHEL						
1048	Dumps, iron mine	NHEL						
1049	Pits, iron mine	NHEL						
1050	Tailings basin	NHEL						
A1B	Graycalm-Grayling complex, 1 to 8 percent slopes	NHEL	5	.10	134	4	80	
A3B	Wurtsmith-Friendship complex, 1 to 4 percent slopes	NHEL	5	.15	134	2	80	
A4A	Meehan loamy sand, 0 to 2 percent slopes	NHEL	5	.15	134	1	80	
A21B	Graycalm-Keenan complex, 1 to 8 percent slopes	NHEL	5	.10	134	5	80	
B1C	Taylor silty clay loam, 4 to 12 percent slopes	PHEL	3	0.28	86	12	100	1.60
B1D	Taylor silty clay loam, 12 to 25 percent slopes	HEL	3	0.37	48	12	100	1.60
B2A	Indus-Woodslake, depressional, complex, 0 to 1 percent slopes	NHEL	5	.28	48	0.5	100	
B3B	Alango-Indus complex, 1 to 4 percent slopes	NHEL	5	.28	48	3	100	
B4A	Indus-Dora, depressional, complex, 0 to 2 percent slopes	NHEL	5	.28	48	1	100	
B5B	Alango-Taylor-Woodslake, depressional, complex, 0 to 6 percent slopes	NHEL	5	.28	48	3	100	
B6B	Morcom-Thistledew complex, 0 to 6 percent slopes	NHEL	4	.20	86	2	100	
B7D	Udorthents, slumped-Thistledew-Taylor complex, 10 to 25 percent slopes	PHEL	3	0.28	86	12	100	1.60
B8A	Bearville loamy sand, 0 to 2 percent slopes	NHEL	3	.15	134	1	80	
B9A	Greaney and Dora soils, 0 to 1 percent slopes, frequently flooded	NHEL	5	.28	48	0.5	80	
B10B	Rollins sandy loam, 2 to 8 percent slopes	NHEL	2	.20	86	6	80	
B10D	Rollins sandy loam, 8 to 18 percent slopes	PHEL	2	0.10	0	12	80	1.60
B11B	Taylor-Taylor, sandy substratum complex, 2 to 6 percent slopes	PHEL	3	0.43	38	5	100	0.54
B11C	Taylor-Taylor, sandy substratum complex, 6 to 12 percent slopes	PHEL	3	0.28	86	12	100	1.60
B12D	Taylor-Greaney, frequently flooded complex, 0 to 25 percent slopes	HEL	3	0.32	48	12	100	1.60
B15A	Morph fine sandy loam, 0 to 2 percent slopes	NHEL	5	.28	56	1	100	
B18A	Foglake-Hassman, depressional complex, 0 to 2 percent slopes	NHEL	5	.43	48	1	100	
B19B	Longsiding-Foglake-Grasston complex, 0 to 6 percent slopes	NHEL	5	.43	48	2	100	
B23A	Effie-Ashlake complex, MLRA 88, 0 to 2 percent slopes	NHEL	5	.28	56	1	100	
B24B	Ashlake-Suomi-Effie complex, MLRA 88, 1 to 4 percent slopes	NHEL	5	.28	56	2	100	
B25C	Suomi-Ashlake complex, MLRA 88, 6 to 15 percent slopes	PHEL	3	0.28	86	12	100	1.60
B26A	Daisybay-Greenwood complex, 0 to 1 percent slopes	NHEL	1		0	0	80	
B36B	Lavell-Shawano complex, 1 to 6 percent slopes	NHEL	5	.17	134	4	80	
B37B	Westoo-Lavell complex, 0 to 6 percent slopes	NHEL	5	.20	134	2	80	
B41B	Friendship loamy sand, 0 to 4 percent slopes	NHEL	5	.10	134	2	80	
B45A	Dora muck, depressional, taylor catena, 0 to 1 percent slopes	NHEL	1		0	0	100	
B46A	Dora mucky peat, taylor catena, 0 to 1 percent slopes	NHEL	1		56	0	100	

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musym	muname	HELC	T	K	I	slope_%	slope_l	LS
B55A	Kooch-Kab-Ratroot complex, 0 to 4 percent slopes	NHEL	3	.32	48	2	100	
B64B	Vasso-Keenan complex, 1 to 6 percent slopes	NHEL	5	.20	86	2	80	
B79B	Sugarbush-Graycalm complex, 2 to 8 percent slopes	NHEL	5	.15	86	4	80	
B79D	Sugarbush-Graycalm complex, 8 to 18 percent slopes	PHEL	2	0.10	0	12	80	1.60
B82A	Greenwood soils, taylor catena, 0 to 1 percent slopes	NHEL	2		0	0	80	
B84B	Eutrudepts, occasionally flooded-Greaney, frequently flooded, complex, 0 to 4 percent slopes	NHEL	5	.37	48	2	80	
B151A	Kab-Kooch complex, 0 to 4 percent slopes	NHEL						
B255A	Beseman and Merwin soils, suomi catena, 0 to 1 percent slopes	NHEL	1		0	0	80	
B256A	Cathro and Tacoosh soils, suomi catena, 0 to 1 percent slopes	NHEL	1		0	0	80	
B274A	Rifle soils, spooner catena, 0 to 1 percent slopes	NHEL	2		0	0	80	
B275A	Rifle soils, suomi catena, 0 to 1 percent slopes	NHEL	2		0	0	80	
B276A	Cathro and Tacoosh soils, spooner catena, 0 to 1 percent slopes	NHEL	1		0	0	80	
B279A	Markey and Lougee soils, 0 to 1 percent slopes	NHEL	1		0	0	80	
B281C	Thistledew-Pequaywan complex, 2 to 12 percent slopes	PHEL	3	0.28	86	12	80	1.60
F2B	Eaglesnest-Wahlsten complex, 2 to 8 percent slopes, bouldery, very rocky	NHEL	4	.15	48	5	80	
F3D	Eveleth-Eaglesnest-Conic complex, 6 to 18 percent slopes, bouldery	PHEL	4	0.17	0	12	80	1.80
F4E	Eveleth-Conic, bouldery-Rock outcrop complex, 18 to 30 percent slopes	HEL	2	0.17	0	25	80	7.00
F5B	Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0 to 8 percent slopes, rocky	NHEL	4	.17	48	3	80	
F6B	Soudan-Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery	NHEL	4	.17	86	5	80	
F7B	Biwabik-Graycalm complex, 1 to 8 percent slopes	NHEL	5	.15	86	5	80	
F8D	Biwabik-Graycalm-Friendship complex, 0 to 18 percent slopes, pitted	PHEL	2	0.10	0	12	80	1.60
F9B	Cloquet loam, 2 to 8 percent slopes	NHEL	3	.28	56	5	80	
F10D	Cloquet-Pequaywan complex, 0 to 18 percent slopes, pitted	PHEL	2	0.10	0	12	80	1.60
F10E	Cloquet-Pequaywan complex, 0 to 45 percent slopes, pitted	HEL	2	0.10	0	30	80	7.00
F11B	Eaglesnest stony loam, 2 to 8 percent slopes, bouldery	NHEL	4	.15	48	5	80	
F12B	Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery	NHEL	4	.15	48	4	80	
F13A	Babbitt, bouldery-Aquepts, rubbly, complex, 0 to 3 percent slopes	NHEL	4	.17	48	2	80	
F14D	Eveleth stony loam, 8 to 18 percent slopes, bouldery	PHEL	4	0.17	0	12	80	1.80
F15E	Rollins cobbly sandy loam, 18 to 35 percent slopes, stony	HEL	2	0.10	0	30	80	7.00
F16B	Shawano loamy fine sand, 1 to 8 percent slopes	NHEL	5	.20	134	5	80	
F17A	Aquepts, 0 to 2 percent slopes, rubbly	NHEL	5	.05	0	0.5	80	
F19A	Pequaywan loam, 0 to 3 percent slopes	NHEL	3	.28	56	1	80	
F21C	Quetico, bouldery-Insula, bouldery-Rock outcrop complex, 3 to 18 percent slopes	PHEL	1	0.24	0	10	80	1.20
F21D	Quetico, stony-Rock outcrop complex, 15 to 35 percent slopes	HEL	1	0.24	0	30	80	7.00
F21F	Quetico, stony-Rock outcrop complex, 35 to 60 percent slopes	HEL	1	0.24	0	30	80	7.00

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F23B	Rollins-Biwabik complex, 1 to 8 percent slopes, very rocky	NHEL	2	.20	86	5	80	
F24A	Gnesen loam, 0 to 3 percent slopes	NHEL	3	.37	56	2	80	
F25D	Rollins-Cloquet complex, 8 to 18 percent slopes	PHEL	2	0.10	0	12	80	1.60
F26C	Shagawa-Beargrease complex, 2 to 15 percent slopes, extremely bouldery	PHEL	2	0.10	0	12	80	1.60
F26E	Shagawa-Beargrease complex, 8 to 30 percent slopes, extremely bouldery	PHEL	2	0.10	0	12	80	1.60
F26G	Shagawa-Beargrease complex, 35 to 60 percent slopes, extremely bouldery	HEL	2	0.10	0	30	80	7.00
F28B	Oysterlake complex, 0 to 4 percent slopes, extremely stony	NHEL	3	.15	48	2	80	
F30G	Conic, very bouldery-Insula, very bouldery-Rock outcrop complex, 20 to 70 percent slopes	HEL	2	0.17	0	25	80	7.00
F34A	Cathro muck, depressional, 0 to 1 percent slopes	NHEL	1		0	0	80	
F35D	Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 18 percent slopes	PHEL	4	.17	0	12	80	1.80
F35E	Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 30 percent slopes	HEL	2	.17	0	25	80	7.00
F36D	Conic, bouldery-Insula, bouldery-Rock outcrop complex, 8 to 25 percent slopes	PHEL	2	0.17	0	10	80	1.20
F37B	Foglake-Babbitt, bouldery, complex, 0 to 4 percent slopes	NHEL	5	.43	48	1	80	
F38B	Longsiding-Eaglesnest, bouldery, complex, 0 to 8 percent slopes	NHEL	5	.43	48	4	80	
F39A	Foglake-Aquepts, rubbly-Hassman, depressional, complex, 0 to 2 percent slopes	NHEL	5	.43	48	1	80	
F40B	Rollins cobbly sandy loam, 2 to 8 percent slopes	NHEL	2	.15	56	5	80	
F40D	Rollins cobbly sandy loam, 8 to 18 percent slopes	PHEL	2	0.10	0	12	80	1.60
F41B	Wurtsmith-Friendship complex, MLRA 93, 1 to 4 percent slopes	NHEL	5	.15	134	2	80	
F116A	Mooselake muck, 0 to 1 percent slopes	NHEL	2		134	0	80	
F151A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	NHEL	1		56	0	80	
F164B	Beargrease-Biwabik-Rollins complex, 2 to 8 percent slopes, very stony	NHEL	2	.10	38	5	80	
F164E	Beargrease-Biwabik-Rollins complex, 8 to 35 percent slopes, very stony	PHEL	2	.10	0	12	80	1.60
F165C	Insula, very bouldery-Rock outcrop-Wahlsten, very bouldery complex, 2 to 12 percent slopes	PHEL	2	0.17	0	10	80	1.20
F166A	Aquepts, rubbly-Tacoosh-Rifle complex, 0 to 2 percent slopes	NHEL	5	.05	0	0.5	80	
F167B	Wahlsten, bouldery-Insula, bouldery-Rock outcrop complex, 1 to 10 percent slopes	NHEL	2	.20	48	5	80	
F168A	Foglake-Hassman, depressional, complex, MLRA 93A, 0 to 2 percent slopes	NHEL	5	.43	48	1	100	
F169B	Longsiding-Grasston complex, 1 to 6 percent slopes	NHEL	5	.43	48	2	100	
F172B	Westoo-Barber-Vasso complex, MLRA 93A, 0 to 6 percent slopes	NHEL	5	.20	134	3	80	
F173A	Wabuse-Vasso complex, MLRA 93A, 0 to 3 percent slopes	NHEL	5	.17	86	1	80	
F176A	Sago muck, depressional, 0 to 1 percent slopes	NHEL	1		134	0	80	
F182B	Cromwell-Slimlake complex, 0 to 4 percent slopes	NHEL						
F186C	Dystrudepts-Udipsamments complex, 2 to 12 percent slopes	PHEL	3	0.28	86	12	80	1.60
F187A	Dora mucky peat, 0 to 1 percent slopes	NHEL						
F189B	Suomi-Ashlake complex, 1 to 8 percent slopes	NHEL	5	.28	56	4	100	
F190B	Ashlake-Effie complex, 0 to 4 percent slopes	NHEL	5	.28	56	2	100	

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F191A	Littleswan-Spooner complex, 0 to 3 percent slopes	NHEL	5	.43	56	2	100		
F192B	Baudette-Littleswan complex, 1 to 8 percent slopes	NHEL	5	.43	56	5	100		
F193A	Effie-Hamre complex, 0 to 2 percent slopes	NHEL	5	.28	56	1	100		
F194D	Suomi loam, 8 to 18 percent slopes	HEL	3	0.32	48	12	100	1.60	
F195B	Aquepts-Wahlsten-Rock outcrop complex, 1 to 8 percent slopes, very stony	NHEL	2	.17	48	3	80		
F196A	Spooner-Sax complex, 0 to 1 percent slopes	NHEL	5	.43	56	1	100		
F197B	Cutaway-Biwabik complex, 1 to 8 percent slopes	NHEL	4	.10	134	4	80		
F198D	Cutaway-Suomi-Conic complex, 6 to 25 percent slopes	PHEL	3	0.28	86	12	80	1.60	
F199B	Cutaway-Suomi complex, 1 to 8 percent slopes	NHEL	4	.10	134	4	80		
F200A	Northwood-Hassman-Cathro soils, 0 to 1 percent slopes	NHEL	1		134	0	80		
F201B	Rollins-Biwabik-Friendship complex, 0 to 8 percent slopes	NHEL	2	.20	86	5	80		
F202B	Ricelake-Cutaway complex, 1 to 4 percent slopes	NHEL	5	.10	134	2	80		
F204D	Debs silt loam, mlra 93A, 8 to 18 percent slopes	HEL	3	0.32	48	12	80	1.60	
F205D	Rollins-Biwabik complex, suomi catena, 8 to 18 percent slopes	PHEL	2	0.10	0	12	80	1.60	
F206B	Wahlsten, bouldery-Rock outcrop-Aquepts complex, 0 to 12 percent slopes	NHEL	2	.20	48	6	80		
F206D	Wahlsten, bouldery-Rock outcrop-Aquepts complex, 0 to 25 percent slopes	PHEL	2	0.17	0	10	80	1.20	
F207F	Insula, bouldery-Rock outcrop-Aquepts complex, 0 to 50 percent slopes	HEL	2	0.17	0	25	80	7.00	
F208B	Babbitt, bouldery-Wahlsten, bouldery-Canthook complex, 0 to 8 percent slopes	NHEL	4	.17	48	2	80		
F209D	Conic, bouldery-Rock outcrop-Eaglesnest, bouldery complex, 0 to 18 percent slopes	PHEL	2	0.17	0	10	80	1.20	
F209E	Conic, bouldery-Rock outcrop-Eveleth, bouldery complex, 0 to 35 percent slopes	HEL	2	0.17	0	25	80	7.00	
F210B	Babbitt-Lithic Endoaquepts-Eaglesnest, complex, 0 to 8 percent slopes, bouldery	NHEL	4	.17	48	2	80		
F211B	Durkeelake-Canthook-Longsiding complex, 0 to 6 percent slopes	NHEL	4	.15	86	4	80		
F212A	Canthook-Bootleg-Foglake complex, 0 to 3 percent slopes	NHEL	4	.15	86	2	100		
F213B	Longsiding-Canthook-Foglake complex, 0 to 6 percent slopes	NHEL	5	.43	48	2	100		
F214A	Aquepts, rubbly-Foglake-Hassman complex, 0 to 2 percent slopes	NHEL	5	.05	0	0.5	80		
F215A	Greenwood soils, spooner catena, 0 to 1 percent slopes	NHEL	2		0	0	80		
F216A	Mooselake mucky peat, suomi catena, 0 to 1 percent slopes	NHEL	2		134	0	80		
GP	Pits, gravel-Udipsamments complex	NHEL							
I-W	Water, intermittent	NHEL							
M-W	Water, miscellaneous	NHEL							
W	Water	NHEL							