

Highly Erodible Soil Map Unit List - LAKE COUNTY, MN

C=.08

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 'HELC' should only be used for PHEL.

musym	muname	HELC	T	K	I	slope_%	slope_l	LS
A1-11C	Quetico, stony-Barto, stony-Rock outcrop complex, 2 to 15 percent slopes	PHEL	1	0.24	0	10	80	1.2
A1-11D	Quetico, stony-Barto, stony-Rock outcrop complex, 15 to 35 percent slopes	HEL						
A1-11F	Quetico, stony-Barto, stony-Rock outcrop complex, 35 to 60 percent slopes	HEL						
A1-20C	Mesaba, stony-Greysolon-Rock outcrop complex, 2 to 15 percent slopes	PHEL	2	0.17	0	10	80	1.2
A1-20D	Mesaba, stony-Barto, stony-Rock outcrop complex, 15 to 35 percent slopes	HEL						
A1-20F	Barto, stony-Mesaba, stony-Rock outcrop complex, 35 to 60 percent slopes	HEL						
A1-30B	Barto, stony-Greysolon-Rock outcrop complex, 0 to 8 percent slopes	NHEL						
A1-30D	Barto, stony-Greysolon-Rock outcrop complex, 0 to 18 percent slopes	PHEL	2	0.17	0	10	80	1.2
A1-40B	Normanna-Greysolon complex, 2 to 8 percent slopes, very rocky	NHEL						
A1-41D	Ahmeek-Normanna-Mesaba, stony complex, 4 to 18 percent slopes, very rocky	HEL						
A1-41F	Ahmeek-Mesaba, stony complex, 18 to 35 percent slopes, very rocky	HEL						
A2-19A	Twig extremely stony mucky peat, 0 to 3 percent slopes, rubbly, very rocky	NHEL						
A2-20B	Aquepts, very stony-Greysolon-Rock outcrop complex, 0 to 8 percent slopes	NHEL						
A2-20D	Aquepts, very stony-Mesaba, stony-Rock outcrop complex, 0 to 18 percent slopes	PHEL	2	0.17	0	10	80	1.2
A2-30B	Greysolon-Giese, rubbly-Barto, stony complex, 0 to 8 percent slopes, very rocky	NHEL						
A2-30D	Mesaba, stony-Giese, rubbly-Barto, stony complex, 0 to 18 percent slopes, very rocky	PHEL	2	0.17	0	10	80	1.2
A2-40B	Greysolon-Normanna-Giese, rubbly complex, 0 to 8 percent slopes, very rocky	NHEL						
A2-41D	Ahmeek-Mesaba, stony-Giese, rubbly complex, 0 to 18 percent slopes, very rocky	HEL						
A3-10A	Giese, rubbly-Tacoosh-Rifle complex, 0 to 2 percent slopes	NHEL						
A3-11A	Twig-Tacoosh-Giese complex, 0 to 1 percent slopes, depressional	NHEL						
A3-12A	Giese muck, depressional, 0 to 1 percent slopes	NHEL						
A3-13A	Giese muck, 0 to 2 percent slopes, rubbly	NHEL						
A3-20A	Canosia loam, 0 to 2 percent slopes	NHEL						
A3-21A	Hermantown silt loam, 1 to 3 percent slopes	NHEL						
A3-22B	Normanna-Hermantown complex, 1 to 8 percent slopes	NHEL						
A3-30B	Normanna-Canosia-Hermantown complex, 0 to 8 percent slopes	NHEL						
A3-31D	Ahmeek-Normanna-Canosia complex, 0 to 18 percent slopes	HEL						
A3-32F	Ahmeek-Canosia complex, 0 to 45 percent slopes	HEL						
A3-40A	Hermantown-Canosia-Giese, depressional complex, 0 to 3 percent slopes	NHEL						
A3-41B	Normanna-Giese, depressional complex, 0 to 8 percent slopes, pitted	NHEL						
A3-42D	Ahmeek-Normanna-Cathro, depressional complex 0 to 25 percent slopes, pitted	HEL						
A3-50D	Ahmeek-Canosia complex, 0 to 25 percent slopes, very rocky	HEL						
B1-10A	Wahbegon, depressional-Eldes complex, 0 to 2 percent slopes	NHEL						
B1-20B	Hegberg-Eldes complex, 0 to 3 percent slopes	NHEL						
B1-30E	Forbay loam, 18 to 45 percent slopes	HEL						
B1-40B	Augustana-Hegberg complex, 1 to 8 percent slopes	NHEL						
B1-41D	Forbay-Augustana complex, 3 to 18 percent slopes	PHEL	5	0.37	86	8	80	0.89

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musym	muname	HELCL	T	K	I	slope_%	slope_l	LS
B1-50D	Forbay-Eldes complex, 0 to 25 percent slopes, very rocky	PHEL	5	0.37	86	8	80	0.89
B2-20C	Augustanna, moderately deep-Hegberg, moderately deep-Rock outcrop complex, 1 to 15 percent slopes	PHEL	5	0.37	86	8	80	0.89
B2-20D	Forbay, moderately deep-Barto, stony-Rock outcrop complex, 15 to 35 percent slopes	HEL						
B2-40B	Hegberg, moderately deep-Augustanna, moderately deep complex, 1 to 8 percent slopes, very rocky	NHEL						
B2-41D	Forbay, moderately deep-Augustanna, moderately deep complex, 3 to 18 percent slopes, very rocky	PHEL	5	0.37	86	8	80	0.89
B2-41E	Forbay loam, 18 to 35 percent slopes, very rocky	HEL						
B3-40B	Hegberg, moderately deep-Eldes, moderately deep complex, 0 to 8 percent slopes, very rocky	NHEL						
B274A	Rifle soils, spooner catena, 0 to 1 percent slopes	NHEL						
C1-10A	Palmer, depressional-Badriver complex, 0 to 1 percent slopes	NHEL						
C1-20A	Badriver complex, 0 to 3 percent slopes	NHEL						
C1-40B	Badriver complex, 0 to 8 percent slopes	NHEL						
C1-41D	Sandborg-Badriver complex, 3 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
C3-40B	Badriver complex, 0 to 8 percent slopes, very rocky	NHEL						
C3-41D	Sanborg-Badriver complex, 1 to 18 percent slopes, very rocky	PHEL	3	0.28	86	8	100	0.99
C1071D	Normanna, clayey substratum-Badriver, colluvial mantle complex, 3 to 18 percent slopes, very rocky	PHEL	5	0.37	86	8	80	0.89
D1-10A	Palmer, depressional-Cuttre complex, 0 to 1 percent slopes	NHEL						
D1-20A	Cuttre complex, 0 to 3 percent slopes	NHEL						
D1-40B	Cuttre silt loam, 3 to 8 percent slopes	NHEL						
D1-41D	Amnicon-Cuttre complex, 5 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
D1-42F	Miskoaki-Cuttre complex, 5 to 45 percent slopes	HEL						
D1-50B	Cuttre complex, 0 to 8 percent slopes	NHEL						
D1-51D	Amnicon-Cuttre complex, 3 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
D1-60B	Cuttre-Cuttre, mantled complex, 0 to 8 percent slopes	NHEL						
D3-10A	Palmer, depressional-Cuttre complex, 0 to 1 percent slopes, very rocky	NHEL						
D3-20A	Cuttre complex, 0 to 3 percent slopes, very rocky	NHEL						
D3-40B	Cuttre complex, 3 to 8 percent slopes, very rocky	NHEL						
D3-41D	Amnicon-Cuttre complex, 5 to 18 percent slopes, very rocky	PHEL	3	0.28	86	8	100	0.99
D3-42F	Miskoaki-Cuttre complex, 5 to 45 percent slopes, very rocky	HEL						
D3-50B	Cuttre complex, 0 to 8 percent slopes, very rocky	NHEL						
D3-51D	Amnicon-Cuttre complex, 3 to 18 percent slopes, very rocky	PHEL	3	0.28	86	8	100	0.99
D3-60B	Cuttre, colluvial mantle complex, 0 to 4 percent slopes, very rocky	NHEL						
D3-62D	Amnicon, colluvial mantle-Cuttre, colluvial mantle complex, 2 to 18 percent slopes, very rocky	PHEL	3	0.28	86	8	100	0.99
E1-9B	Normanna-Fluvaquents, frequently flooded-Rock outcrop complex, 0 to 8 percent slopes	NHEL						
E1-9D	Ahmeek-Udfluents, frequently flooded-Rock outcrop complex, 1 to 18 percent slopes	HEL						
E1-10F	Ahmeek-Rock outcrop-Fluvaquents, frequently flooded complex 0 to 50 percent slopes	HEL						
E1-12F	Quetico, stony-Rock outcrop-Fluvaquents, frequently flooded complex, 0 to 50 percent slopes	HEL						
E1-13F	Mesaba, stony-Rock outcrop-Fluvaquents, frequently flooded complex, 0 to 50 percent slopes	HEL						

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musym	muname	HEL	T	K	I	slope_%	slope_l	LS
E1-14F	Ahmeek-Rock outcrop-Udifluents, frequently flooded complex, 1 to 70 percent slopes	HEL						
E1-18B	Augustanna-Rock outcrop-Fluvaquents, frequently flooded complex, 0 to 8 percent slopes	NHEL						
E1-19D	Forbay-Udifluents, frequently flooded-Rock outcrop complex, 1 to 18 percent slopes	PHEL	5	0.37	86	8	80	0.89
E1-20E	Forbay-Udifluents, frequently flooded-Rock outcrop complex, 1 to 70 percent slopes	HEL						
E1-27D	Sandborg-Fluvaquebts, frequently flooded-Rock outcrop complex, 0 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E1-28D	Sandborg-Udifluents, frequently flooded-Rock outcrop complex, 1 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E1-29E	Odanah-Fluvaquents, frequently flooded-Rock outcrop complex, 0 to 45 percent slopes	HEL						
E1-30F	Odanah-Udifluents, frequently flooded-Rock outcrop complex, 1 to 70 percent slopes	HEL						
E1-37D	Amnicon-Fluvaquents, frequently flooded-Rock outcrop complex, 0 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E1-38D	Amnicon-Udifluents, frequently flooded-Rock outcrop complex, 1 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E1-39E	Miskoaki-Fluvaquents, frequently flooded-Rock outcrop complex, 0 to 45 percent slopes	HEL						
E1-40E	Miskoaki-Udifluents, frequently flooded-Rock outcrop complex, 1 to 45 percent slopes	HEL						
E2-10B	Augustanna-Fluvaquents, frequently flooded complex, 0 to 8 percent slopes	NHEL						
E2-11D	Forbay-Fluvaquents, frequently flooded complex, 0 to 18 percent slopes	PHEL	5	0.37	86	8	80	0.89
E2-12D	Forbay-Udifluents, frequently flooded complex, 1 to 18 percent slopes	PHEL	5	0.37	86	8	80	0.89
E2-13E	Forbay-Fluvaquents, frequently flooded complex, 0 to 45 percent slopes	HEL						
E2-14E	Forbay-Udifluents, frequently flooded complex, 1 to 45 percent slopes	HEL						
E2-20B	Badriver-Fluvaquents, frequently flooded complex, 0 to 8 percent slopes	NHEL						
E2-21D	Sandborg-Fluvaquents, frequently flooded complex, 0 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E2-22D	Sandborg-Udifluents, frequently flooded complex, 1 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E2-23E	Odanah-Fluvaquents, frequently flooded complex, 0 to 45 percent slopes	HEL						
E2-24E	Odanah-Udifluents, frequently flooded complex 1 to 45 percent slopes	HEL						
E2-30B	Cuttre-Fluvaquents, frequently flooded complex, 0 to 8 percent slopes	NHEL						
E2-31D	Amnicon-Fluvaquents, frequently flooded, complex, 0 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E2-32D	Amnicon-Udifluents, frequently flooded complex, 1 to 18 percent slopes	PHEL	3	0.28	86	8	100	0.99
E2-33E	Miskoaki-Fluvaquents, frequently flooded, complex, 0 to 45 percent slopes	HEL						
E2-34E	Miskoaki-Udifluents, frequently flooded complex, 1 to 45 percent slopes	HEL						
F1-10A	Rollins sandy loam, 0 to 3 percent slopes	NHEL						
F1-10B	Rollins sandy loam, 2 to 8 percent slopes	NHEL						
F1-10D	Rollins sandy loam, 8 to 18 percent slopes	PHEL	3	0.2	0	16	80	2.6
F1-10F	Rollins sandy loam, 18 to 45 percent slopes	HEL						
F1-30B	Rollins-Pequaywan complex, 0 to 8 percent slopes, pitted	NHEL						
F1-30D	Rollins-Pequaywan complex, 0 to 18 percent slopes, pitted	PHEL	3	0.2	0	16	80	2.6
F1-30F	Rollins-Pequaywan complex, 0 to 45 percent slopes, pitted	HEL						
F2-10A	Hulligan mucky fine sandy loam, depressional, 0 to 1 percent slopes	NHEL						
F2-11A	Hulligan fine sandy loam, 0 to 1 percent slopes	NHEL						
F2-13A	Pequaywan fine sandy loam, 0 to 3 percent slopes	NHEL						

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musym	muname	HEL	T	K	I	slope_%	slope_l	LS
F2-14B	Aldenlake-Pequaywan complex, 0 to 6 percent slopes	NHEL						
F2-15A	Aldenlake sandy loam, 0 to 3 percent slopes	NHEL						
F2-15B	Aldenlake sandy loam, 2 to 8 percent slopes	NHEL						
F2-15D	Aldenlake sandy loam, 8 to 18 percent slopes	PHEL	3	0.2	0	16	80	2.6
F2-15F	Aldenlake sandy loam, 18 to 45 percent slopes	HEL						
F2-20B	Aldenlake-Pequaywan complex, 0 to 8 percent slopes, pitted	NHEL						
F2-20D	Aldenlake-Pequaywan complex, 0 to 18 percent slopes, pitted	PHEL	3	0.2	0	16	80	2.6
F2-20F	Aldenlake-Pequaywan complex, 0 to 45 percent slopes, pitted	HEL						
F2-30D	Aldenlake sandy loam, 3 to 20 percent slopes, very rocky	PHEL	3	0.2	0	16	80	2.6
F2-40B	Normanna-Aldenlake-Canosia complex, 0 to 8 percent slopes	NHEL						
F2-41D	Aldenlake-Ahmeek complex, 8 to 18 percent slopes	PHEL	3	0.2	0	16	80	2.6
F2-42F	Ahmeek-Aldenlake complex, 18 to 45 percent slopes	HEL						
F2B	Eaglesnest-Wahlsten complex, 2 to 8 percent slopes, bouldery, very rocky	NHEL						
F4-20D	Grayling-Grytal-Cromwell complex, 0 to 18 percent slopes, pitted	NHEL						
F5-10A	Cloquet loam, 0 to 2 percent slopes	NHEL						
F7B	Biwabik-Graycalm complex, 1 to 8 percent slopes	NHEL						
F8D	Biwabik-Graycalm-Friendship complex, 0 to 18 percent slopes, pitted	PHEL	2	0.17	0	6	80	0.6
F9B	Cloquet loam, 2 to 8 percent slopes	NHEL						
F10D	Cloquet-Pequaywan complex, 0 to 18 percent slopes, pitted	HEL						
F10E	Cloquet-Pequaywan complex, 0 to 45 percent slopes, pitted	HEL						
F15E	Rollins cobbly sandy loam, 18 to 35 percent slopes, stony	HEL						
F19A	Pequaywan loam, 0 to 3 percent slopes	NHEL						
F23B	Rollins-Biwabik complex, 1 to 8 percent slopes, very rocky	NHEL						
F24A	Gnesen loam, 0 to 3 percent slopes	NHEL						
F25D	Rollins-Cloquet complex, 8 to 18 percent slopes	HEL						
F37B	Foglake-Babbitt, bouldery, complex, 0 to 4 percent slopes	NHEL						
F38B	Longsiding-Eaglesnest, bouldery, complex, 1 to 8 percent slopes	NHEL						
F39A	Foglake, bouldery-Aquepts, rubbly-Hassman, depressional, complex, 0 to 2 percent slopes	NHEL						
F40D	Rollins cobbly sandy loam, 8 to 18 percent slopes	HEL						
F164E	Beargrease-Biwabik-Rollins complex, 8 to 35 percent slopes, very stony	HEL						
F169B	Longsiding-Grasston complex, 1 to 6 percent slopes	NHEL						
G1-10A	Eldes, colluvial mantle-Wahbegon complex, 0 to 3 percent slopes, very rocky	NHEL						
G1-10B	Hegberg, colluvial mantle-Eldes, colluvial mantle complex, 0 to 8 percent slopes, very rocky	NHEL						
G1-10D	Augustanna, colluvial mantle-Hegberg, colluvial mantle-Mesaba, stony complex, 1 to 18 percent slopes, very rocky	PHEL	5	0.37	86	8	80	0.89
I1-10A	Bugcreek extremely stony sandy loam, 0 to 1 percent slopes, rubbly	NHEL						
I1-11A	Nevens stony loam, 0 to 2 percent slopes, very stony	NHEL						
I1-20B	Brimson stony fine sandy loam, 2 to 5 percent slopes, very stony	NHEL						

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musym	muname	HELC	T	K	I	slope_%	slope_l	LS
I1-21B	Toimi stony loam, 3 to 8 percent slopes, very stony	NHEL						
I1-21D	Toimi stony loam, 8 to 18 percent slopes, very stony	PHEL	4	0.24	86	8	100	0.99
I1-21E	Toimi stony loam, 18 to 45 percent slopes, very stony	HEL						
I1-30D	Toimi, very stony-Brimson, very stony complex, 0 to 20 percent slopes, very rocky	PHEL	4	0.24	86	8	100	0.99
I1-40B	Brimson, very stony-Bugcreek, rubbly complex, 0 to 5 percent slopes	NHEL						
I1-41B	Toimi-Nevens-Brimson complex, 0 to 8 percent slopes, very stony	NHEL						
I1-42D	Toimi-Nevens complex, 0 to 18 percent slopes, very stony	PHEL	4	0.24	86	8	100	0.99
I2a10C	Quetico, bouldery-Insula, bouldery-Rock outcrop complex, 3 to 18 percent slopes	PHEL	1	0.24	0	10	80	1.2
I2a10D	Quetico, stony-Rock outcrop complex, 15 to 35 percent slopes	HEL						
I2a10F	Quetico, stony-Rock outcrop complex, 35 to 60 percent slopes	HEL						
I2a21B	Insula, very bouldery-Rock outcrop-Wahlsten, very bouldery complex, 2 to 12 percent slopes	PHEL	2	0.17	0	10	80	1.2
I2a22D	Conic, bouldery-Insula, bouldery-Rock outcrop complex, 8 to 25 percent slopes	PHEL	3	0.15	0	20	80	3.5
I2a23G	Conic, very bouldery-Insula, very bouldery-Rock outcrop complex, 20 to 70 percent slopes	HEL						
I2a31D	Eveleth-Eaglesnest-Conic complex, bouldery, 6 to 18 percent slopes, very rocky	HEL						
I2a32E	Eveleth, bouldery-Conic, bouldery-Rock outcrop complex, 18 to 30 percent slopes	HEL						
I2b19A	Babbitt, bouldery-Aquepts, rubbly complex, 0 to 3 percent slopes	NHEL						
I2b20B	Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0 to 8 percent slopes, rocky	NHEL						
I2b21D	Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly complex, 0 to 18 percent slopes, very rocky	HEL						
I2b21E	Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly complex, 0 to 30 percent slopes, very rocky	HEL						
I2c10D	Wahlsten, bouldery-Rock outcrop-Aquepts, rubbly complex, 0 to 25 percent slopes	HEL						
I2c11E	Insula, bouldery-Rock outcrop-Aquepts, rubbly complex, 0 to 50 percent slopes	HEL						
I2c21B	Babbitt, bouldery-Whalsten, bouldery-Canthook complex, 0 to 8 percent slopes	NHEL						
I2c22D	Conic, bouldery-Rock outcrop-Eaglesnest, bouldery complex, 2 to 18 percent slopes	PHEL	3	0.15	0	10	80	1.2
I2c23E	Conic, bouldery-Rock outcrop-Eveleth, bouldery complex, 2 to 35 percent slopes	HEL						
I2c30A	Aquepts, rubbly-Foglake-Hassman, depressional complex, 0 to 2 percent slopes	NHEL						
I2c31B	Longsiding-Canthook-Foglake complex, 0 to 6 percent slopes	NHEL						
I2c40A	Canthook-Bootleg-Foglake complex, 0 to 3 percent slopes	NHEL						
I2c41B	Durkeelake-Canthook-Longsiding complex, 0 to 6 percent slopes	NHEL						
I3-11A	Aquepts, rubbly-Tacoosh-Rifle complex, 0 to 2 percent slopes	NHEL						
I3-30B	Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery	NHEL						
I3-32D	Eveleth stony loam, 8 to 18 percent slopes, bouldery	HEL						
I4-30C	Shagawa-Beargrease complex, 2 to 15 percent slopes, extremely bouldery	PHEL	3	0.2	0	8	80	0.89
J1a10A	Rifle soils, dense substratum, 0 to 1 percent slopes	NHEL						
J1a11A	Mooselake muck, 0 to 1 percent slopes	NHEL						
J1a40A	Greenwood soils, dense substratum, 0 to 1 percent slopes	NHEL						
J2-15A	Lougee peat, 0 to 1 percent slopes	NHEL						
J2-30A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	NHEL						

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J2-31A	Merwin peat, dense substratum, 0 to 1 percent slopes	NHEL						
J2-40A	Cathro muck, depressional, dense substratum, 0 to 1 percent slopes	NHEL						
J2-60A	Dora mucky peat, 0 to 1 percent slopes	NHEL						
J3-11A	Lithic Haplohemist, 0 to 1 percent slopes	NHEL						
K1-10	Pits, gravel-Udipsamments complex	PHEL	2	0.17	0	6	80	0.6
K1-11	Pits, iron mine	PHEL	2	0.17	0	6	80	0.6
K1-13B	Udorthents, loamy (cut and fill land)	NHEL						
K1-14	Tailings basin	NHEL						
K1-15C	Beaches, remnant complex, 2 to 12 percent slopes	PHEL	2	0.17	0	6	80	0.6
K1-17C	Beaches, gravelly and cobbly, 0 to 5 percent slopes	NHEL						
K1-19	Water, miscellaneous	NHEL						
K1-21B	Urban land-Cuttre complex, 0 to 8 percent slopes, very rocky	NHEL						
K1-23D	Urban land-Mesaba-Rock outcrop complex, 1 to 18 percent slopes	PHEL	2	0.17	0	10	80	1.2
K1-24	Udorthents, sanitary landfill, 0 to 8 percent slopes	NHEL						
K2-10A	Bowstring and Fluvaquents soils, 0 to 2 percent slopes, frequently flooded	NHEL						
K2-11A	Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, frequently flooded, rubbly	NHEL						
K2-12	Entisols, frequently flooded, rubbly and Histosols soils, 0 to 1 percent slope, ponded	NHEL						
K2-13A	Udifluvents complex, 0 to 2 percent slopes, occasionally flooded	NHEL						
K2-14A	Fluvaquents, clayey, 0 to 1 percent slopes, frequently flooded	NHEL						
K2-15A	Udifluvents complex, 0 to 3 percent slopes, flooded	NHEL						
K2-16A	Udifluvents complex, 0 to 2 percent slopes, rarely flooded	NHEL						
NOTCOM	No Digital Data Available							
W	Water	NHEL						
The Soil Legend below represents soil mapping 2013 and early.								
21A	Hermantown silt loam	NHEL	4	0.32	56	1	80	0.12
21B	Ahmeek loam, 2 to 6 percent slopes	NHEL	3	0.37	56	4	80	0.37
21BC	Ahmeek loam, 2 to 12 percent slopes	PHEL	3	0.37	56	8	80	0.89
21C	Ahmeek loam, 6 to 12 percent slopes	PHEL	3	0.37	56	8	80	0.89
21D	Ahmeek loam, 12 to 18 percent slopes	HEL	3	0.37	56	16	80	2.60
21DE	Ahmeek loam, 12 to 25 percent slopes	HEL	3	0.37	56	16	80	2.60
21E	Ahmeek loam, 18 to 25 percent slopes	HEL	3	0.37	56	20	80	3.50
21F	Ahmeek loam, 25 to 40 percent slopes	HEL	5	0.37	86	30	80	7.00
22	Allendale loamy sand	NHEL	4	0.17	134	1	80	0.12
254B	Hibbing loam, 2 to 6 percent slopes	NHEL	3	0.32	48	4	80	0.37
254BC	Hibbing loam, 2 to 12 percent slopes	PHEL	3	0.32	48	8	80	0.89

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254C	Hibbing loam, 6 to 12 percent slopes	PHEL	3	0.32	48	8	80	0.89
254D	Hibbing loam, 12 to 18 percent slopes	HEL	3	0.32	48	16	80	2.60
254DE	Hibbing loam, 12 to 25 percent slopes	HEL	3	0.32	48	16	80	2.60
254E	Hibbing loam, 18 to 25 percent slopes	HEL	3	0.32	48	20	80	3.50
254F	Hibbing loam, 25 to 40 percent slopes	HEL	3	0.37	86	30	80	7.00
274	Newson loamy sand	NHEL	5	0.17	134	1	80	0.12
303A	Ontonagon silty clay, 0 to 2 percent slopes	NHEL	3	0.28	86	1	100	0.13
303B	Ontonagon silty clay, 2 to 6 percent slopes	NHEL	3	0.28	86	4	100	0.40
303BC	Ontonagon silty clay, 2 to 12 percent slopes	PHEL	3	0.28	86	8	100	0.99
303C	Ontonagon silty clay, 6 to 12 percent slopes	PHEL	3	0.28	86	8	100	0.99
303D	Ontonagon silty clay, 12 to 18 percent slopes	HEL	3	0.28	86	16	100	2.80
303DE	Ontonagon silty clay, 12 to 25 percent slopes	HEL	3	0.28	86	16	100	2.80
303E	Ontonagon silty clay, 18 to 25 percent slopes	HEL	3	0.28	86	20	100	4.00
303F	Ontonagon silty clay, 25 to 40 percent slopes	HEL	3	0.28	86	30	100	8.00
305	Bergland clay	NHEL	5	0.28	86	1	100	0.13
355A	Cloquet fine sandy loam, 0 to 2 percent slopes	NEHL	3	0.24	86	1	80	0.12
355B	Cloquet fine sandy loam, 2 to 6 percent slopes	NEHL	3	0.24	86	4	80	0.37
355BC	Cloquet fine sandy loam, 2 to 12 percent slopes	PHEL	3	0.24	86	6	80	0.60
355C	Cloquet fine sandy loam, 6 to 12 percent slopes	PHEL	3	0.24	86	8	80	0.89
355D	Cloquet fine sandy loam, 12 to 18 percent slopes	HEL	3	0.24	86	16	80	2.60
355DE	Cloquet fine sandy loam, 12 to 25 percent slopes	HEL	3	0.24	86	18	80	3.00
355E	Cloquet fine sandy loam, 18 to 25 percent slopes	HEL	3	0.24	86	20	80	3.50
355F	Cloquet fine sandy loam, 25 to 40 percent slopes	HEL	3	0.24	86	30	80	7.00
407	Brimson loam, rubbly	NHEL	4	0.20	86	1	80	0.12
420	Twig muck	NHEL	5	-	134	1	80	0.12
454BC	Mahtomedi loamy sand 0 to 12 percent slopes	NHEL	5	0.15	134	6	80	0.60
454DE	Mahtomedi loamy sand 12 to 25 percent slopes	PHEL	5	0.15	134	18	80	3.00
454F	Mahtomedi loamy sand 25 to 40 percent slopes	HEL	5	0.15	134	30	80	7.00
502	Dusler silt loam	NHEL	5	0.37	48	1	80	0.12
504A	Dusler very fine sandy loam, 0 to 2 percent slopes	NHEL	5	0.37	86	1	80	0.12
504B	Duluth very fine sandy loam, 1 to 6 percent slopes	NHEL	5	0.37	86	4	80	0.37
504BC	Duluth very fine sandy loam, 2 to 12 percent slopes	PHEL	5	0.37	86	8	80	0.89
504C	Duluth very fine sandy loam, 6 to 12 percent slopes	PHEL	5	0.37	86	8	80	0.89
504D	Duluth very fine sandy loam, 12 to 18 percent slopes	HEL	5	0.37	86	16	80	2.60
504DE	Duluth very fine sandy loam, 12 to 25 percent slopes	HEL	5	0.37	86	16	80	2.60
504E	Duluth very fine sandy loam, 18 to 25 percent slopes	HEL	5	0.37	86	20	80	3.50
504F	Duluth very fine sandy loam, 25 to 35 percent slopes	HEL	5	0.37	86	30	80	7.00

Highly Erodible Soil Map Unit List - LAKE COUNTY, MN

C=.08

R=90

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musym	muname	HEL	T	K	I	slope_%	slope_l	LS
512A	Amasa fine sandy loam, 0 to 2 percent slopes	NHEL	4	0.24	86	1	80	0.12
512B	Amasa fine sandy loam, 2 to 6 percent slopes	NHEL	4	0.24	86	4	80	0.37
512C	Amasa fine sandy loam, 6 to 12 percent slopes	NHEL	4	0.24	86	8	80	0.89
515A	Newfound gravelly sandy loam, 0 to 2 percent slopes	NHEL	3	0.20	0	1	80	0.12
515B	Newfound gravelly sandy loam, 2 to 6 percent slopes	NHEL	3	0.20	0	4	80	0.37
515C	Newfound gravelly sandy loam, 2 to 12 percent slopes	PHEL	3	0.20	0	8	80	0.89
515C	Newfound gravelly sandy loam, 6 to 12 percent slopes	PHEL	3	0.20	0	8	80	0.89
515D	Newfound gravelly sandy loam, 12 to 20 percent slopes	PHEL	3	0.20	0	16	80	2.60
515DE	Newfound gravelly sandy loam, 12 to 25 percent slopes	PHEL	3	0.20	0	16	80	2.60
515EF	Newfound gravelly sandy loam, 18 to 35 percent slopes	HEL	3	0.32	56	20	80	3.50
515F	Newfound gravelly sandy loam, 25 to 40 percent slopes	HEL	3	0.20	0	30	80	7.00
530	Greenwood mucky peat	NHEL	5	-	56	0.2	80	0.08
531	Beseman muck	NHEL	2	-	134	0.2	80	0.08
533	Loxley muck	NHEL	5	-	134	0.2	80	0.08
534	Mooselake mucky peat	NHEL	5	-	56	0.2	80	0.08
537	Lobo peat	NHEL	5	-	-	0.2	80	0.08
540	Seeyleville muck	NHEL	5	-	134	0.2	80	0.08
544	Cathro muck	NHEL	5	-	134	0.2	80	0.08
555AD	Barto gravelly loam, 2 to 18 percent slopes	PHEL	2	0.24	0	10	80	1.20
556AD	Insula gravelly sandy loam, 2 to 18 percent slopes	PHEL	2	0.17	0	10	80	1.20
556DE	Insula gravelly sandy loam, 12 to 25 percent slopes	HEL	2	0.17	0	18	80	3.00
557AD	Conic gravelly sandy loam, 2 to 18 percent slopes	PHEL	3	0.15	0	10	80	1.20
557DF	Conic gravelly sandy loam, 12 to 35 percent slopes	PHEL	3	0.15	0	20	80	3.50
614	Blackhoof muck	NHEL	3	-	134	0.2	80	0.08
685	Oesteale fine sand loam	NHEL	4	0.24	86	1	80	0.12
695B	Finland loam, 2 to 6 percent slopes	NHEL	3	0.32	56	4	80	0.37
695C	Finland loam, 6 to 12 percent slopes	PHEL	3	0.32	56	8	80	0.89
695D	Finland loam, 12 to 18 percent slopes	HEL	3	0.32	56	16	80	2.60
695E	Finland loam, 18 to 25 percent slopes	HEL	4	0.32	56	20	80	3.50
695F	Finland loam, 25 to 35 percent slopes	HEL	3	0.32	56	30	80	7.00
696	Hermantown silt loam	NHEL	4	0.32	56	1	80	0.12
697B	Toimi sandy loam, 2 to 6 percent slopes	NHEL	4	0.24	86	4	100	0.40
697C	Toimi sandy loam, 6 to 12 percent slopes	NHEL	4	0.24	86	8	100	0.99
697D	Toimi sandy loam, 12 to 18 percent slopes	HEL	4	0.24	86	16	100	2.80
714	Buhl loam	NHEL	3	0.37	56	1	80	0.12
872	Pengilly and Winterfield soils	NHEL	5	0.24	86	1	80	0.12
890B	Barto-Mesaba complex, 2 to 6 percent slopes	NHEL	2	0.24	0	4	80	0.37

Highly Erodible Soil Map Unit List - LAKE COUNTY, MN

C=.08

R=90

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musym	muname	HELCL	T	K	I	slope_%	slope_l	LS
890BD	Barto-Mesaba complex, 2 to 18 percent slopes	PHEL	2	0.24	0	10	80	1.20
890EF	Barto-Mesaba complex, 18 to 35 percent slopes	HEL	2	0.17	0	18	80	3.50
952AD	Quetico-Rock outcrop complex, 2 to 18 percent slopes	PHEL	1	0.24	0	10	80	1.20
952EF	Quetico-Rock outcrop complex, 12 to 40 percent slopes	HEL	1	0.24	0	20	80	3.50
975A	Ahmeek and Omega soils, 0 to 2 percent slopes	NHEL	3	0.37	56	1	80	0.12
975B	Ahmeek and Omega soils, 2 to 6 percent slopes	NHEL	3	0.37	56	4	80	0.37
975C	Ahmeek and Omega soils, 6 to 12 percent slopes	PHEL	3	0.37	56	8	80	0.89
975D	Ahmeek and Omega soils, 12 to 18 percent slopes	HEL	3	0.37	56	16	80	2.60
975E	Ahmeek and Omega soils, 18 to 25 percent slopes	HEL	3	0.37	56	20	80	3.50
980	Blackhoof and Mahtowa soils	NHEL	5	0.28	48	0.2	80	0.08
995	Borosaprist, undifferentiated	NHEL	-	-	-	0.2	80	0.08
1001	Alluvial land, occasionally flooded	NHEL	-	-	-	1	80	0.12
1002	Alluvial land, frequently flooded	NHEL	5	0.28	56	1	80	0.12
1022	Dumps	PHEL	-	-	-	10	80	1.20
1020F	Udorthents, very steep	HEL	5	0.24	86	50	80	16.00
1334B	Eveleth stony loam, 2 to 6 percent slopes	NHEL	4	0.24	0	4	80	0.37
1334C	Eveleth stony loam, 6 to 12 percent slopes	NHEL	4	0.24	86	8	100	0.81
1335BC	Eveleth stony loam, 2 to 12 percent slopes	NHEL	4	0.24	86	8	100	0.99
1336	Bugcreek stony loam	NHEL	4	0.17	0	0.2	80	0.08
1340A	Ontonagon-Omega complex, 0 to 2 percent slopes	NHEL	3	0.28	86	1	100	0.13
1340B	Ontonagon-Omega complex, 2 to 6 percent slopes	NHEL	3	0.28	86	4	100	0.40
1340C	Ontonagon-Omega complex, 6 to 12 percent slopes	PHEL	3	0.28	86	8	100	0.99
1340D	Ontonagon-Omega complex, 12 to 18 percent slopes	HEL	3	0.28	86	16	100	2.80
1340E	Ontonagon-Omega complex, 18 to 25 percent slopes	HEL	3	0.28	86	20	100	4.00
1340F	Ontonagon-Omega complex, 25 to 40 percent slopes	HEL	3	0.28	86	30	100	8.00
1823	Mesaba variant, 2 to 12 percent slopes	PHEL	2	0.17	0	10	80	1.20