

Highly Erodible Soil Map Unit List - ST. LOUIS COUNTY - DULUTH PART, MN

C=.09

R=100

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musym	muname	HEL	T	K	I	slope_%	slope_l	LS
1007	Udorthents, shallow (sanitary landfill)	NHEL						
1010	Pits, quarry	NHEL						
1014A	Uskabwanka peat, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
1020A	Bowstring and Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded	NHEL	5		134	0.2	80	0.08
1021A	Rifle soils, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
1022A	Greenwood soils, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
1026A	Udifluents, loamy, 0 to 2 percent slopes, occasionally flooded	NHEL	5	0.15	250	1	80	0.12
1028A	Urban land-Udorthents-Aquents complex, 0 to 8 percent slopes	NHEL	5	0.24	86	2	80	0.19
1034A	Udifluents and Fluvaquents, loamy, 0 to 2 percent slopes, rarely flooded	NHEL	5	0.15	250	1	80	0.12
1035	Urban land	NHEL						
B18A	Foglake-Hassman, depressional complex, upham basin, 0 to 2 percent slopes	NHEL	5	0.37	56	1	100	0.13
B19B	Longsiding-Foglake-Grasston complex, upham basin, 0 to 6 percent slopes	NHEL	5	0.37	48	4	100	0.40
B27A	Mcquade-Buhl complex, 0 to 3 percent slopes	NHEL	5	0.37	56	1	100	0.13
B28B	Buhl loam, 1 to 5 percent slopes	NHEL	5	0.37	48	4	100	0.40
B29B	Hibbing-Buhl complex, 1 to 8 percent slopes	PHEL	3	0.32	48	5	80	0.48
B29D	Hibbing-Buhl complex, 1 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
B31D	Hibbing loam, 8 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
B31E	Hibbing loam, 18 to 30 percent slopes	HEL	3	0.24	86	25	80	5.50
B32A	Mcquade-Daisybay, depressional-Fayal, depressional complex, 0 to 2 percent slopes	NHEL	5	0.37	56	1	100	0.13
B33A	Mcquade-Fayal, depressional complex, 0 to 2 percent slopes	NHEL	5	0.37	56	1	100	0.13
B34B	Majestic-Hibbing complex, 2 to 8 percent slopes	NHEL	3	0.32	48	2	80	0.12
B47A	Daisybay peat, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B48A	Mooseline-Turpela complex, 0 to 3 percent slopes	NHEL	5	0.17	134	1	80	0.12
B53A	Dora mucky peat, hibbing catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B67A	Rifle soils, hibbing catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B81A	Cathro muck, depressional, duluth catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B101A	Schisler-Ellsburg-Baden, depressional, complex, 0 to 2 percent slopes	NHEL	5	0.15	86	1	80	0.12
B102A	Hellwig-Ellsburg-Baden, depressional, complex, 0 to 2 percent slopes	NHEL	5	0.15	86	1	80	0.12
B103A	Melrude-Schisler-Baden, depressional, complex, 0 to 2 percent slopes	NHEL	5	0.15	56	1	80	0.12
B104A	Ellsburg-Baden complex, 0 to 2 percent slopes	NHEL	5	0.24	56	1	80	0.12
B107A	Baden mucky silt loam, depressional, 0 to 1 percent slopes	NHEL	3		134	0.2	80	0.08
B118A	Rifle soils, duluth catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B120A	Mooselake mucky peat, duluth catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B121A	Merwin peat, duluth catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08

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musym	muname	HELC	T	K	I	slope_%	slope_l	LS
B122A	Tacoosh mucky peat, duluth catena, 0 to 1 percent slopes	NHEL	5		134	0.2	80	0.08
B123A	Blackhoof-Cathro-Baden complex, depressional, 0 to 1 percent slopes	NHEL	3		134	0.2	80	0.08
B124A	Dusler-Ellsburg complex, 0 to 3 percent slopes	NHEL	5	0.37	48	1	80	0.12
B125B	Culver silt loam, 3 to 8 percent slopes	NHEL	5	0.37	56	4	80	0.37
B126D	Duluth-Culver complex, 3 to 18 percent slopes	PHEL	5	0.37	56	12	80	1.60
B126E	Duluth silt loam, 18 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
B127B	Culver-Dusler-Ellsburg complex, 0 to 8 percent slopes	NHEL	5	0.37	56	4	80	0.37
B128D	Duluth-Culver-Cathro, depressional complex, 0 to 18 percent slopes	PHEL	5	0.37	56	12	80	1.60
B129B	Culver-Culver, coarse substratum-Ellsburg complex, 0 to 8 percent slopes	NHEL	5	0.37	56	4	80	0.37
B130D	Duluth-Duluth, coarse substratum-Ellsburg complex, 0 to 18 percent slopes	PHEL	5	0.37	56	12	80	1.60
B131F	Duluth-Duluth, coarse substratum complex, 18 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
B143B	Dinham-Dusler complex, 0 to 8 percent slopes	NHEL	5	0.17	134	4	80	0.37
B144A	Ellsburg-Dusler complex, 0 to 3 percent slopes	NHEL	5	0.24	56	1	80	0.12
B145B	Dusler-Culver complex, 1 to 8 percent slopes	NHEL	5	0.37	48	1	80	0.12
B148A	Greenwood soils, duluth catena, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
B150D	Dinham-Duluth complex, 8 to 18 percent slopes	PHEL	5	0.37	56	12	80	1.60
B152A	Greenwood soils, hibbing catena, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
E1A	Fluvaquents, clayey, 0 to 1 percent slopes, frequently flooded	NHEL	5	0.15	250	1	80	0.12
E2B	Cuttre-Fluvaquents frequently flooded, complex, 0 to 8 percent slopes	NHEL	5	0.15	250	1	80	0.12
E3A	Cuttre complex, 0 to 3 percent slopes	NHEL	3	0.32	48	2	80	0.12
E3B	Cuttre complex, 0 to 8 percent slopes	PHEL	3	0.43	86	5	100	0.54
E4B	Cuttre-Eutrudepts, complex, 0 to 8 percent slopes	PHEL	3	0.43	86	5	100	0.54
E5A	Palmers, depressional-Cuttre complex, 0 to 1 percent slopes	NHEL	5	0.37	56	1	100	0.13
E6D	Amnicon-Cuttre complex, 3 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
E7B	Cuttre silt loam, 3 to 8 percent slopes	PHEL	3	0.43	86	5	100	0.54
E8D	Amnicon-Fluvaquents, frequently flooded, complex, 0 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
E9E	Miskoaki-Fluvaqueunts, frequently flooded, complex, 0 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
E10D	Amnicon-Udifluents, frequently flooded, complex, 0 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
E11E	Miskoaki-Rock outcrop complex, 18 to 70 percent slopes	HEL	3	0.24	86	25	80	5.50
E12A	Udifluents complex, 0 to 3 percent slopes, flooded	NHEL	5	0.15	220	1	80	0.12
E13E	Udifluents, occasionally flooded-Rollins complex, 0 to 30 percent slopes	PHEL	5	0.15	220	25	80	5.50
E14B	Barto-Greysolon-Rock outcrop complex, 0 to 8 percent slopes	PHEL	1	0.24		5	80	0.48
E14D	Barto-Greysolon-Rock outcrop complex, 0 to 18 percent slopes	PHEL	1	0.17		10	80	1.20
E15A	Badriver complex, 0 to 3 percent slopes	NHEL	3	0.32	48	2	80	0.12

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E15B	Badriver complex, 0 to 8 percent slopes	PHEL	3	0.32	48	5	80	0.43
E16D	Amnicon-Cuttre complex, 5 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
E18A	Urban land-Cuttre-Rock outcrop complex, 0 to 3 percent slopes	NHEL	3	0.32	48	2	80	0.12
E18B	Urban land-Cuttre-Rock outcrop complex, 0 to 8 percent slopes	PHEL	3	0.43	86	5	100	0.54
E22D	Sanborg-Badriver complex, 3 to 18 percent slopes	PHEL	3	0.32	48	10	80	1.20
E23F	Miskoaki-Udifluents, flooded, complex, 1 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
E24F	Miskoaki-Cuttre complex, 5 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
E25D	Urban land-Amnicon-Rock outcrop complex, 0 to 18 percent slopes	HEL	3	0.43	86	12	100	1.60
F32A	Merwin peat, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F33A	Cathro muck, depressional, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F34A	Cathro muck, depressional, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F101A	Bugcreek extremely stony sandy loam, 0 to 1 percent slopes, rubbly	NHEL	5		134	0.2	80	0.08
F102A	Nevens stony loam, 0 to 2 percent slopes, very stony	NHEL	4	0.32	48	1	80	0.12
F103B	Brimson stony fine sandy loam, 2 to 5 percent slopes, very stony	NHEL	4	0.17		2	80	0.19
F104B	Toimi stony loam, 3 to 8 percent slopes, very stony	NHEL	4	0.17		5	80	0.48
F104D	Toimi stony loam, 8 to 18 percent slopes, very stony	PHEL	4	0.17		13	80	1.80
F104E	Toimi stony loam, 18 to 45 percent slopes, very stony	HEL	3	0.24	86	25	80	5.50
F105D	Toimi-Brimson-Rock outcrop complex, 0 to 20 percent slopes	PHEL	4	0.17		13	80	1.80
F106B	Toimi-Nevens-Brimson complex, 0 to 8 percent slopes, very stony	NHEL	4	0.17		5	80	0.48
F107D	Toimi-Nevens complex, 0 to 18 percent slopes, very stony	PHEL	4	0.17		13	80	1.80
F108B	Brimson, very stony-Bugcreek, rubbly complex, 0 to 5 percent slopes	NHEL	4	0.17		2	80	0.19
F109A	Wahbegon, depressional-Eldes complex, 0 to 2 percent slopes	NHEL	5	0.24	56	1	80	0.12
F110A	Hegberg-Eldes complex, 0 to 3 percent slopes	NHEL	5	0.37	48	1	80	0.12
F111B	Augustana-Hegberg complex, 1 to 8 percent slopes	NHEL	5	0.37	56	4	80	0.37
F112D	Forbay-Augustana complex, 3 to 18 percent slopes	PHEL	5	0.37	56	12	80	1.60
F113E	Forbay loam, 18 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
F115A	Merwin peat, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F116A	Mooselake mucky peat, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F117A	Rollins sandy loam, 0 to 3 percent slopes	NHEL	3	0.20	86	1	80	0.12
F117B	Rollins sandy loam, 2 to 8 percent slopes	PHEL	2	0.20		4	80	0.37
F117D	Rollins sandy loam, 8 to 18 percent slopes	PHEL	2	0.10		14	80	2.00
F117F	Rollins sandy loam, 18 to 45 percent slopes	HEL	2	0.10		30	80	7.00
F118B	Aldenlake-Pequaywan complex, 0 to 6 percent slopes	PHEL	2	0.20	0	4	80	0.37
F119B	Urban land-Greysolon-Normanna-Rock outcrop complex, 1 to 8 percent slopes	NHEL	3	0.37	56	2	80	0.19

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F120A	Grayling-Cromwell complex, 0 to 3 percent slopes	NHEL	3	0.20	86	1	80	0.12
F120B	Grayling-Cromwell complex, 2 to 8 percent slopes	NHEL	5	0.15	220	4	80	0.37
F120D	Grayling-Cromwell complex, 8 to 18 percent slopes	PHEL	5	0.15	220	12	80	1.60
F120F	Grayling-Cromwell complex, 18 to 45 percent slopes	PHEL	5	0.15	220	25	80	5.50
F121A	Aldenlake sandy loam, 0 to 3 percent slopes	NHEL	3	0.20	86	1	80	0.12
F121B	Aldenlake sandy loam, 2 to 8 percent slopes	PHEL	2	0.20	0	4	80	0.37
F121D	Aldenlake sandy loam, 8 to 18 percent slopes	HEL	3	0.24	86	12	80	1.60
F121F	Aldenlake sandy loam, 18 to 45 percent slopes	HEL	3	0.24	86	30	80	7.00
F122B	Aldenlake-Pequaywan complex, pitted, 0 to 8 percent slopes	PHEL	2	0.20	0	4	80	0.37
F122D	Aldenlake-Pequaywan complex, pitted, 0 to 18 percent slopes	HEL	3	0.24	86	14	80	1.60
F122F	Aldenlake-Pequaywan complex, pitted, 0 to 45 percent slopes	HEL	3	0.24	86	30	80	7.00
F123B	Grayling-Grytal-Cromwell complex, pitted, 0 to 8 percent slopes	NHEL	5	0.15	220	4	80	0.37
F123D	Grayling-Grytal-Cromwell complex, pitted, 0 to 18 percent slopes	PHEL	5	0.15	220	12	80	1.60
F124B	Rollins-Pequaywan complex, pitted, 0 to 8 percent slopes	PHEL	2	0.20		4	80	0.37
F124D	Rollins-Pequaywan complex, pitted, 0 to 18 percent slopes	PHEL	2	0.10	86	14	80	2.00
F124F	Rollins-Pequaywan complex, pitted, 0 to 45 percent slopes	HEL	2	0.10		30	80	7.00
F125A	Pequaywan loam, 0 to 3 percent slopes	NHEL	5	0.17	134	2	80	0.19
F126A	Grytal sandy loam, 0 to 3 percent slopes	NHEL	5	0.17	134	2	80	0.19
F127A	Hulligan mucky fine sandy loam, depressional, 0 to 1 percent slopes	NHEL	5	0.17	134	0.5	80	0.09
F128A	Hulligan fine sandy loam, 0 to 2 percent slopes	NHEL	4	0.24	86	1	80	0.08
F129A	Tacoosh mucky peat, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F134A	Giese muck, depressional, 0 to 1 percent slope	NHEL	5		134	0.2	80	0.08
F135A	Hermantown-Canosia-Giese, depressional complex, 0 to 3 percent slopes	NHEL	4	0.32	56	1	80	0.12
F136A	Hermantown silt loam, 1 to 3 percent slopes	NHEL	4	0.32	56	1	80	0.12
F137B	Normanna-Canosia-Hermantown complex, 0 to 8 percent slopes	NHEL	3	0.37	56	2	80	0.19
F138D	Ahmeek-Normanna-Canosia complex, 0 to 18 percent slopes	HEL	3	0.28	86	12	80	1.60
F139F	Ahmeek fine sandy loam, 18 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
F140B	Normanna-Giese, depressional complex, pitted, 0 to 8 percent slopes	NHEL	4	0.17		5	80	0.48
F141D	Ahmeek-Normanna-Cathro, depressional complex, pitted, 0 to 25 percent slopes	HEL	3	0.28	86	12	80	1.60
F142A	Canosia fine sandy loam, 0 to 2 percent slopes	NHEL	4	0.32	56	1	80	0.12
F143B	Normanna-Aldenlake-Canosia complex, 0 to 8 percent slopes	NHEL	4	0.17		5	80	0.48
F144D	Aldenlake-Ahmeek complex, 8 to 18 percent slopes	HEL	3	0.24	86	12	80	1.60
F145F	Ahmeek-Aldenlake complex, 18 to 45 percent slopes	HEL	3	0.24	86	25	80	5.50
F146A	Giese muck, 0 to 2 percent slopes, rubbly	NHEL	3		134	0.2	80	0.08

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F147D	Ahmeek-Canosia-Rock outcrop complex, 0 to 25 percent slopes	HEL	3	0.28	86	12	80	1.60
F148F	Ahmeek-Rock outcrop-Fluvaquents, frequently flooded, complex, 0 to 50 percent slopes	HEL	3	0.24	86	25	80	5.50
F149D	Aldenlake-Rock outcrop complex, 3 to 20 percent slopes	HEL	3	0.24	86	12	80	1.60
F150A	Twig-Tacoosh-Giese complex, depressional, 0 to 1 percent slopes	NHEL	3		134	0.2	80	0.08
F151A	Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F152A	Aquepts complex, 0 to 2 percent slopes	NHEL	4	0.32	56	1	80	0.12
F153B	Eutrudepts complex, 1 to 8 percent slopes	PHEL	3	0.37	56	5	80	0.48
F154A	Urban land-Hermantown-Canosia complex, 0 to 3 percent slopes	NHEL	4	0.32	56	1	80	0.12
F155B	Udalfs-Eutrudepts complex, 0 to 8 percent slopes	NHEL	5	0.37	56	4	80	0.37
F155G	Udalfs-Eutrudepts complex, 25 to 70 percent slopes	HEL	3	0.24	86	30	80	7.00
F156D	Rock outcrop-Ahmeek, bedrock substratum-Barto complex, 4 to 18 percent slopes	HEL	3	0.28	86	12	80	1.60
F157C	Udipsamments-Urban land complex, 1 to 20 percent slopes	PHEL	5	0.15	220	12	80	1.60
F158B	Urban land-Normanna-Canosia complex, 0 to 8 percent slopes	NHEL	3	0.37	56	2	80	0.19
F159D	Urban land-Ahmeek-Normanna complex, 3 to 18 percent slopes	PHEL	3	0.28	86	12	80	1.60
F160F	Rock outcrop-Mesaba-Barto complex, 18 to 60 percent slopes	HEL	1	0.24	0	30	80	7.00
F161A	Mooselake mucky peat, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F162A	Spidercreek sandy loam, 0 to 2 percent slopes	NHEL	5	0.17	134	1	80	0.12
F163D	Urban land-Mesaba-Rock outcrop complex, 1 to 18 percent slopes	PHEL	3	0.17	0	10	80	1.20
F170A	Rifle soils, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
F171D	Udipsamments complex, 4 to 20 percent slopes	PHEL	5	0.15	220	12	80	1.60
F175A	Greenwood soils, dense substratum, 0 to 1 percent slopes	NHEL	5		38	0.2	80	0.08
GP	Pits, gravel-Udipsamments complex	NHEL						
I-W	Water, intermittent	NHEL						
W	Water	NHEL						