

Highly Erodible Soil Map Unit List - **BENTON COUNTY, MN**

**C=.10**

**R=120**

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
1002A	Udorthents, wet substratum, 0 to 2 percent slopes	NHEL						
1010	Pits, quarry	NHEL						
1011A	Fordum-Winterfield complex, 0 to 2 percent slopes, frequently flooded	NHEL						
1020A	Bowstring and Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded	NHEL						
1023A	Seelyeville and Markey soils, ponded, 0 to 1 percent slopes	NHEL						
1052B	Udorthents, loamy-Rock outcrop complex, 1 to 6 percent slopes	NHEL						
C1C	Milaca-Brennyville complex, 1 to 7 percent slopes, stony	NHEL						
C4A	Cebana-Giese, frequently ponded-Ronneby complex, 0 to 3 percent slopes, stony	NHEL						
C5C	Milaca fine sandy loam, 8 to 15 percent slopes, stony	PHEL	4	0.28	86	9.00	125	1.30
C5E	Milaca fine sandy loam, 15 to 30 percent slopes, stony	HEL	4	0.28	86	16.00	120	3.00
C9B	Mora-Ronneby complex, 1 to 4 percent slopes, stony	NHEL						
C10B	Brennyville-Freer complex, 1 to 4 percent slopes, stony	NHEL						
C23B	Antigo-Chetek complex, 2 to 8 percent slopes	NHEL						
C26A	Foglake silt loam, 0 to 2 percent slopes	NHEL						
C28A	Cathro-Twig, stony complex, 0 to 1 percent slopes, frequently ponded	NHEL						
C36A	Nokasippi loamy fine sand, depressional, 0 to 1 percent slopes	NHEL						
C37C	Braham loamy fine sand, 6 to 12 percent slopes	NHEL						
C38B	Grasston fine sandy loam, terrace, 2 to 6 percent slopes	NHEL						
C42B	Sartell, till substratum-Bushville complex, 1 to 6 percent slopes	NHEL						
C48A	Ronneby loam, 0 to 2 percent slopes, stony	NHEL						
C49A	Antigo silt loam, 0 to 2 percent slopes	NHEL						
C51D	Emmert-St. francis complex, 6 to 25 percent slopes	PHEL	2	0.10		12.00	75	1.60
C52B	Waukon fine sandy loam, dense substratum, 2 to 6 percent slopes	NHEL						
C53C	Pomroy loamy fine sand, 6 to 12 percent slopes	NHEL						
C54B	Chetek-Mahtomedi complex, 2 to 6 percent slopes	NHEL						
C54C	Chetek-Mahtomedi complex, 6 to 12 percent slopes	NHEL						
C55A	Watab loamy fine sand, 0 to 2 percent slopes	NHEL						
C56A	Langola loamy fine sand, 0 to 2 percent slopes	NHEL						
C57A	Warman loam, depressional, 0 to 1 percent slopes	NHEL						

Highly Erodible Soil Map Unit List - **BENTON COUNTY, MN**

**C=.10**

**R=120**

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
C58A	Ogilvie loam, 0 to 2 percent slopes	NHEL						
C59A	Pierz sandy loam, 0 to 2 percent slopes	NHEL						
C60A	Bushville fine sand, 0 to 2 percent slopes	NHEL						
C62C	Sartell fine sand, till substratum, 6 to 12 percent slopes	NHEL						
C63B	Kost, till substratum-Langola complex, 1 to 6 percent slopes	NHEL						
C64A	Mora fine sandy loam, 1 to 3 percent slopes, stony	NHEL						
C64B	Mora fine sandy loam, 3 to 5 percent slopes, stony	NHEL						
C65A	Parent loam, 0 to 2 percent slopes, stony	NHEL						
C66A	St. francis fine sandy loam, 0 to 2 percent slopes	NHEL						
C67B	Bushville complex, 1 to 6 percent slopes	NHEL						
C68B	Milaca fine sandy loam, 3 to 6 percent slopes, stony	NHEL						
C68C	Milaca fine sandy loam, 6 to 12 percent slopes, stony	PHEL	4	0.28	86	9.00	125	1.30
C68E	Milaca fine sandy loam, 12 to 25 percent slopes, stony	HEL	4	0.28	86	16.00	120	3.00
C69B	Milaca, stony-St. francis complex, 3 to 8 percent slopes	NHEL						
C69C	Milaca, stony-St. francis complex, 8 to 15 percent slopes	PHEL	4	0.28	86	9.00	125	1.30
C70B	St. francis-Mahtomedi complex, 2 to 6 percent slopes	NHEL						
C70C	St. francis-Mahtomedi complex, 6 to 12 percent slopes	NHEL						
C71A	Blomford loamy fine sand, 0 to 2 percent slopes	NHEL						
C71C	Milaca-Mora complex, 1 to 7 percent slopes, stony	NHEL						
C72B	Langola complex, 1 to 6 percent slopes	NHEL						
C72D	Milaca-Millward complex, 2 to 20 percent slopes, stony	PHEL	4	0.28	86	9.00	125	1.30
C73A	Mora loam, 1 to 3 percent slopes, stony	NHEL						
C73C	Milaca loam, 1 to 7 percent slopes, stony	NHEL						
C74A	Parent loam, depressional, 0 to 1 percent slopes, stony	NHEL						
C75A	Seelyeville, occasionally ponded-Cathro, frequently ponded, complex, 0 to 1 percent	NHEL						
C77A	Novak loam, 0 to 2 percent slopes	NHEL						
C77B	Novak loam, 2 to 6 percent slopes	NHEL						
C78A	Warman loam, 0 to 2 percent slopes	NHEL						
C89A	Cathro and Seelyeville soils, grasston catena, depressional, 0 to 1 percent slopes	NHEL						

Highly Erodible Soil Map Unit List - BENTON COUNTY, MN

C=.10

R=120

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
C101A	Greenwood mucky peat, 0 to 1 percent slopes	NHEL						
C104A	Cathro, frequently ponded-Seelyville, occasionally ponded-Greenwood complex, 0 to 1	NHEL						
C122D	Emmert-Chetek complex, 8 to 25 percent slopes	PHEL	2	0.10		12.00	75	1.60
C125A	Hulligan loam, depressional, 0 to 1 percent slopes	NHEL						
C126A	Cebana-Giese, frequently ponded-Freer complex, 0 to 3 percent slopes, stony	NHEL						
C126B	Bamlake-Rosy complex, 1 to 6 percent slopes	NHEL						
C128A	Talmoon loam, 0 to 2 percent slopes	NHEL						
C129A	Longsiding fine sandy loam, terrace, 0 to 2 percent slopes	NHEL						
C211	Bowstring muck and Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded	NHEL						
D1B	Anoka and Zimmerman soils, terrace, 2 to 6 percent slopes	NHEL						
D1C	Anoka and Zimmerman soils, terrace, 6 to 12 percent slopes	NHEL						
D2A	Elkriver fine sandy loam, 0 to 2 percent slopes, rarely flooded	NHEL						
D3A	Elkriver fine sandy loam, 0 to 2 percent slopes, occasionally flooded	NHEL						
D6A	Verndale sandy loam, acid substratum, 0 to 2 percent slopes	NHEL						
D7A	Hubbard loamy sand, 0 to 2 percent slopes	NHEL						
D7B	Hubbard loamy sand, 2 to 6 percent slopes	NHEL						
D7C	Hubbard loamy sand, 6 to 12 percent slopes	NHEL						
D7E	Hubbard loamy sand, 18 to 35 percent slopes	HEL	5	0.15	134	25.00	100	6.00
D8E	Sandberg loamy coarse sand, 18 to 35 percent slopes	HEL	5	0.10	134	25.00	100	6.00
D9B	Stonelake-Sanburn complex, 1 to 6 percent slopes	NHEL						
D9C	Stonelake-Sanburn complex, 6 to 15 percent slopes	NHEL						
D9E	Stonelake-Sanburn complex, 15 to 40 percent slopes	HEL	4	0.20	86	25.00	100	6.00
D14B	Elkriver-Mosford complex, 0 to 6 percent slopes, rarely flooded	NHEL						
D17A	Duelm loamy sand, 0 to 2 percent slopes	NHEL						
D20A	Isan-Isan, frequently ponded, complex, 0 to 2 percent slopes	NHEL						
D21A	Isan sandy loam, depressional, 0 to 1 percent slopes	NHEL						
D30A	Seelyville and Markey soils, depressional, 0 to 1 percent slopes	NHEL						
D32A	Mosford sandy loam, 0 to 2 percent slopes	NHEL						
D36B	Eagleview loamy sand, 2 to 6 percent slopes	NHEL						

Highly Erodible Soil Map Unit List - **BENTON COUNTY, MN**

**C=.10**

**R=120**

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
D36C	Eagleview loamy sand, 6 to 12 percent slopes	NHEL						
D38A	Cantlin loamy fine sand, 0 to 3 percent slopes	NHEL						
D39A	Fordum loam, 0 to 2 percent slopes, occasionally flooded	NHEL						
D44A	Isanti loamy fine sand, 0 to 2 percent slopes	NHEL						
D46A	Lino loamy fine sand, 0 to 2 percent slopes	NHEL						
D47A	Kost loamy fine sand, 0 to 2 percent slopes	NHEL						
D47B	Kost loamy fine sand, 2 to 6 percent slopes	NHEL						
D47C	Kost loamy fine sand, 6 to 12 percent slopes	NHEL						
D48A	Cantlin loamy fine sand, thick surface, 0 to 2 percent slopes	NHEL						
D50A	Isanti fine sandy loam, depressional, 0 to 1 percent slopes	NHEL						
D51A	Kost loamy fine sand, banded substratum, 0 to 2 percent slopes	NHEL						
D51B	Kost loamy fine sand, banded substratum, 2 to 6 percent slopes	NHEL						
D51C	Kost loamy fine sand, banded substratum, 6 to 12 percent slopes	NHEL						
D52A	Glendorado loamy fine sand, 0 to 2 percent slopes	NHEL						
D54B	Hubbard, bedrock substratum-Rock outcrop complex, 1 to 8 percent slopes	NHEL						
D55B	Zimmerman fine sand, banded substratum, 1 to 6 percent slopes	NHEL						
D55C	Zimmerman fine sand, banded substratum, 6 to 12 percent slopes	NHEL						
D55E	Zimmerman fine sand, banded substratum, 12 to 35 percent slopes	PHEL	5	0.15	220	20.00	100	4.00
D56A	Lino loamy fine sand, stratified substratum, 0 to 2 percent slopes	NHEL						
D61A	Glendorado loamy sand, 0 to 2 percent slopes	NHEL						
D62A	Hubbard-Mosford complex, Mississippi River Valley, 0 to 3 percent slopes	NHEL						
D64A	Zimmerman fine sand, 0 to 3 percent slopes	NHEL						
D64B	Zimmerman fine sand, 3 to 6 percent slopes	NHEL						
D64C	Zimmerman fine sand, 6 to 12 percent slopes	NHEL						
D64E	Zimmerman fine sand, 12 to 30 percent slopes	PHEL	5	0.15	220	20.00	100	4.00
D67A	Hubbard loamy sand, Mississippi River Valley, 0 to 2 percent slopes	NHEL						
D67B	Hubbard loamy sand, Mississippi River Valley, 2 to 6 percent slopes	NHEL						
D67C	Hubbard loamy sand, Mississippi River Valley, 6 to 12 percent slopes	NHEL						
D67E	Hubbard loamy sand, Mississippi River Valley, 18 to 35 percent slopes	HEL	5	0.15	134	25.00	100	6.00

Highly Erodible Soil Map Unit List - **BENTON COUNTY, MN**

**C=.10**

**R=120**

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.

<b>musym</b>	<b>muname</b>	<b>HEL</b>	<b>T</b>	<b>K</b>	<b>I</b>	<b>slope_%</b>	<b>slope_l</b>	<b>LS</b>
GP	Pits, gravel-udispamments complex	NHEL						
M-W	Water, miscellaneous	NHEL						
W	Water	NHEL						