

Map Unit Description (MN)

Carlton County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

12C--Emmert gravelly fine sandy loam, 1 to 12 percent slopes

Emmert

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 12 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	gravelly fine sandy loam	rapid	0.20 to 0.30 in	5.1 to 6.5
E,Bt,C -- 2 to 60 in	very gravelly coarse sand	very rapid	1.16 to 2.31 in	5.1 to 7.3

12E--Emmert gravelly fine sandy loam, 12 to 25 percent slopes

Emmert

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 12 to 25 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .15

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	gravelly fine sandy loam	rapid	0.20 to 0.30 in	5.1 to 6.5
E,Bt,C -- 2 to 60 in	very gravelly coarse sand	very rapid	1.16 to 2.31 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

21--Ahmeek loam, 0 to 2 percent slopes

Ahmeek

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

21C--Ahmeek loam, 2 to 12 percent slopes

Ahmeek

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

21E--Ahmeek loam, 12 to 25 percent slopes

Ahmeek

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

22--Allendale loamy fine sand

Allendale

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash over clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loamy fine sand	rapid	0.64 to 0.85 in	4.5 to 7.3
Bw -- 7 to 31 in	loamy fine sand	rapid	1.44 to 2.40 in	4.5 to 7.3
2Bt,2C -- 31 to 60 in	clay	impermeable	2.30 to 3.45 in	6.1 to 8.4

43--Automba fine sandy loam, 0 to 2 percent slopes

Automba

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	fine sandy loam	moderate	0.31 to 0.35 in	5.1 to 6.0
Bhir,Bt -- 2 to 46 in	fine sandy loam	moderately slow	3.09 to 5.73 in	5.6 to 7.3
C -- 46 to 60 in	fine sandy loam	impermeable	0.00 to 0.55 in	6.6 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

43B--Automba fine sandy loam, 2 to 6 percent slopes

Automba

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	fine sandy loam	moderate	0.31 to 0.35 in	5.1 to 6.0
B _h r,B _t -- 2 to 46 in	fine sandy loam	moderately slow	3.09 to 5.73 in	5.6 to 7.3
C -- 46 to 60 in	fine sandy loam	impermeable	0.00 to 0.55 in	6.6 to 7.8

147--Spooner silt loam

Spooner

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A _p -- 0 to 7 in	silt loam	moderate	1.42 to 1.70 in	5.6 to 7.8
E _g -- 7 to 10 in	very fine sandy loam	moderately rapid	0.47 to 0.52 in	5.6 to 7.8
B _t g -- 10 to 20 in	silty clay loam	moderate	1.74 to 2.25 in	6.1 to 7.8
C _g -- 20 to 60 in	silt loam	moderate	6.76 to 8.75 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

186--Nemadji fine sand

Nemadji

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .17

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	fine sand	rapid	0.41 to 0.59 in	4.5 to 5.5
B _h r -- 6 to 39 in	fine sand	rapid	1.65 to 3.64 in	4.5 to 6.0
C -- 39 to 60 in	fine sand	rapid	1.04 to 1.46 in	4.5 to 6.0

188--Omega loamy sand, 0 to 2 percent slopes

Omega

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E, B _h s, B _s , C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

Map Unit Description (MN)

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188C--Omega loamy sand, 2 to 12 percent slopes

Omega

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 12 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E,Bhs,Bs,C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

188E--Omega loamy sand, 12 to 25 percent slopes

Omega

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 12 to 25 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E,Bhs,Bs,C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

204--Warba fine sandy loam

Warba

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	fine sandy loam	moderately rapid	0.35 to 0.45 in	5.1 to 6.5
E,B/E,Bt -- 2 to 36 in	clay loam	moderately slow	5.42 to 6.43 in	5.1 to 7.3
C -- 36 to 60 in	loam	moderate	3.84 to 4.56 in	6.6 to 8.4

254--Hibbing silt loam, 0 to 2 percent slopes

Hibbing

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	silt loam	moderate	0.21 to 0.26 in	3.5 to 6.0
E,E/B,2Bt -- 1 to 70 in	clay	slow	6.89 to 11.02 in	5.1 to 7.8
2Cd -- 70 to 75 in	clay	slow	0.43 to 0.71 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

254C--Hibbing silt loam, 2 to 12 percent slopes

Hibbing

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	silt loam	moderate	0.21 to 0.26 in	3.5 to 6.0
E,E/B,2Bt -- 1 to 70 in	clay	slow	6.89 to 11.02 in	5.1 to 7.8
2Cd -- 70 to 75 in	clay	slow	0.43 to 0.71 in	7.4 to 8.4

268--Cromwell sandy loam, 0 to 2 percent slopes

Cromwell

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	sandy loam	moderate	0.19 to 0.21 in	4.5 to 6.0
E,Bw,2Bw,2C - 1 to 69 in	coarse sand	rapid	3.39 to 4.74 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

268B--Cromwell sandy loam, 2 to 6 percent slopes

Cromwell

Extent: 90 percent of the unit
Landform(s): outwash plains
Slope gradient: 2 to 6 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	sandy loam	moderate	0.19 to 0.21 in	4.5 to 6.0
E,Bw,2Bw,2C - 1 to 69 in	coarse sand	rapid	3.39 to 4.74 in	5.1 to 7.3

274--Newson mucky loamy sand

Newson

Extent: 90 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .15
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	mucky loamy sand	rapid	0.26 to 0.51 in	3.5 to 7.3
Bg -- 5 to 26 in	sand	rapid	1.04 to 2.30 in	3.5 to 5.5
Cg -- 26 to 70 in	sand	rapid	1.76 to 4.85 in	4.5 to 6.5

Map Unit Description (MN)

Carlton County, Minnesota

292--Alstad fine sandy loam

Alstad

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	fine sandy loam	moderate	0.24 to 0.35 in	4.5 to 7.8
E -- 2 to 9 in	fine sandy loam	moderate	0.64 to 1.56 in	4.5 to 7.8
E/B -- 9 to 14 in	loam	moderate	0.46 to 0.92 in	4.5 to 7.8
Bt -- 14 to 37 in	loam	moderate	2.06 to 4.11 in	4.5 to 7.8
C -- 37 to 64 in	loam	moderate	2.41 to 4.82 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

303--Ontonagon silty clay, 0 to 2 percent slopes

Ontonagon

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silty clay	slow	0.38 to 0.44 in	4.5 to 6.5
E/B -- 3 to 6 in	silty clay	moderately slow	0.55 to 0.61 in	4.5 to 6.5
Bt -- 6 to 24 in	clay	impermeable	1.99 to 2.35 in	4.5 to 7.3
C -- 24 to 60 in	clay	impermeable	3.94 to 4.66 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

303C--Ontonagon silty clay, 2 to 12 percent slopes

Ontonagon

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 2 to 12 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silty clay	slow	0.38 to 0.44 in	4.5 to 6.5
E/B -- 3 to 6 in	silty clay	moderately slow	0.55 to 0.61 in	4.5 to 6.5
Bt -- 6 to 24 in	clay	impermeable	1.99 to 2.35 in	4.5 to 7.3
C -- 24 to 60 in	clay	impermeable	3.94 to 4.66 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

303E--Ontonagon silty clay, 12 to 25 percent slopes

Ontonagon

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 12 to 25 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silty clay	slow	0.38 to 0.44 in	4.5 to 6.5
E/B -- 3 to 6 in	silty clay	moderately slow	0.55 to 0.61 in	4.5 to 6.5
Bt -- 6 to 24 in	clay	impermeable	1.99 to 2.35 in	4.5 to 7.3
C -- 24 to 60 in	clay	impermeable	3.94 to 4.66 in	7.4 to 8.4

305--Bergland clay

Bergland

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	clay	slow	0.94 to 1.10 in	5.1 to 7.8
Bg,Bw -- 8 to 25 in	clay	impermeable	1.56 to 2.25 in	5.1 to 7.8
C -- 25 to 60 in	clay	impermeable	2.77 to 4.16 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

337--Warman mucky loam

Warman

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .24

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	mucky loam	moderately rapid	1.50 to 1.97 in	4.5 to 6.0
Bg -- 8 to 20 in	loam	moderate	1.83 to 2.44 in	5.1 to 7.3
2C -- 20 to 60 in	gravelly coarse sand	rapid	0.40 to 3.18 in	6.1 to 7.3

355--Cloquet fine sandy loam, 0 to 2 percent slopes

Cloquet

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.19 to 0.26 in	4.5 to 6.0
E,Bw -- 1 to 14 in	very fine sandy loam	moderate	1.56 to 2.34 in	4.5 to 6.0
2Bw,2BC -- 14 to 36 in	gravelly loamy coarse sand	very rapid	0.43 to 0.87 in	5.6 to 6.5
2C -- 36 to 60 in	stratified g to gravelly coarse sand	very rapid	0.48 to 0.96 in	5.6 to 6.5

Map Unit Description (MN)

Carlton County, Minnesota

355C--Cloquet fine sandy loam, 2 to 12 percent slopes

Cloquet

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 12 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.19 to 0.26 in	4.5 to 6.0
E,Bw -- 1 to 14 in	very fine sandy loam	moderate	1.56 to 2.34 in	4.5 to 6.0
2Bw,2BC -- 14 to 36 in	gravelly loamy coarse sand	very rapid	0.43 to 0.87 in	5.6 to 6.5
2C -- 36 to 60 in	stratified g to gravelly coarse sand	very rapid	0.48 to 0.96 in	5.6 to 6.5

Map Unit Description (MN)

Carlton County, Minnesota

355E--Cloquet fine sandy loam, 12 to 25 percent slopes

Cloquet

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 12 to 25 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.19 to 0.26 in	4.5 to 6.0
E,Bw -- 1 to 14 in	very fine sandy loam	moderate	1.56 to 2.34 in	4.5 to 6.0
2Bw,2BC -- 14 to 36 in	gravelly loamy coarse sand	very rapid	0.43 to 0.87 in	5.6 to 6.5
2C -- 36 to 60 in	stratified g to gravelly coarse sand	very rapid	0.48 to 0.96 in	5.6 to 6.5

Map Unit Description (MN)

Carlton County, Minnesota

367--Campia silt loam, 0 to 2 percent slopes

Campia

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silt loam	moderate	1.42 to 1.70 in	4.5 to 7.3
B/E -- 7 to 9 in	silty clay loam	moderate	0.31 to 0.43 in	4.5 to 6.5
Bt1 -- 9 to 16 in	silty clay loam	moderate	1.13 to 1.56 in	4.5 to 6.5
Bt2 -- 16 to 40 in	silt loam	moderate	3.84 to 5.28 in	4.5 to 6.5
C -- 40 to 60 in	stratified fine sand to silty clay loam	moderate	2.76 to 3.94 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

367C--Campia silt loam, 2 to 12 percent slopes

Campia

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 2 to 12 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silt loam	moderate	1.42 to 1.70 in	4.5 to 7.3
B/E -- 7 to 9 in	silty clay loam	moderate	0.31 to 0.43 in	4.5 to 6.5
Bt1 -- 9 to 16 in	silty clay loam	moderate	1.13 to 1.56 in	4.5 to 6.5
Bt2 -- 16 to 40 in	silt loam	moderate	3.84 to 5.28 in	4.5 to 6.5
C -- 40 to 60 in	stratified fine sand to silty clay loam	moderate	2.76 to 3.94 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

367E--Campia silt loam, 12 to 25 percent slopes

Campia

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 12 to 25 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silt loam	moderate	1.42 to 1.70 in	4.5 to 7.3
B/E -- 7 to 9 in	silty clay loam	moderate	0.31 to 0.43 in	4.5 to 6.5
Bt1 -- 9 to 16 in	silty clay loam	moderate	1.13 to 1.56 in	4.5 to 6.5
Bt2 -- 16 to 40 in	silt loam	moderate	3.84 to 5.28 in	4.5 to 6.5
C -- 40 to 60 in	stratified fine sand to silty clay loam	moderate	2.76 to 3.94 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

502--Dusler silt loam

Dusler

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	4.5 to 6.0
E,E/B -- 4 to 22 in	fine sandy loam	moderate	2.90 to 3.98 in	4.5 to 6.0
Bt -- 22 to 55 in	loam	moderately slow	4.96 to 6.28 in	5.1 to 7.3
C -- 55 to 60 in	loam	slow	0.47 to 0.71 in	6.6 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

504--Duluth very fine sandy loam, 0 to 2 percent slopes

Duluth

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very fine sandy loam	moderate	0.31 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 13 in	fine sandy loam	moderate	1.76 to 2.43 in	4.5 to 6.0
Bt -- 13 to 64 in	loam	moderately slow	7.62 to 9.65 in	4.5 to 6.5
C -- 64 to 72 in	loam	moderately slow	1.16 to 1.57 in	6.1 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

504C--Duluth very fine sandy loam, 2 to 12 percent slopes

Duluth

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very fine sandy loam	moderate	0.31 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 13 in	fine sandy loam	moderate	1.76 to 2.43 in	4.5 to 6.0
Bt -- 13 to 64 in	loam	moderately slow	7.62 to 9.65 in	4.5 to 6.5
C -- 64 to 72 in	loam	moderately slow	1.16 to 1.57 in	6.1 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

504E--Duluth very fine sandy loam, 12 to 25 percent slopes

Duluth

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very fine sandy loam	moderate	0.31 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 13 in	fine sandy loam	moderate	1.76 to 2.43 in	4.5 to 6.0
Bt -- 13 to 64 in	loam	moderately slow	7.62 to 9.65 in	4.5 to 6.5
C -- 64 to 72 in	loam	moderately slow	1.16 to 1.57 in	6.1 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

504G--Duluth very fine sandy loam, 25 to 35 percent slopes

Duluth

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 25 to 35 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very fine sandy loam	moderate	0.31 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 13 in	fine sandy loam	moderate	1.76 to 2.43 in	4.5 to 6.0
Bt -- 13 to 64 in	loam	moderately slow	7.62 to 9.65 in	4.5 to 6.5
C -- 64 to 72 in	loam	moderately slow	1.16 to 1.57 in	6.1 to 7.8

530--Greenwood mucky peat

Greenwood

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 20 in	mucky peat	rapid	9.04 to 11.04 in	
Oe -- 20 to 70 in	mucky peat	rapid	22.50 to 27.50 in	

Map Unit Description (MN)

Carlton County, Minnesota

531--Beseman muck

Beseman

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: organic material over loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 8 in	muck	moderately rapid	4.33 to 5.12 in	
Oa2 -- 8 to 36 in	muck	moderately rapid	15.37 to 18.17 in	
Cg -- 36 to 60 in	loam	moderately slow	2.64 to 4.32 in	

533--Loxley muck

Loxley

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 6 in	mucky peat	rapid	2.66 to 3.25 in	
Oa -- 6 to 60 in	muck	moderately rapid	18.88 to 24.27 in	

Map Unit Description (MN)

Carlton County, Minnesota

534--Mooselake mucky peat

Mooselake

Extent: 90 percent of the unit

Landform(s): swamps

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 56

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 6 in	muck	moderately rapid	2.07 to 2.66 in	
Oe -- 6 to 72 in	mucky peat	rapid	26.46 to 33.07 in	

535--Merwin mucky peat

Merwin

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 56

Kw factor (surface layer) .02

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 6 in	peat	very rapid	3.25 to 3.84 in	
Oe,Oa -- 6 to 42 in	mucky peat	rapid	17.39 to 21.01 in	
Ab,Cg -- 42 to 60 in	fine sandy loam	moderately slow	1.95 to 3.37 in	

Map Unit Description (MN)

Carlton County, Minnesota

536--Dawson muck

Dawson

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 3 in	mucky peat	rapid	1.42 to 1.73 in	
Oa -- 3 to 30 in	muck	moderately rapid	9.37 to 12.05 in	
C -- 30 to 60 in	sand	rapid	0.90 to 2.99 in	

537--Lobo peat

Lobo

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: mossy organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi,Oa -- 0 to 42 in	peat	very rapid	23.17 to 27.38 in	
Oe -- 42 to 60 in	mucky peat	rapid	7.97 to 9.74 in	

Map Unit Description (MN)

Carlton County, Minnesota

538--Waskish peat

Waskish

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: mossy organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi,Oe --	0 to 66 in peat	very rapid	36.38 to 42.99 in	

549--Greenwood peat

Greenwood

Extent: 90 percent of the unit

Landform(s): bogs

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .02

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi --	0 to 20 in peat	very rapid	11.04 to 13.05 in	
Oe --	20 to 70 in mucky peat	rapid	22.50 to 27.50 in	

Map Unit Description (MN)

Carlton County, Minnesota

975--Ahmeek-Omega complex, 0 to 2 percent slopes

Ahmeek

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Omega

Extent: 35 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E,Bhs,Bs,C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

975C--Ahmeek-Omega complex, 2 to 12 percent slopes

Ahmeek

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Omega

Extent: 35 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E,Bhs,Bs,C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

975E--Ahmeek-Omega complex, 12 to 25 percent slopes

Ahmeek

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: loamy till

Restrictive feature(s): dense material at 26 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.35 to 0.43 in	4.5 to 6.0
E,Bw -- 2 to 16 in	loam	moderate	2.13 to 2.83 in	4.5 to 6.0
2Bw -- 16 to 60 in	fine sandy loam	moderately slow	5.24 to 7.43 in	5.1 to 6.5
2Cd -- 60 to 75 in	fine sandy loam	impermeable	0.75 to 1.50 in	6.1 to 7.3

Omega

Extent: 35 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loamy sand	rapid	0.12 to 0.14 in	4.5 to 5.5
E,Bhs,Bs,C -- 1 to 60 in	sand	rapid	2.93 to 4.11 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

976C--Campia-Ontonagon complex, 2 to 12 percent slopes

Campia

Extent: 50 percent of the unit

Landform(s): lake plains

Slope gradient: 2 to 12 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silt loam	moderate	1.42 to 1.70 in	4.5 to 7.3
B/E -- 7 to 9 in	silty clay loam	moderate	0.31 to 0.43 in	4.5 to 6.5
Bt1 -- 9 to 16 in	silty clay loam	moderate	1.13 to 1.56 in	4.5 to 6.5
Bt2 -- 16 to 40 in	silt loam	moderate	3.84 to 5.28 in	4.5 to 6.5
C -- 40 to 60 in	stratified fine sand to silty clay loam	moderate	2.76 to 3.94 in	5.1 to 7.3

Ontonagon

Extent: 35 percent of the unit

Landform(s): lake plains

Slope gradient: 2 to 12 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silty clay	slow	0.38 to 0.44 in	4.5 to 6.5
E/B -- 3 to 6 in	silty clay	moderately slow	0.55 to 0.61 in	4.5 to 6.5
Bt -- 6 to 24 in	clay	impermeable	1.99 to 2.35 in	4.5 to 7.3
C -- 24 to 60 in	clay	impermeable	3.94 to 4.66 in	7.4 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

977G--Cloquet-Emmert complex, 25 to 60 percent slopes

Cloquet

Extent: 50 percent of the unit

Landform(s): outwash plains

Slope gradient: 25 to 60 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.19 to 0.26 in	4.5 to 6.0
E,Bw -- 1 to 14 in	very fine sandy loam	moderate	1.56 to 2.34 in	4.5 to 6.0
2Bw,2BC -- 14 to 36 in	gravelly loamy coarse sand	very rapid	0.43 to 0.87 in	5.6 to 6.5
2C -- 36 to 60 in	gravelly coarse sand	very rapid	0.48 to 0.96 in	5.6 to 6.5

Emmert

Extent: 35 percent of the unit

Landform(s): outwash plains

Slope gradient: 25 to 60 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .15

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	gravelly fine sandy loam	rapid	0.20 to 0.30 in	5.1 to 6.5
E,Bt,C -- 2 to 60 in	very gravelly coarse sand	very rapid	1.16 to 2.31 in	5.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

980--Blackhoof and Mahtowa soils

Blackhoof

Extent: 50 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material over loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 11 in	muck	moderately rapid	6.06 to 7.17 in	5.1 to 6.5
A -- 11 to 15 in	silty clay loam	slow	0.63 to 0.79 in	5.1 to 6.5
Bg,Bw,C -- 15 to 60 in	loam	slow	6.28 to 7.63 in	5.1 to 7.8

Mahtowa

Extent: 50 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 11 in	silt loam	moderate	1.98 to 2.65 in	5.1 to 6.5
Bg -- 11 to 21 in	silt loam	moderately slow	1.67 to 1.87 in	6.1 to 7.3
Bw,C -- 21 to 60 in	loam	moderately rapid	5.46 to 7.41 in	6.6 to 7.8

Map Unit Description (MN)

Carlton County, Minnesota

990--Twig and Parent soils

Twig

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy till</p> <p><i>Restrictive feature(s):</i> dense material at 40 to 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 4</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated</i> 4w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa,Oe -- 0 to 12 in	muck	moderately rapid	4.13 to 6.50 in	3.5 to 5.0
A -- 12 to 20 in	mucky silt loam	moderately slow	1.65 to 1.82 in	3.5 to 5.5
Eg -- 20 to 26 in	loam	impermeable	0.41 to 0.59 in	3.5 to 5.5
2Btg,2Bt -- 26 to 48 in	fine sandy loam	moderately slow	2.43 to 3.53 in	3.5 to 5.5
2BCd -- 48 to 72 in	fine sandy loam	impermeable	0.00 to 0.96 in	3.5 to 6.0

Parent

<p><i>Extent:</i> 50 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> loamy till</p> <p><i>Restrictive feature(s):</i> dense material at 40 to 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 4</p> <p><i>Wind erodibility group (WEG):</i> 7</p> <p><i>Wind erodibility index (WEI):</i> 38</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 4w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	silty clay loam	moderate	1.18 to 1.30 in	5.6 to 7.3
AB -- 6 to 18 in	loam	moderate	1.46 to 2.07 in	5.6 to 7.3
Bg -- 18 to 53 in	fine sandy loam	slow	0.00 to 2.80 in	6.1 to 7.3
Cd -- 53 to 60 in	fine sandy loam	impermeable	0.00 to 0.27 in	6.1 to 8.4

Map Unit Description (MN)

Carlton County, Minnesota

1005--Fluvaquents

Fluvaquents

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 16 in	silt loam	moderate	2.91 to 3.87 in	5.6 to 7.8
C -- 16 to 80 in	stratified loamy sand to silt loam	rapid	2.55 to 12.76 in	5.6 to 7.8

1020--Udorthents

Udorthents

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 25 to 50 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
C -- 0 to 60 in	clay loam	moderate	7.18 to 10.77 in	6.6 to 9.0

Map Unit Description (MN)

Carlton County, Minnesota

1073--Borofolists

Borofolists

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 12 percent

Parent material: mossy organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: C

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 6 in	peat	very rapid	3.25 to 3.84 in	
R -- 6 to 80 in	bedrock	impermeable		

1074--Borosaprists

Borosaprists

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group: D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 10 in	muck	moderately rapid	5.41 to 6.40 in	
R -- 10 to 80 in	bedrock	impermeable		

Map Unit Description (MN)

Carlton County, Minnesota

DAM--Dam

Dam

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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V166--Mora fine sandy loam, wet

Mora, wet

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: loamy till

Restrictive feature(s): dense material at 20 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	fine sandy loam	moderate	0.71 to 0.87 in	5.1 to 6.0
E -- 4 to 11 in	fine sandy loam	moderate	1.06 to 1.42 in	5.1 to 6.0
Bt1 -- 11 to 21 in	fine sandy loam	moderate	1.18 to 1.77 in	5.1 to 6.5
BC -- 21 to 58 in	fine sandy loam	slow	3.70 to 5.18 in	5.1 to 6.5
BCd,Cd -- 58 to 85 in	fine sandy loam	impermeable	0.27 to 1.90 in	6.1 to 7.3

Map Unit Description (MN)

Carlton County, Minnesota

V292--Alstad variant loam

Alstad, variant

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 3 in	muck	moderately rapid	1.10 to 1.73 in	4.5 to 6.0
A,E,B/E -- 3 to 19 in	loam	moderate	1.89 to 3.62 in	4.5 to 6.0
Bt -- 19 to 45 in	clay loam	moderately slow	3.64 to 4.68 in	5.1 to 7.3
C -- 45 to 60 in	loam	moderately slow	2.09 to 2.69 in	6.6 to 7.8

V337--Warman fine sandy loam

Warman

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy drift over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.51 to 0.92 in	4.5 to 6.5
Bg -- 5 to 20 in	fine sandy loam	moderately rapid	1.35 to 2.99 in	4.5 to 6.5
2C -- 20 to 60 in	gravelly sand	rapid	0.40 to 2.78 in	5.1 to 6.5

Map Unit Description (MN)

Carlton County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.