Map Unit Description (MN)

Mille Lacs 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]

1003B--Udorthents, loamy (cut and fill land), 0 to 6 percent slopes

Udorthents, loamy (cut and fill land)

Extent: 100 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 6 percent
Parent material: variable loamy material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1008B--Udipsamments (cut and fill land)

Udipsamments, cut and fill land

Extent: 100 percent of the unit
Landform(s): outwash plains, stream terraces, lake plains
Slope gradient: 0 to 6 percent
Parent material: variable sandy material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1009--Udorthents, lake beach, 1 to 20 percent slopes, very rubbly

Udorthents, lake beach, very rubbly

Extent: 100 percent of the unit
Landform(s): beaches
Slope gradient: 1 to 20 percent
Parent material: sandy lake beach material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor):
Wind erodibility group (WEG):
Wind erodibility index (WEI):
Kw factor (surface layer)
Land capability, nonirrigated: 8s
Hydric soil:
Hydrologic group:
Potential for frost action:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1010--Pits, quarry

Pits, quarry

Extent: 100 percent of the unit
Landform(s): outwash plains, stream terraces, moraines, drumlins, lake plains
Slope gradient: 0 to 0 percent
Parent material:
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

1011A--Fordum-Winterfield complex, 0 to 2 percent slopes, frequently flooded

Fordum, frequently flooded

Extent: 50 to 80 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 1 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): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 5w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 7 in	fine sandy loam	moderately rapid	0.99 to 1.28 in	5.1 to 7.3
Cg -- 7 to 28 in	sandy loam	moderately rapid	2.09 to 5.01 in	5.1 to 7.3
2Cg -- 28 to 80 in	sand	rapid	1.04 to 5.20 in	5.6 to 7.3

Winterfield, frequently flooded

Extent: 20 to 40 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: somewhat poorly 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: 5w
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loamy fine sand	rapid	0.79 to 0.94 in	5.6 to 7.3
C1,C2 -- 8 to 20 in	sand	rapid	0.61 to 1.34 in	5.6 to 7.3
C3,C4,C5 -- 20 to 80 in	sand	rapid	2.39 to 5.98 in	5.6 to 7.3

1013A--Seelyeville and Cathro soils, ponded, 0 to 1 percent slopes

Seelyeville, ponded

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 8w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, ponded, milaca catena

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	moderately rapid	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	moderately rapid	0.89 to 1.42 in	5.6 to 7.3

1017A--Fluvaquents, ponded, 0 to 1 percent slopes, frequently flooded

Fluvaquents, frequently flooded, ponded

Extent: 80 to 100 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 1 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: frequent
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: 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	*Permeability*	*Available water capacity*	*pH*
A --	0 to 6 in	mucky silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
Cg --	6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

1020A--Bowstring muck and Fluvaquents, loamy, 0 to 1 percent slopes, frequently flooded

Bowstring, frequently flooded

Extent: 25 to 75 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic materials containing strata of alluvium
Restrictive feature(s): greater than 60 inches
Flooding: frequent
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 38 in	muck	moderately rapid	13.37 to 17.19 in	
Cg -- 38 to 47 in	stratified fine sand to loamy fine sand	rapid	0.43 to 0.87 in	5.6 to 7.3
Oa' -- 47 to 80 in	muck	moderately rapid	11.57 to 14.88 in	

Fluvaquents, frequently flooded, loamy

Extent: 20 to 60 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 1 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) .32
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	mucky silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
Cg -- 6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

1023A--Seelyeville and Markey soils, ponded, 0 to 1 percent slopes

Seelyeville, ponded

Extent: 0 to 100 percent of the unit
Landform(s): lake plains, outwash plains, stream terraces
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 8w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 15 in	muck	moderately rapid	5.24 to 6.73 in	
Oa2,Oa5 -- 15 to 80 in	muck	moderately rapid	22.74 to 29.23 in	

Markey, ponded

Extent: 0 to 100 percent of the unit
Landform(s): lake plains, outwash plains, stream terraces
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 8w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 27 in	muck	moderately rapid	9.51 to 12.22 in	
A -- 27 to 32 in	loamy sand	rapid	0.28 to 0.57 in	5.6 to 7.3
Cg -- 32 to 80 in	sand	rapid	1.92 to 3.36 in	5.6 to 7.3

1025A--Fluvaquents and Udifluvents, loamy, 0 to 2 percent slopes, frequently flooded

Fluvaquents, frequently flooded, loamy

Extent: 25 to 80 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: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 5w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
Cg -- 6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

Udifluvents, frequently flooded, loamy

Extent: 10 to 50 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: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 4w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
Cg -- 6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

1026A--Udifluvents and Fluvaquents, loamy, 0 to 2 percent slopes, occasionally flooded

Udifluvents, occas. flooded, moderately well drained

Extent: 25 to 65 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: occasional
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:		*Texture*	*Permeability*	*Available water capacity*	*pH*
A --	0 to 6 in	silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
C --	6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

Udifluvents, occas. flooded, somewhat poorly drained

Extent: 15 to 50 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: occasional
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:		*Texture*	*Permeability*	*Available water capacity*	*pH*
A --	0 to 6 in	silt loam	moderate	1.18 to 1.42 in	5.6 to 7.3
Cg --	6 to 80 in	stratified silt loam to gravelly loamy coarse sand	rapid	4.44 to 16.28 in	5.6 to 7.3

C1B--Milaca-Brennyville complex, 3 to 8 percent slopes, stony

Milaca, stony

Extent: 56 to 80 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 4 to 8 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.18 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

Brennyville, stony

Extent: 10 to 44 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 6 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

C2A--Adolph mucky silty clay loam, depressional, 0 to 1 percent slopes, stony

Adolph, depressional, stony

Extent: 80 to 95 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 80 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) .32
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 5 in	mucky silty clay loam	moderately slow	1.07 to 1.18 in	5.1 to 6.5
A2 -- 5 to 13 in	silt loam	moderate	1.65 to 1.89 in	5.1 to 6.5
Bg -- 13 to 32 in	silt loam	moderate	3.21 to 4.16 in	5.1 to 7.3
2BC -- 32 to 44 in	fine sandy loam	slow	0.98 to 1.46 in	5.6 to 7.3
2BCd -- 44 to 80 in	fine sandy loam	very slow	1.79 to 2.87 in	5.6 to 7.3

C4A--Cebana silt loam, 0 to 1 percent slopes, stony

Cebana, stony

Extent: 85 to 95 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg,E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C5C--Milaca fine sandy loam, 8 to 15 percent slopes, stony

Milaca, stony

Extent: 70 to 90 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 8 to 15 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
E -- 4 to 15 in	fine sandy loam	moderately rapid	1.21 to 2.09 in	5.1 to 6.5
E/B,Bt1,Bt2 -- 15 to 42 in	fine sandy loam	moderately rapid	2.72 to 4.07 in	5.1 to 6.5
BCd -- 42 to 80 in	fine sandy loam	very slow	1.89 to 3.02 in	5.6 to 7.3

C5E--Milaca fine sandy loam, 15 to 30 percent slopes, stony

Milaca, stony

Extent: 70 to 90 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 15 to 30 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
E -- 4 to 15 in	fine sandy loam	moderately rapid	1.21 to 2.09 in	5.1 to 6.5
E/B,Bt1,Bt2 -- 15 to 42 in	fine sandy loam	moderately rapid	2.72 to 4.07 in	5.1 to 6.5
BCd -- 42 to 80 in	fine sandy loam	very slow	1.89 to 3.02 in	5.6 to 7.3

C6A--Cebana silt loam, 0 to 2 percent slopes, stony

Cebana, stony

Extent: 65 to 85 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C8A--Brennyville, wet-Cebana complex, 0 to 3 percent slopes, stony

Brennyville, wet, stony

Extent: 68 to 98 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 3 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2,2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

Cebana, stony

Extent: 5 to 30 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg,E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C9A--Mora, wet-Cebana complex, 0 to 3 percent slopes, stony

Mora, wet, stony

Extent: 43 to 60 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 3 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 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) .15
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 12 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 12 to 36 in	fine sandy loam	moderately rapid	2.40 to 4.56 in	5.1 to 6.5
BC -- 36 to 46 in	fine sandy loam	slow	0.82 to 1.23 in	5.6 to 7.3
BCd -- 46 to 80 in	fine sandy loam	very slow	1.69 to 2.71 in	5.6 to 7.3

Cebana, stony

Extent: 15 to 27 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C10B--Brennyville complex, 1 to 6 percent slopes, stony

Brennyville, stony

Extent: 40 to 85 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 6 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2,2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

Brennyville, wet, stony

Extent: 5 to 35 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 3 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2,2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

C10B--Brennyville complex, 1 to 6 percent slopes, stony

C11B--Mora-Brennyville, wet, complex, 1 to 6 percent slopes, stony

Mora, stony

Extent: 40 to 70 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 6 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 12 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 12 to 36 in	fine sandy loam	moderately rapid	2.40 to 4.56 in	5.1 to 6.5
BC -- 36 to 46 in	fine sandy loam	slow	0.82 to 1.23 in	5.6 to 7.3
BCd -- 46 to 80 in	fine sandy loam	very slow	1.69 to 2.71 in	5.6 to 7.3

Brennyville, wet, stony

Extent: 10 to 35 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 3 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

C11B--Mora-Brennyville, wet, complex, 1 to 6 percent slopes, stony

C12A--Brennyville, wet-Cebana complex, 0 to 4 percent slopes, stony

Brennyville, wet, stony

Extent: 52 to 78 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 4 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

Cebana, stony

Extent: 9 to 18 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C13A--Bluffton loam, depressional, 0 to 1 percent slopes

Bluffton, depressional

Extent: 75 to 95 percent of the unit
Landform(s): 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): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 9 in	loam	moderate	1.54 to 1.90 in	5.1 to 6.5
A2 -- 9 to 13 in	loam	moderate	0.67 to 0.91 in	5.1 to 6.5
Bg -- 13 to 40 in	loam	moderate	3.53 to 4.89 in	5.6 to 7.3
Cg -- 40 to 80 in	loam	moderate	4.77 to 7.16 in	7.4 to 8.4

C14A--Cathro, Twig, and Adolph soils, ponded, 0 to 1 percent slopes

Adolph, ponded, stony

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .32
Land capability, nonirrigated: 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 5 in	mucky silty clay loam	moderately slow	1.07 to 1.18 in	5.1 to 6.5
A2 -- 5 to 13 in	silt loam	moderate	1.65 to 1.89 in	5.1 to 6.5
Bg -- 13 to 32 in	silt loam	moderate	3.21 to 4.16 in	5.1 to 7.3
2BC -- 32 to 44 in	fine sandy loam	slow	0.98 to 1.46 in	5.6 to 7.3
2BCd -- 44 to 80 in	fine sandy loam	very slow	1.79 to 2.87 in	5.6 to 7.3

Cathro, ponded, milaca catena

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 8w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C14A--Cathro, Twig, and Adolph soils, ponded, 0 to 1 percent slopes

Twig, ponded

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: thin highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Oa	0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	3.5 to 6.0
A	10 to 16 in	loam	moderate	1.07 to 1.51 in	3.5 to 6.0
Eg	16 to 21 in	fine sandy loam	moderately rapid	0.61 to 1.04 in	3.5 to 6.0
2Bg,2Bw	21 to 44 in	sandy loam	moderately rapid	2.09 to 4.41 in	3.5 to 6.0
2BC	44 to 52 in	fine sandy loam	slow	0.63 to 0.94 in	5.6 to 7.3
2BCd	52 to 80 in	fine sandy loam	very slow	1.40 to 2.24 in	5.6 to 7.3

C16B--Mahtomedi-Chetek complex, 1 to 8 percent slopes

Mahtomedi

Extent: 35 to 70 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 8 percent
Parent material: 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
E -- 4 to 9 in	gravelly coarse sandy loam	moderately rapid	0.20 to 0.77 in	5.1 to 6.5
Bw -- 9 to 20 in	gravelly coarse sand	very rapid	0.11 to 0.66 in	5.1 to 6.5
BC, C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 6.5

Chetek

Extent: 5 to 30 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC,2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C16C--Mahtomedi-Chetek complex, 8 to 15 percent slopes

Mahtomedi

Extent: 30 to 50 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
E -- 4 to 9 in	gravelly coarse sandy loam	moderately rapid	0.20 to 0.77 in	5.1 to 6.5
Bw -- 9 to 20 in	gravelly coarse sand	very rapid	0.11 to 0.66 in	5.1 to 6.5
BC, C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 6.5

Chetek

Extent: 30 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C16E--Mahtomedi-Chetek complex, 15 to 30 percent slopes

Mahtomedi

Extent: 30 to 50 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 30 percent
Parent material: 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
E -- 4 to 9 in	gravelly coarse sandy loam	moderately rapid	0.20 to 0.77 in	5.1 to 6.5
Bw -- 9 to 20 in	gravelly coarse sand	very rapid	0.11 to 0.66 in	5.1 to 6.5
BC, C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 6.5

Chetek

Extent: 30 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 30 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C17A--Rosholt-Chetek complex, 0 to 2 percent slopes

Rosholt

Extent: 50 to 65 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
B/E -- 8 to 12 in	fine sandy loam	moderately rapid	0.39 to 0.75 in	5.1 to 6.5
Bt -- 12 to 28 in	loam	moderate	1.45 to 3.07 in	5.1 to 6.5
2BC -- 28 to 32 in	loamy sand	rapid	0.12 to 0.35 in	5.1 to 6.5
2C -- 32 to 80 in	gravelly coarse sand	very rapid	0.48 to 2.88 in	5.1 to 6.5

Chetek

Extent: 30 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C17B--Rosholt-Chetek complex, 2 to 8 percent slopes

Rosholt

Extent: 30 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 8 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
B/E -- 8 to 12 in	fine sandy loam	moderately rapid	0.39 to 0.75 in	5.1 to 6.5
Bt -- 12 to 28 in	loam	moderate	1.45 to 3.07 in	5.1 to 6.5
2BC -- 28 to 32 in	loamy sand	rapid	0.12 to 0.35 in	5.1 to 6.5
2C -- 32 to 80 in	gravelly coarse sand	very rapid	0.48 to 2.88 in	5.1 to 6.5

Chetek

Extent: 4 to 35 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C17C--Rosholt-Chetek complex, 8 to 15 percent slopes

Rosholt

Extent: 35 to 80 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
B/E -- 8 to 12 in	fine sandy loam	moderately rapid	0.39 to 0.75 in	5.1 to 6.5
Bt -- 12 to 28 in	loam	moderate	1.45 to 3.07 in	5.1 to 6.5
2BC -- 28 to 32 in	loamy sand	rapid	0.12 to 0.35 in	5.1 to 6.5
2C -- 32 to 80 in	gravelly coarse sand	very rapid	0.48 to 2.88 in	5.1 to 6.5

Chetek

Extent: 15 to 50 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C17E--Rosholt-Chetek complex, 15 to 40 percent slopes

Rosholt

Extent: 40 to 75 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 40 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
B/E -- 8 to 12 in	fine sandy loam	moderately rapid	0.39 to 0.75 in	5.1 to 6.5
Bt -- 12 to 28 in	loam	moderate	1.45 to 3.07 in	5.1 to 6.5
2BC -- 28 to 32 in	loamy sand	rapid	0.12 to 0.35 in	5.1 to 6.5
2C -- 32 to 80 in	gravelly coarse sand	very rapid	0.48 to 2.88 in	5.1 to 6.5

Chetek

Extent: 15 to 30 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 40 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C18B--Branstad loam, 2 to 6 percent slopes

Branstad

Extent: 60 to 85 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: moderately 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: 2e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loam	moderate	0.89 to 1.30 in	5.1 to 6.5
E -- 6 to 11 in	fine sandy loam	moderately rapid	0.67 to 0.92 in	5.1 to 6.5
B/E -- 11 to 17 in	loam	moderate	0.77 to 1.06 in	5.1 to 6.5
Bt -- 17 to 45 in	loam	moderate	3.35 to 5.03 in	5.6 to 7.3
C -- 45 to 80 in	loam	moderate	4.20 to 6.31 in	7.4 to 8.4

C19A--Longsiding-Grasston complex, 0 to 3 percent slopes

Longsiding

Extent: 50 to 75 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 3 percent
Parent material: silty glaciolacustrine
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): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.1 to 7.3
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.61 in	5.1 to 7.3
Bt1, Bt3 -- 12 to 35 in	silty clay	slow	1.86 to 4.65 in	5.1 to 7.3
Bk -- 35 to 45 in	silt loam	moderately slow	1.77 to 2.17 in	7.4 to 8.4
C -- 45 to 80 in	silty clay loam	moderately slow	6.31 to 7.71 in	7.4 to 8.4

Grasston

Extent: 20 to 35 percent of the unit
Landform(s): lake plains
Slope gradient: 1 to 3 percent
Parent material: silty glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .37
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.1 to 7.3
B/E -- 9 to 14 in	silty clay loam	moderately slow	0.56 to 1.13 in	5.1 to 7.3
Bt1, Bt2 -- 14 to 42 in	silty clay	slow	2.24 to 5.59 in	5.1 to 7.3
Bk -- 42 to 66 in	silt loam	moderate	4.32 to 5.28 in	7.4 to 8.4
C -- 66 to 80 in	silty clay loam	moderately slow	2.48 to 3.03 in	7.4 to 8.4

C20C--Cushing loam, 6 to 12 percent slopes

Cushing

Extent: 70 to 90 percent of the unit
Landform(s): moraines
Slope gradient: 6 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): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.73 in	5.1 to 6.5
B/E -- 8 to 14 in	loam	moderate	0.82 to 1.13 in	5.1 to 6.5
Bt -- 14 to 44 in	loam	moderate	3.59 to 5.39 in	5.6 to 7.3
C -- 44 to 80 in	loam	moderate	4.30 to 6.45 in	7.4 to 8.4

C20D--Cushing loam, 12 to 18 percent slopes

Cushing

Extent: 70 to 90 percent of the unit
Landform(s): moraines
Slope gradient: 12 to 18 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): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.06 to 1.56 in	5.1 to 6.5
B/E -- 7 to 20 in	loam	moderate	1.69 to 2.34 in	5.1 to 6.5
Bt -- 20 to 45 in	loam	moderate	2.98 to 4.46 in	5.6 to 7.3
C -- 45 to 80 in	loam	moderate	4.20 to 6.31 in	7.4 to 8.4

C20E--Cushing loam, 18 to 35 percent slopes

Cushing

Extent: 80 to 90 percent of the unit
Landform(s): moraines
Slope gradient: 18 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): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .24
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	0.77 to 1.13 in	5.1 to 6.5
E -- 5 to 9 in	fine sandy loam	moderate	0.51 to 0.71 in	5.1 to 6.5
B/E -- 9 to 17 in	loam	moderate	1.02 to 1.42 in	5.1 to 6.5
Bt -- 17 to 55 in	loam	moderate	4.58 to 6.87 in	5.6 to 7.3
C -- 55 to 60 in	loam	moderate	0.57 to 0.85 in	7.4 to 8.4

C21A--Quam mucky silty clay loam, depressional, MLRA 90, 0 to 1 percent slopes

Quam, depressional, mlra 90

Extent: 70 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 1 percent
Parent material: silty glaciolacustrine
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): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 14 in	mucky silty clay loam	moderately slow	2.89 to 3.17 in	5.1 to 7.3
A2 -- 14 to 24 in	silty clay loam	moderately slow	2.15 to 2.35 in	5.1 to 7.3
Bg -- 24 to 32 in	silty clay loam	moderately slow	0.71 to 1.57 in	5.1 to 7.3
Cg -- 32 to 80 in	silty clay loam	moderately slow	8.65 to 10.57 in	7.4 to 8.4

C23B--Antigo-Chetek complex, 2 to 8 percent slopes

Antigo

Extent: 45 to 80 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 6 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .49
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	silt loam	moderate	0.75 to 0.87 in	5.1 to 6.5
E -- 4 to 12 in	silt loam	moderate	1.50 to 1.73 in	5.1 to 6.5
B/E -- 12 to 18 in	silt loam	moderate	1.20 to 1.39 in	5.1 to 6.5
2Bt -- 18 to 30 in	fine sandy loam	moderate	1.06 to 2.13 in	5.1 to 6.5
3C -- 30 to 80 in	gravelly coarse sand	very rapid	0.50 to 3.00 in	5.1 to 6.5

Chetek

Extent: 15 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 8 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC,2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C24A--Billyboy-Ossmer complex, 0 to 3 percent slopes

Billyboy

Extent: 50 to 85 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.42 to 1.73 in	5.1 to 6.5
E/B -- 8 to 13 in	silt loam	moderate	0.97 to 1.13 in	5.1 to 6.5
Bt1 -- 13 to 19 in	silt loam	moderate	1.12 to 1.30 in	5.1 to 6.5
2Bt2 -- 19 to 25 in	loam	moderate	0.57 to 1.13 in	5.1 to 6.5
3C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

Ossmer

Extent: 15 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.63 to 1.99 in	5.1 to 6.5
B/E -- 9 to 13 in	silt loam	moderate	0.75 to 0.87 in	5.1 to 6.5
Bt1 -- 13 to 26 in	silt loam	moderate	2.47 to 2.86 in	5.1 to 6.5
2Bt2 -- 26 to 30 in	loam	moderate	0.35 to 0.71 in	5.1 to 6.5
3C -- 30 to 80 in	gravelly coarse sand	very rapid	0.50 to 3.00 in	5.1 to 6.5

C25A--Alstad loam, 1 to 3 percent slopes

Alstad

Extent: 70 to 90 percent of the unit
Landform(s): moraines
Slope gradient: 1 to 3 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): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .28
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.36 to 1.99 in	5.1 to 6.5
E -- 9 to 15 in	fine sandy loam	moderately rapid	0.77 to 1.06 in	5.1 to 6.5
E/B, B/E -- 15 to 24 in	loam	moderate	1.18 to 1.63 in	5.1 to 6.5
Bt -- 24 to 49 in	loam	moderate	2.98 to 4.46 in	5.6 to 7.3
C -- 49 to 60 in	loam	moderate	1.32 to 1.98 in	7.4 to 8.4

C26A--Foglake silt loam, 0 to 2 percent slopes

Foglake

Extent: 75 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 2 percent
Parent material: silty glaciolacustrine
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): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .37
Land capability, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 7.3
Eg -- 8 to 16 in	silt loam	moderate	1.41 to 1.82 in	5.1 to 7.3
Btg,BCg -- 16 to 47 in	silty clay loam	slow	2.46 to 6.14 in	5.1 to 7.3
Cg -- 47 to 80 in	silty clay loam	moderately slow	5.95 to 7.28 in	7.4 to 8.4

C27A--Oesterle-Scott Lake complex, 0 to 3 percent slopes

Oesterle

Extent: 30 to 75 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	loam	moderate	1.48 to 1.87 in	5.1 to 6.5
B/E -- 10 to 17 in	fine sandy loam	moderately rapid	0.71 to 1.35 in	5.1 to 6.5
Bt -- 17 to 34 in	loam	moderate	1.52 to 3.22 in	5.1 to 6.5
2BC, 2C -- 34 to 80 in	gravelly coarse sand	very rapid	0.46 to 2.76 in	5.1 to 6.5

Scott Lake

Extent: 15 to 34 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
E -- 8 to 11 in	fine sandy loam	moderately rapid	0.31 to 0.60 in	5.1 to 6.5
B/E -- 11 to 17 in	fine sandy loam	moderately rapid	0.53 to 1.12 in	5.1 to 6.5
Bt -- 17 to 25 in	loam	moderate	0.74 to 1.57 in	5.1 to 6.5
2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C28A--Cathro and Twig soils, depressional, 0 to 1 percent slopes

Cathro, depressional, milaca catena

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

Twig, depressional

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: thin highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	3.5 to 6.0
A -- 10 to 16 in	loam	moderate	1.07 to 1.51 in	3.5 to 6.0
Eg -- 16 to 21 in	fine sandy loam	moderately rapid	0.61 to 1.04 in	3.5 to 6.0
2Bg,2Bw -- 21 to 44 in	sandy loam	moderately rapid	2.09 to 4.41 in	3.5 to 6.0
2BC -- 44 to 52 in	fine sandy loam	slow	0.63 to 0.94 in	5.6 to 7.3
2BCd -- 52 to 80 in	fine sandy loam	very slow	1.40 to 2.24 in	5.6 to 7.3

C28A--Cathro and Twig soils, depressional, 0 to 1 percent slopes

C29D2--Debs silt loam, 12 to 18 percent slopes, eroded

Debs, moderately eroded

Extent: 70 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 12 to 18 percent
Parent material: silty glaciolacustrine
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): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 4e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	silt loam	moderate	1.02 to 1.23 in	5.1 to 7.3
E/B, B/E -- 5 to 22 in	silty clay loam	moderately slow	1.86 to 3.72 in	5.1 to 7.3
Bt1, Bt2 -- 22 to 40 in	silty clay loam	slow	1.45 to 3.62 in	5.1 to 7.3
BC, C -- 40 to 80 in	silty clay loam	moderately slow	7.16 to 8.75 in	7.4 to 8.4

C29E--Debs silt loam, 18 to 25 percent slopes

Debs

Extent: 70 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 18 to 25 percent
Parent material: silty glaciolacustrine
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): 48
Kw factor (surface layer) .37
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	silt loam	moderate	1.57 to 1.89 in	5.1 to 7.3
Bt1,Bt2 -- 8 to 32 in	silty clay loam	slow	1.92 to 4.80 in	5.1 to 7.3
Btk -- 32 to 45 in	silty clay	slow	1.04 to 2.60 in	7.4 to 8.4
C -- 45 to 60 in	silty clay loam	moderately slow	2.69 to 3.29 in	7.4 to 8.4

C30A--Talmoon loam, 0 to 2 percent slopes

Talmoon

Extent: 80 to 94 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: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
Land capability, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.20 to 1.49 in	5.1 to 6.5
Eg -- 7 to 12 in	fine sandy loam	moderately rapid	0.61 to 0.85 in	5.1 to 6.5
Btg -- 12 to 32 in	loam	moderate	2.41 to 3.61 in	5.6 to 7.3
Cg -- 32 to 80 in	loam	moderate	5.76 to 8.65 in	7.4 to 8.4

C31B--Grasston silt loam, 2 to 6 percent slopes

Grasston

Extent: 75 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 2 to 6 percent
Parent material: silty glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .37
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.1 to 7.3
B/E -- 9 to 14 in	silty clay loam	moderately slow	0.56 to 1.13 in	5.1 to 7.3
Bt1, Bt2 -- 14 to 42 in	silty clay	slow	2.24 to 5.59 in	5.1 to 7.3
Bk -- 42 to 66 in	silt loam	moderate	4.32 to 5.28 in	7.4 to 8.4
C -- 66 to 80 in	silty clay loam	moderately slow	2.48 to 3.03 in	7.4 to 8.4

C31C2--Grasston silt loam, 6 to 12 percent slopes, eroded

Grasston, moderately eroded

Extent: 60 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 6 to 12 percent
Parent material: silty glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.1 to 7.3
B/E -- 9 to 14 in	silty clay loam	moderately slow	0.56 to 1.13 in	5.1 to 7.3
Bt1, Bt2 -- 14 to 42 in	silty clay	slow	2.24 to 5.59 in	5.1 to 7.3
Bk -- 42 to 66 in	silt loam	moderate	4.32 to 5.28 in	7.4 to 8.4
C -- 66 to 80 in	silty clay loam	moderately slow	2.48 to 3.03 in	7.4 to 8.4

C32A--Ellsburg silt loam, 0 to 2 percent slopes

Ellsburg

Extent: 65 to 90 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 2 percent
Parent material: loamy mantled loamy till
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: 4w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	silt loam	moderate	0.55 to 0.94 in	4.5 to 6.0
E -- 4 to 10 in	fine sandy loam	moderately rapid	0.83 to 1.30 in	4.5 to 6.0
B/E -- 10 to 20 in	loam	moderate	1.33 to 2.25 in	4.5 to 6.0
2Bt1, 2Bt3 -- 20 to 65 in	clay loam	slow	5.83 to 8.53 in	5.1 to 6.5
2C -- 65 to 80 in	loam	slow	1.80 to 2.84 in	6.1 to 7.8

C34B--Dusler-Culver complex, 0 to 5 percent slopes

Dusler

Extent: 37 to 65 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 3 percent
Parent material: loamy mantled loamy till
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	silt loam	moderate	1.02 to 1.23 in	4.5 to 6.0
E -- 5 to 15 in	silt loam	moderate	1.28 to 2.17 in	4.5 to 6.0
2B/E -- 15 to 19 in	loam	moderate	0.47 to 0.87 in	4.5 to 6.0
2Bt1, 2Bt3 -- 19 to 66 in	loam	slow	5.67 to 8.98 in	5.1 to 6.5
2C -- 66 to 80 in	loam	slow	1.65 to 2.62 in	6.1 to 7.8

Culver

Extent: 33 to 54 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 3 to 5 percent
Parent material: loamy mantled loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately 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: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	4.5 to 6.0
E, Bw -- 4 to 9 in	silt loam	moderate	0.72 to 1.13 in	4.5 to 6.0
E/B -- 9 to 16 in	silt loam	moderate	0.92 to 1.56 in	4.5 to 6.0
2Bt1, 2Bt3 -- 16 to 52 in	clay loam	slow	4.66 to 6.81 in	5.1 to 6.5
2C -- 52 to 80 in	loam	slow	3.35 to 5.31 in	6.1 to 7.8

C35A--Ossmer-Billyboy complex, 0 to 3 percent slopes

Ossmer

Extent: 40 to 77 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.63 to 1.99 in	5.1 to 6.5
B/E -- 9 to 13 in	silt loam	moderate	0.75 to 0.87 in	5.1 to 6.5
Bt1 -- 13 to 26 in	silt loam	moderate	2.47 to 2.86 in	5.1 to 6.5
2Bt2 -- 26 to 30 in	loam	moderate	0.35 to 0.71 in	5.1 to 6.5
3C -- 30 to 80 in	gravelly coarse sand	very rapid	0.50 to 3.00 in	5.1 to 6.5

Billyboy

Extent: 15 to 50 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.42 to 1.73 in	5.1 to 6.5
E/B -- 8 to 13 in	silt loam	moderate	0.97 to 1.13 in	5.1 to 6.5
Bt1 -- 13 to 19 in	silt loam	moderate	1.12 to 1.30 in	5.1 to 6.5
2Bt2 -- 19 to 25 in	loam	moderate	0.57 to 1.13 in	5.1 to 6.5
3C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C40A--Scott Lake fine sandy loam, 0 to 3 percent slopes

Scott Lake

Extent: 60 to 80 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
E -- 8 to 11 in	fine sandy loam	moderately rapid	0.31 to 0.60 in	5.1 to 6.5
B/E -- 11 to 17 in	fine sandy loam	moderately rapid	0.53 to 1.12 in	5.1 to 6.5
Bt -- 17 to 25 in	loam	moderate	0.74 to 1.57 in	5.1 to 6.5
2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C41B--Culver-Sanburn-Cathro complex, pitted, 0 to 8 percent slopes

Culver

Extent: 20 to 65 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 3 to 8 percent
Parent material: loamy mantled loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately 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: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	4.5 to 6.0
E, Bw -- 4 to 9 in	silt loam	moderate	0.72 to 1.13 in	4.5 to 6.0
E/B -- 9 to 16 in	silt loam	moderate	0.92 to 1.56 in	4.5 to 6.0
2Bt1, 2Bt3 -- 16 to 52 in	clay loam	slow	4.66 to 6.81 in	5.1 to 6.5
2C -- 52 to 80 in	loam	slow	3.35 to 5.31 in	6.1 to 7.8

Sanburn

Extent: 15 to 30 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 1 to 8 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	moderately rapid	0.28 to 0.35 in	5.1 to 6.5
E -- 2 to 15 in	fine sandy loam	moderately rapid	1.30 to 2.21 in	5.1 to 6.5
Bt -- 15 to 19 in	sandy loam	moderately rapid	0.35 to 0.75 in	5.1 to 6.5
2BC, 2C -- 19 to 60 in	gravelly coarse sand	very rapid	0.41 to 2.46 in	5.1 to 7.8

C41B--Culver-Sanburn-Cathro complex, pitted, 0 to 8 percent slopes

Cathro, depressional, duluth catena

Extent: 10 to 20 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderate	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 62 in	stratified sandy loam to silty clay loam	moderately rapid	2.43 to 4.85 in	5.6 to 7.3
2C -- 62 to 80 in	loam	slow	2.13 to 3.37 in	6.1 to 7.8

C43C--Duluth loam, 8 to 15 percent slopes

Duluth

Extent: 65 to 85 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 8 to 15 percent
Parent material: loamy mantled loamy till
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): 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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	4.5 to 6.0
E, E/B -- 5 to 18 in	fine sandy loam	moderately rapid	1.82 to 2.86 in	4.5 to 6.0
2Bt1, 2Bt2 -- 18 to 38 in	clay loam	slow	2.61 to 3.81 in	5.1 to 6.5
2BC -- 38 to 50 in	clay loam	slow	1.54 to 2.24 in	5.6 to 7.3
2C -- 50 to 80 in	loam	slow	3.59 to 5.69 in	6.1 to 7.8

C43E--Duluth loam, 15 to 25 percent slopes

Duluth

Extent: 80 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 15 to 25 percent
Parent material: loamy mantled loamy till
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): 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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	4.5 to 6.0
E, E/B -- 5 to 18 in	fine sandy loam	moderately rapid	1.82 to 2.86 in	4.5 to 6.0
2Bt1, 2Bt2 -- 18 to 38 in	clay loam	slow	2.61 to 3.81 in	5.1 to 6.5
2BC -- 38 to 50 in	clay loam	slow	1.54 to 2.24 in	5.6 to 7.3
2C -- 50 to 80 in	loam	slow	3.59 to 5.69 in	6.1 to 7.8

C44A--Wurtsmith-Grettum complex, 0 to 3 percent slopes

Wurtsmith

Extent: 40 to 65 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .24
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loamy sand	rapid	0.72 to 1.00 in	5.1 to 6.5
Bw -- 9 to 51 in	sand	rapid	2.11 to 4.63 in	5.1 to 6.5
C -- 51 to 80 in	sand	rapid	1.44 to 2.01 in	5.1 to 6.5

Grettum

Extent: 35 to 50 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.63 to 0.87 in	5.1 to 6.5
Bw -- 8 to 43 in	sand	rapid	1.75 to 3.85 in	5.1 to 6.5
E and Bt -- 43 to 60 in	sand	rapid	1.02 to 1.35 in	5.1 to 6.5

C45C--Duluth-Sanburn-Cathro complex, pitted, 0 to 15 percent slopes

Duluth

Extent: 20 to 65 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 8 to 15 percent
Parent material: loamy mantled loamy till
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): 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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	4.5 to 6.0
E, E/B -- 5 to 18 in	fine sandy loam	moderately rapid	1.82 to 2.86 in	4.5 to 6.0
2Bt1, 2Bt2 -- 18 to 38 in	clay loam	slow	2.61 to 3.81 in	5.1 to 6.5
2BC -- 38 to 50 in	clay loam	slow	1.54 to 2.24 in	5.6 to 7.3
2C -- 50 to 80 in	loam	slow	3.59 to 5.69 in	6.1 to 7.8

Sanburn

Extent: 15 to 35 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 8 to 15 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	moderately rapid	0.28 to 0.35 in	5.1 to 6.5
E -- 2 to 15 in	fine sandy loam	moderately rapid	1.30 to 2.21 in	5.1 to 6.5
Bt -- 15 to 19 in	sandy loam	moderately rapid	0.35 to 0.75 in	5.1 to 6.5
2BC, 2C -- 19 to 60 in	gravelly coarse sand	very rapid	0.41 to 2.46 in	5.1 to 7.8

C45C--Duluth-Sanburn-Cathro complex, pitted, 0 to 15 percent slopes

Cathro, depressional, duluth catena

Extent: 10 to 15 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderate	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 62 in	stratified sandy loam to silty clay loam	moderately rapid	2.43 to 4.85 in	5.6 to 7.3
2C -- 62 to 80 in	loam	slow	2.13 to 3.37 in	6.1 to 7.8

C45E--Duluth-Sanburn-Cathro complex, pitted, 0 to 35 percent slopes

Duluth

Extent: 25 to 50 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 15 to 35 percent
Parent material: loamy mantled loamy till
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): 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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	4.5 to 6.0
E, E/B -- 5 to 18 in	fine sandy loam	moderately rapid	1.82 to 2.86 in	4.5 to 6.0
2Bt1, 2Bt2 -- 18 to 38 in	clay loam	slow	2.61 to 3.81 in	5.1 to 6.5
2BC -- 38 to 50 in	clay loam	slow	1.54 to 2.24 in	5.6 to 7.3
2C -- 50 to 80 in	loam	slow	3.59 to 5.69 in	6.1 to 7.8

Sanburn

Extent: 20 to 40 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 15 to 35 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	moderately rapid	0.28 to 0.35 in	5.1 to 6.5
E -- 2 to 15 in	fine sandy loam	moderately rapid	1.30 to 2.21 in	5.1 to 6.5
Bt -- 15 to 19 in	sandy loam	moderately rapid	0.35 to 0.75 in	5.1 to 6.5
2BC, 2C -- 19 to 60 in	gravelly coarse sand	very rapid	0.41 to 2.46 in	5.1 to 7.8

C45E--Duluth-Sanburn-Cathro complex, pitted, 0 to 35 percent slopes

Cathro, depressional, duluth catena

Extent: 10 to 20 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderate	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 62 in	stratified sandy loam to silty clay loam	moderately rapid	2.43 to 4.85 in	5.6 to 7.3
2C -- 62 to 80 in	loam	slow	2.13 to 3.37 in	6.1 to 7.8

C49A--Antigo silt loam, 0 to 2 percent slopes

Antigo

Extent: 55 to 93 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .49
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	silt loam	moderate	0.75 to 0.87 in	5.1 to 6.5
E -- 4 to 12 in	silt loam	moderate	1.50 to 1.73 in	5.1 to 6.5
B/E -- 12 to 18 in	silt loam	moderate	1.20 to 1.39 in	5.1 to 6.5
2Bt -- 18 to 30 in	fine sandy loam	moderate	1.06 to 2.13 in	5.1 to 6.5
3C -- 30 to 80 in	gravelly coarse sand	very rapid	0.50 to 3.00 in	5.1 to 6.5

C50B--Culver-Dusler complex, 1 to 8 percent slopes

Culver

Extent: 40 to 75 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 2 to 8 percent
Parent material: loamy mantled loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately 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: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	4.5 to 6.0
E, Bw -- 4 to 9 in	silt loam	moderate	0.72 to 1.13 in	4.5 to 6.0
E/B -- 9 to 16 in	silt loam	moderate	0.92 to 1.56 in	4.5 to 6.0
2Bt1, 2Bt3 -- 16 to 52 in	clay loam	slow	4.66 to 6.81 in	5.1 to 6.5
2C -- 52 to 80 in	loam	slow	3.35 to 5.31 in	6.1 to 7.8

Dusler

Extent: 15 to 25 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 1 to 3 percent
Parent material: loamy mantled loamy till
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	silt loam	moderate	1.02 to 1.23 in	4.5 to 6.0
E -- 5 to 15 in	silt loam	moderate	1.28 to 2.17 in	4.5 to 6.0
2B/E -- 15 to 19 in	loam	moderate	0.47 to 0.87 in	4.5 to 6.0
2Bt1, 2Bt3 -- 19 to 66 in	loam	slow	5.67 to 8.98 in	5.1 to 6.5
2C -- 66 to 80 in	loam	slow	1.65 to 2.62 in	6.1 to 7.8

C53B--Pomroy loamy fine sand, 2 to 6 percent slopes

Pomroy

Extent: 80 to 95 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 2 to 6 percent
Parent material: sandy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .28
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loamy fine sand	rapid	0.47 to 0.71 in	5.1 to 6.5
E -- 6 to 22 in	loamy fine sand	rapid	0.81 to 1.78 in	5.1 to 6.5
2Bt -- 22 to 31 in	sandy loam	moderately rapid	0.91 to 1.45 in	5.1 to 6.5
2BC -- 31 to 41 in	sandy loam	slow	0.79 to 1.18 in	5.6 to 7.3
2BCd -- 41 to 60 in	fine sandy loam	very slow	0.94 to 1.51 in	5.6 to 7.3

C53C--Pomroy loamy fine sand, 6 to 12 percent slopes

Pomroy

Extent: 75 to 95 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 6 to 12 percent
Parent material: sandy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .28
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	loamy fine sand	rapid	0.47 to 0.71 in	5.1 to 6.5
E -- 6 to 22 in	loamy fine sand	rapid	0.81 to 1.78 in	5.1 to 6.5
2Bt -- 22 to 31 in	sandy loam	moderately rapid	0.91 to 1.45 in	5.1 to 6.5
2BC -- 31 to 41 in	sandy loam	slow	0.79 to 1.18 in	5.6 to 7.3
2BCd -- 41 to 60 in	fine sandy loam	very slow	0.94 to 1.51 in	5.6 to 7.3

C57A--Warman loam, depressional, 0 to 1 percent slopes

Warman, depressional

Extent: 70 to 95 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 1 percent
Parent material: outwash
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): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 16 in	loam	moderate	2.74 to 3.55 in	5.1 to 6.5
Bg -- 16 to 34 in	loam	moderate	1.77 to 3.37 in	5.1 to 6.5
2Cg -- 34 to 60 in	gravelly coarse sand	very rapid	0.26 to 1.56 in	5.1 to 6.5

C58A--Ogilvie loam, 0 to 2 percent slopes

Ogilvie

Extent: 65 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
E -- 8 to 18 in	loam	moderate	1.54 to 2.25 in	5.1 to 6.5
Bt -- 18 to 31 in	loam	moderate	1.95 to 2.86 in	5.1 to 6.5
2C -- 31 to 60 in	gravelly coarse sand	very rapid	0.29 to 1.72 in	5.1 to 6.5

C69B--Milaca, stony-St. Francis complex, 3 to 8 percent slopes

Milaca, stony

Extent: 40 to 75 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 3 to 8 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E,Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

St. francis

Extent: 20 to 50 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 3 to 8 percent
Parent material: loamy glaciofluvial deposits and/or 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): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	fine sandy loam	moderately rapid	0.83 to 1.06 in	5.1 to 6.5
E -- 6 to 11 in	fine sandy loam	moderately rapid	0.51 to 0.87 in	5.1 to 6.5
Bt1 -- 11 to 16 in	loam	moderate	0.46 to 0.97 in	5.1 to 6.5
2Bt2 -- 16 to 20 in	gravelly loamy coarse sand	rapid	0.04 to 0.35 in	5.1 to 6.5
2C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 6.5

C69C--Milaca, stony-St. Francis complex, 8 to 15 percent slopes

Milaca, stony

Extent: 25 to 75 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 8 to 15 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E,Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

St. francis

Extent: 15 to 45 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 8 to 15 percent
Parent material: loamy glaciofluvial deposits and/or 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): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .32
Land capability, nonirrigated: 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 6 in	fine sandy loam	moderately rapid	0.83 to 1.06 in	5.1 to 6.5
E -- 6 to 11 in	fine sandy loam	moderately rapid	0.51 to 0.87 in	5.1 to 6.5
Bt1 -- 11 to 16 in	loam	moderate	0.46 to 0.97 in	5.1 to 6.5
2Bt2 -- 16 to 20 in	gravelly loamy coarse sand	rapid	0.04 to 0.35 in	5.1 to 6.5
2C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 6.5

C75A--Seelyeville and Cathro soils, Milaca catena, depressional, 0 to 1 percent slopes

Seelyeville, depressional

Extent: 0 to 95 percent of the unit
Landform(s): depressions on interdrumlins
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, depressional, milaca catena

Extent: 0 to 95 percent of the unit
Landform(s): depressions on interdrumlins
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C77A--Novak loam, 0 to 2 percent slopes

Novak

Extent: 65 to 80 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
B/E -- 8 to 15 in	loam	moderate	1.06 to 1.56 in	5.1 to 6.5
Bt1 -- 15 to 26 in	loam	moderate	1.65 to 2.43 in	5.1 to 6.5
2Bt2 -- 26 to 30 in	sandy loam	moderate	0.35 to 0.67 in	5.1 to 6.5
3C -- 30 to 60 in	gravelly coarse sand	very rapid	0.30 to 1.80 in	5.1 to 6.5

C77B--Novak loam, 2 to 6 percent slopes

Novak

Extent: 70 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 6 percent
Parent material: outwash
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.06 to 1.35 in	5.1 to 6.5
B/E -- 7 to 17 in	loam	moderate	1.48 to 2.17 in	5.1 to 6.5
Bt1 -- 17 to 23 in	loam	moderate	0.89 to 1.30 in	5.1 to 6.5
2Bt2 -- 23 to 26 in	sandy loam	moderate	0.28 to 0.54 in	5.1 to 6.5
3C -- 26 to 60 in	gravelly coarse sand	very rapid	0.34 to 2.03 in	5.1 to 6.5

C78A--Warman loam, 0 to 2 percent slopes

Warman

Extent: 70 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loam	moderate	1.36 to 1.99 in	5.1 to 6.5
AB -- 9 to 12 in	loam	moderate	0.28 to 0.52 in	5.1 to 6.5
Bg -- 12 to 33 in	loam	moderate	1.91 to 4.04 in	5.1 to 6.5
2C -- 33 to 60 in	gravelly coarse sand	very rapid	0.27 to 1.61 in	5.1 to 6.5

C86A--Aftad-Plover complex, 0 to 3 percent slopes

Aftad

Extent: 50 to 85 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 3 percent
Parent material: loamy glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.36 to 1.63 in	5.1 to 6.5
E -- 9 to 12 in	loamy fine sand	rapid	0.25 to 0.47 in	4.5 to 6.5
B/E -- 12 to 16 in	loam	moderate	0.35 to 0.95 in	4.5 to 6.5
Bt -- 16 to 32 in	loam	moderate	2.68 to 3.46 in	4.5 to 6.5
C -- 32 to 80 in	stratified silt loam to fine sand	rapid	2.40 to 10.57 in	4.5 to 6.5

Plover

Extent: 15 to 50 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy glaciolacustrine
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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.36 to 1.63 in	5.1 to 6.5
B/E -- 9 to 15 in	loam	moderate	0.47 to 1.30 in	4.5 to 6.5
Bt -- 15 to 29 in	silt loam	moderate	2.27 to 3.12 in	4.5 to 6.5
C1, C2 -- 29 to 80 in	stratified silt loam to fine sand	rapid	2.54 to 11.17 in	4.5 to 6.5

C87A--Plover fine sandy loam, 0 to 3 percent slopes

Plover

Extent: 60 to 85 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 3 percent
Parent material: loamy glaciolacustrine
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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.36 to 1.63 in	5.1 to 6.5
B/E -- 9 to 15 in	loam	moderate	0.47 to 1.30 in	4.5 to 6.5
Bt -- 15 to 29 in	silt loam	moderate	2.27 to 3.12 in	4.5 to 6.5
C1, C2 -- 29 to 80 in	stratified silt loam to fine sand	rapid	2.54 to 11.17 in	4.5 to 6.5

C88A--Fenander fine sandy loam, 0 to 2 percent slopes

Fenander

Extent: 65 to 95 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.36 to 1.63 in	5.1 to 6.5
E -- 9 to 15 in	fine sandy loam	moderately rapid	0.53 to 1.00 in	4.5 to 6.5
Bt -- 15 to 27 in	loam	moderate	1.83 to 2.69 in	4.5 to 6.5
BC -- 27 to 33 in	fine sandy loam	moderately rapid	0.47 to 1.12 in	4.5 to 6.5
2C -- 33 to 80 in	stratified silt loam to fine sand	rapid	2.34 to 10.31 in	4.5 to 6.5

C89A--Cathro (Grasston catena) and Seelyeville soils, depressional, 0 to 1 percent slopes

Cathro, depressional, grasston catena

Extent: 0 to 95 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over clayey glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.30 in	5.6 to 6.5
Cg1 -- 37 to 62 in	silty clay	slow	2.02 to 5.04 in	7.4 to 8.4
Cg2 -- 62 to 80 in	silty clay	slow	1.42 to 3.54 in	7.4 to 8.4

Seelyeville, depressional

Extent: 0 to 95 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

C91B--Milaca, stony-Chetek complex, 3 to 8 percent slopes

Milaca, stony

Extent: 30 to 70 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 8 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E,Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

Chetek

Extent: 20 to 50 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 8 percent
Parent material: loamy glaciofluvial deposits and/or 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): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC,2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C91C--Milaca, stony-Chetek complex, 8 to 15 percent slopes

Milaca, stony

Extent: 30 to 70 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 8 to 15 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E,Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

Chetek

Extent: 20 to 50 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 8 to 15 percent
Parent material: loamy glaciofluvial deposits and/or 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): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC,2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C91E--Milaca, stony-Chetek complex, 15 to 30 percent slopes

Milaca, stony

Extent: 30 to 75 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 15 to 30 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

Chetek

Extent: 20 to 70 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 15 to 30 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C93A--Greenwood mucky peat (Grasston catena), 0 to 1 percent slopes

Greenwood

Extent: 85 to 95 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 1 percent
Parent material: moderately decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oi -- 0 to 8 in	peat	very rapid	4.33 to 5.12 in	
Oe -- 8 to 80 in	mucky peat	rapid	32.42 to 39.63 in	

C94A--Seelyeville and Cathro (Cushing catena) soils, depressional, 0 to 1 percent slopes

Cathro, depressional, cushing catena

Extent: 0 to 95 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 35 in	loam	moderate	0.67 to 0.91 in	5.6 to 7.3
Bg -- 35 to 62 in	loam	moderate	3.53 to 4.89 in	5.6 to 7.3
Cg -- 62 to 80 in	loam	moderate	2.13 to 3.19 in	7.4 to 8.4

Seelyeville, depressional

Extent: 0 to 95 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

C95A--Seelyeville and Cathro (Milaca catena) soils, wooded, 0 to 1 percent slopes

Seelyeville

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, milaca catena

Extent: 0 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: occasional
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C96A--Cathro, Twig, and Giese, stony, soils, depressional, 0 to 1 percent slopes

Cathro, depressional, milaca catena

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

Twig, depressional

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: thin highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	3.5 to 6.0
A -- 10 to 16 in	loam	moderate	1.07 to 1.51 in	3.5 to 6.0
Eg -- 16 to 21 in	fine sandy loam	moderately rapid	0.61 to 1.04 in	3.5 to 6.0
2Bg, 2Bw -- 21 to 44 in	sandy loam	moderately rapid	2.09 to 4.41 in	3.5 to 6.0
2BC -- 44 to 52 in	fine sandy loam	slow	0.63 to 0.94 in	5.6 to 7.3
2BCd -- 52 to 80 in	fine sandy loam	very slow	1.40 to 2.24 in	5.6 to 7.3

C96A--Cathro, Twig, and Giese, stony, soils, depressional, 0 to 1 percent slopes

Giese, depressional, stony

Extent: 0 to 100 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 80 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) .02
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 1 in	muck	moderately rapid	0.41 to 0.53 in	5.1 to 6.0
A -- 1 to 6 in	silt loam	moderate	0.80 to 1.13 in	5.1 to 6.0
E -- 6 to 11 in	silt loam	moderate	0.77 to 1.13 in	5.1 to 6.0
Bg -- 11 to 36 in	silt loam	moderate	3.47 to 5.46 in	5.1 to 6.5
2BC -- 36 to 70 in	fine sandy loam	slow	2.74 to 4.11 in	5.6 to 7.3
2BCd -- 70 to 80 in	fine sandy loam	very slow	0.49 to 0.79 in	5.6 to 7.3

C97A--Cathro, sandy substratum, and Seelyeville soils, depressional, 0 to 1 percent slopes

Cathro, sandy substratum, depressional

Extent: 0 to 95 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	0.65 to 1.30 in	5.1 to 6.5
Bg -- 37 to 62 in	loam	moderate	2.52 to 4.79 in	5.1 to 6.5
2Cg -- 62 to 80 in	gravelly coarse sand	very rapid	0.18 to 1.06 in	5.1 to 7.3

Seelyeville, depressional

Extent: 0 to 95 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

C98A--Seelyeville and Cathro (Duluth catena) soils, wooded, 0 to 1 percent slopes

Seelyeville

Extent: 0 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, duluth catena

Extent: 0 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderate	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 62 in	stratified sandy loam to silty clay loam	moderately rapid	2.43 to 4.85 in	5.6 to 7.3
2C -- 62 to 80 in	loam	slow	2.13 to 3.37 in	6.1 to 7.8

C99A--Greenwood mucky peat (Duluth catena), 0 to 1 percent slopes

Greenwood

Extent: 85 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 1 percent
Parent material: moderately decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oi -- 0 to 8 in	peat	very rapid	4.33 to 5.12 in	
Oe -- 8 to 80 in	mucky peat	rapid	32.42 to 39.63 in	

C100A--Seelyeville and Cathro (Cushing catena) soils, wooded, 0 to 1 percent slopes

Seelyeville

Extent: 0 to 95 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, cushing catena

Extent: 0 to 95 percent of the unit
Landform(s): moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over loamy till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 35 in	loam	moderate	0.67 to 0.91 in	5.6 to 7.3
Bg -- 35 to 62 in	loam	moderate	3.53 to 4.89 in	5.6 to 7.3
Cg -- 62 to 80 in	loam	moderate	2.13 to 3.19 in	7.4 to 8.4

C101A--Greenwood mucky peat (Milaca catena), 0 to 1 percent slopes

Greenwood

Extent: 85 to 95 percent of the unit
Landform(s): interdrumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: moderately decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oi -- 0 to 8 in	peat	very rapid	4.33 to 5.12 in	
Oe -- 8 to 80 in	mucky peat	rapid	32.42 to 39.63 in	

C102A--Cathro, sandy substratum, and Seelyeville soils, ponded , 0 to 1 percent slopes

Cathro, sandy substratum, ponded

Extent: 0 to 100 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 8w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	0.65 to 1.30 in	5.1 to 6.5
Bg -- 37 to 62 in	loam	moderate	2.52 to 4.79 in	5.1 to 6.5
2Cg -- 62 to 80 in	gravelly coarse sand	very rapid	0.18 to 1.06 in	5.1 to 7.3

Seelyeville, ponded

Extent: 0 to 100 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 8w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

C103A--Cathro, sandy substratum, and Seelyeville soils, wooded, 0 to 1 percent slopes

Cathro, sandy substratum

Extent: 0 to 95 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	0.65 to 1.30 in	5.1 to 6.5
Bg -- 37 to 62 in	loam	moderate	2.52 to 4.79 in	5.1 to 6.5
2Cg -- 62 to 80 in	gravelly coarse sand	very rapid	0.18 to 1.06 in	5.1 to 7.3

Seelyeville

Extent: 0 to 95 percent of the unit
Landform(s): outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

C104A--Seelyeville and Cathro (Duluth catena) soils, depressional, 0 to 1 percent slopes

Seelyeville, depressional

Extent: 0 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa5 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Cathro, depressional, duluth catena

Extent: 0 to 95 percent of the unit
Landform(s): end moraines, moraines, till plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderate	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 62 in	stratified sandy loam to silty clay loam	moderately rapid	2.43 to 4.85 in	5.6 to 7.3
2C -- 62 to 80 in	loam	slow	2.13 to 3.37 in	6.1 to 7.8

C108A--Hulligan loam, 0 to 2 percent slopes

Hulligan

Extent: 70 to 85 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loam	moderate	1.06 to 1.35 in	5.1 to 6.5
Bw -- 7 to 25 in	loam	moderate	1.81 to 3.44 in	5.1 to 6.5
Bg -- 25 to 36 in	loam	moderate	0.96 to 2.02 in	5.1 to 6.5
2BC -- 36 to 50 in	loamy sand	rapid	0.43 to 1.28 in	5.1 to 6.5
2C -- 50 to 80 in	gravelly coarse sand	very rapid	0.30 to 1.80 in	5.6 to 6.5

C109A--Lenroot loamy sand, 1 to 3 percent slopes

Lenroot

Extent: 55 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	fine sandy loam	moderately rapid	0.55 to 0.71 in	5.1 to 6.5
Bw -- 4 to 14 in	gravelly coarse sand	very rapid	0.20 to 0.72 in	5.1 to 6.5
BC -- 14 to 20 in	gravelly coarse sand	very rapid	0.06 to 0.35 in	5.1 to 6.5
C -- 20 to 80 in	gravelly coarse sand	very rapid	0.60 to 3.59 in	5.1 to 7.3

C110A--Annriver silt loam, 0 to 2 percent slopes

Annriver

Extent: 70 to 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 2 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.63 to 2.17 in	5.1 to 6.5
Eg -- 9 to 14 in	silt loam	moderate	0.82 to 1.13 in	5.1 to 6.5
Btg1 -- 14 to 21 in	silt loam	moderate	1.07 to 1.47 in	5.1 to 6.5
2Btg2 -- 21 to 31 in	loam	moderate	0.92 to 1.84 in	5.1 to 6.5
3C -- 31 to 80 in	gravelly coarse sand	very rapid	0.49 to 2.93 in	5.1 to 6.5

C112B--Graycalm-Grayling complex, 2 to 8 percent slopes

Graycalm

Extent: 25 to 75 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 8 percent
Parent material: 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) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loamy sand	rapid	0.72 to 1.00 in	5.1 to 6.5
Bw -- 9 to 17 in	loamy sand	rapid	0.39 to 0.87 in	5.1 to 6.5
E&Bt -- 17 to 80 in	sand	rapid	3.78 to 5.04 in	5.1 to 6.5

Grayling

Extent: 15 to 40 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 2 to 8 percent
Parent material: 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.63 to 0.87 in	5.1 to 6.5
Bw -- 8 to 47 in	sand	rapid	1.95 to 4.29 in	5.1 to 6.5
BC -- 47 to 60 in	sand	rapid	0.65 to 0.91 in	5.1 to 6.5

C112C--Graycalm-Grayling complex, 8 to 15 percent slopes

Graycalm

Extent: 30 to 70 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: 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) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loamy sand	rapid	0.72 to 1.00 in	5.1 to 6.5
Bw -- 9 to 17 in	loamy sand	rapid	0.39 to 0.87 in	5.1 to 6.5
E&Bt -- 17 to 80 in	sand	rapid	3.78 to 5.04 in	5.1 to 6.5

Grayling

Extent: 30 to 70 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.63 to 0.87 in	5.1 to 6.5
Bw -- 8 to 47 in	sand	rapid	1.95 to 4.29 in	5.1 to 6.5
BC -- 47 to 60 in	sand	rapid	0.65 to 0.91 in	5.1 to 6.5

C112E--Graycalm-Grayling complex, 15 to 30 percent slopes

Graycalm

Extent: 30 to 65 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 30 percent
Parent material: 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: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 9 in	loamy sand	rapid	0.72 to 1.00 in	5.1 to 6.5
Bw -- 9 to 17 in	loamy sand	rapid	0.39 to 0.87 in	5.1 to 6.5
E&Bt -- 17 to 80 in	sand	rapid	3.78 to 5.04 in	5.1 to 6.5

Grayling

Extent: 35 to 70 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 15 to 30 percent
Parent material: 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .17
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loamy sand	rapid	0.63 to 0.87 in	5.1 to 6.5
Bw -- 8 to 47 in	sand	rapid	1.95 to 4.29 in	5.1 to 6.5
BC -- 47 to 60 in	sand	rapid	0.65 to 0.91 in	5.1 to 6.5

C114B--Hubbard loamy sand, lake beach, 2 to 8 percent slopes

Hubbard, lake beach

Extent: 85 to 95 percent of the unit
Landform(s): beaches
Slope gradient: 2 to 8 percent
Parent material: lake beach sediment
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 6 in	loamy sand	rapid	0.53 to 0.71 in	5.1 to 6.5
AB -- 6 to 14 in	sand	rapid	0.41 to 0.91 in	5.1 to 6.5
Bw -- 14 to 35 in	sand	rapid	1.04 to 2.09 in	5.1 to 6.5
C -- 35 to 80 in	sand	rapid	2.24 to 3.14 in	5.1 to 7.8

C114D--Hubbard loamy sand, lake beach, 8 to 20 percent slopes

Hubbard, lake beach

Extent: 90 to 100 percent of the unit
Landform(s): beaches
Slope gradient: 8 to 20 percent
Parent material: lake beach sediment
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 11 in	loamy sand	rapid	0.99 to 1.32 in	5.1 to 6.5
Bw -- 11 to 40 in	sand	rapid	1.46 to 2.91 in	5.1 to 6.5
C -- 40 to 80 in	sand	rapid	1.99 to 2.78 in	5.1 to 7.8

C115B--Rushlake coarse sand, lake beach, 1 to 4 percent slopes

Rushlake, lake beach

Extent: 75 to 90 percent of the unit
Landform(s): beaches
Slope gradient: 1 to 4 percent
Parent material: lake beach sediment
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .05
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loamy coarse sand	rapid	0.41 to 0.61 in	5.1 to 6.5
Bw -- 5 to 14 in	coarse sand	very rapid	0.45 to 1.00 in	5.1 to 6.5
BC -- 14 to 39 in	gravelly coarse sand	very rapid	0.99 to 1.74 in	5.1 to 6.5
C -- 39 to 80 in	gravelly coarse sand	very rapid	1.64 to 2.87 in	5.1 to 7.8

C116B--Mora, stony-Brennyville, stony-Cathro complex, pitted, 0 to 6 percent slopes

Mora, stony

Extent: 40 to 70 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 6 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 12 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 12 to 36 in	fine sandy loam	moderately rapid	2.40 to 4.56 in	5.1 to 6.5
BC -- 36 to 46 in	fine sandy loam	slow	0.82 to 1.23 in	5.6 to 7.3
BCd -- 46 to 80 in	fine sandy loam	very slow	1.69 to 2.71 in	5.6 to 7.3

Brennyville, stony

Extent: 15 to 30 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 6 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

C116B--Mora, stony-Brennyville, stony-Cathro complex, pitted, 0 to 6 percent slopes

Cathro, milaca catena

Extent: 5 to 20 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C117A--Cebana, stony-Annriver complex, 0 to 2 percent slopes

Cebana, stony

Extent: 50 to 75 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

Annriver

Extent: 15 to 30 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 2 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.63 to 2.17 in	5.1 to 6.5
Eg -- 9 to 14 in	silt loam	moderate	0.82 to 1.13 in	5.1 to 6.5
Btg1 -- 14 to 21 in	silt loam	moderate	1.07 to 1.47 in	5.1 to 6.5
2Btg2 -- 21 to 31 in	loam	moderate	0.92 to 1.84 in	5.1 to 6.5
3C -- 31 to 80 in	gravelly coarse sand	very rapid	0.49 to 2.93 in	5.1 to 6.5

C118C--Chetek-Emmert complex, 8 to 15 percent slopes

Chetek

Extent: 30 to 50 percent of the unit
Landform(s): eskers, outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

Emmert

Extent: 25 to 40 percent of the unit
Landform(s): eskers, outwash plains, stream terraces
Slope gradient: 8 to 15 percent
Parent material: 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	rapid	0.16 to 0.24 in	5.1 to 6.5
E -- 2 to 12 in	gravelly loamy sand	rapid	0.49 to 1.48 in	5.1 to 6.5
Bt -- 12 to 37 in	gravelly loamy coarse sand	rapid	0.76 to 2.27 in	5.1 to 6.5
C -- 37 to 80 in	very gravelly coarse sand	very rapid	0.43 to 2.57 in	5.1 to 6.5

C119A--Brennyville, stony-Cebana, stony-Cathro complex, pitted, 0 to 3 percent slopes

Brennyville, wet, stony

Extent: 30 to 60 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 1 to 3 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

Cathro, milaca catena

Extent: 10 to 20 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C119A--Brennyville, stony-Cebana, stony-Cathro complex, pitted, 0 to 3 percent slopes

Cebana, stony

Extent: 15 to 30 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained
Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap	0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B	8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt	27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd	49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C120A--Meehan-Roscommon complex, lake beach, 0 to 3 percent slopes

Meehan, lake beach

Extent: 55 to 65 percent of the unit
Landform(s): beaches
Slope gradient: 1 to 3 percent
Parent material: lake beach sediment
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loamy sand	rapid	0.46 to 0.61 in	5.1 to 6.5
E -- 5 to 11 in	loamy sand	rapid	0.30 to 0.65 in	5.1 to 6.5
Bw -- 11 to 47 in	sand	rapid	1.79 to 3.58 in	5.1 to 6.5
Cg -- 47 to 80 in	sand	rapid	1.65 to 2.31 in	5.1 to 7.8

Roscommon, lake beach

Extent: 25 to 40 percent of the unit
Landform(s): beaches
Slope gradient: 0 to 2 percent
Parent material: lake beach sediment
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .17
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loamy sand	rapid	0.46 to 0.61 in	5.1 to 6.5
Cg -- 5 to 80 in	sand	rapid	3.74 to 5.24 in	5.1 to 7.8

C121A--Wurtsmith-Meehan complex, lake beach, 1 to 3 percent slopes

Wurtsmith, lake beach

Extent: 45 to 75 percent of the unit
Landform(s): beaches
Slope gradient: 1 to 3 percent
Parent material: lake beach sediment
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	loamy sand	rapid	0.71 to 0.94 in	5.1 to 6.5
B -- 8 to 29 in	sand	rapid	1.06 to 2.34 in	5.1 to 6.5
BC, C -- 29 to 80 in	sand	rapid	2.54 to 3.56 in	5.1 to 7.8

Meehan, lake beach

Extent: 20 to 50 percent of the unit
Landform(s): beaches
Slope gradient: 1 to 2 percent
Parent material: lake beach sediment
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loamy sand	rapid	0.46 to 0.61 in	5.1 to 6.5
E -- 5 to 11 in	loamy sand	rapid	0.30 to 0.65 in	5.1 to 6.5
Bw -- 11 to 47 in	sand	rapid	1.79 to 3.58 in	5.1 to 6.5
Cg -- 47 to 80 in	sand	rapid	1.65 to 2.31 in	5.1 to 7.8

C122E--Emmert-Chetek complex, 15 to 45 percent slopes

Emmert

Extent: 30 to 50 percent of the unit
Landform(s): eskers, outwash plains, stream terraces
Slope gradient: 15 to 45 percent
Parent material: 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 2 in	fine sandy loam	rapid	0.16 to 0.24 in	5.1 to 6.5
E -- 2 to 12 in	gravelly loamy sand	rapid	0.49 to 1.48 in	5.1 to 6.5
Bt -- 12 to 37 in	gravelly loamy coarse sand	rapid	0.76 to 2.27 in	5.1 to 6.5
C -- 37 to 80 in	very gravelly coarse sand	very rapid	0.43 to 2.57 in	5.1 to 6.5

Chetek

Extent: 30 to 40 percent of the unit
Landform(s): eskers, outwash plains, stream terraces
Slope gradient: 15 to 45 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C123B--Milaca, stony-Mora, stony-Cathro complex, pitted, 0 to 8 percent slopes

Milaca, stony

Extent: 50 to 75 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 3 to 8 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	fine sandy loam	moderately rapid	1.27 to 1.63 in	5.1 to 6.5
E -- 9 to 13 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 13 to 43 in	fine sandy loam	moderately rapid	2.99 to 4.49 in	5.1 to 6.5
BCd -- 43 to 80 in	fine sandy loam	very slow	1.85 to 2.96 in	5.6 to 7.3

Mora, stony

Extent: 15 to 30 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 3 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 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) .15
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 12 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 12 to 36 in	fine sandy loam	moderately rapid	2.40 to 4.56 in	5.1 to 6.5
BC -- 36 to 46 in	fine sandy loam	slow	0.82 to 1.23 in	5.6 to 7.3
BCd -- 46 to 80 in	fine sandy loam	very slow	1.69 to 2.71 in	5.6 to 7.3

C123B--Milaca, stony-Mora, stony-Cathro complex, pitted, 0 to 8 percent slopes

Cathro, milaca catena

Extent: 10 to 20 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Oa --	0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A --	31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC --	37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd --	62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C124A--Cebana, stony-Cathro complex, pitted, 0 to 2 percent slopes

Cebana, stony

Extent: 50 to 90 percent of the unit
Landform(s): moraines, interdrumlins
Slope gradient: 0 to 2 percent
Parent material: loamy mantled dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
Eg, E/B -- 8 to 27 in	silt loam	moderate	3.28 to 4.24 in	5.1 to 6.5
2Bt -- 27 to 49 in	loam	moderate	1.95 to 3.90 in	5.1 to 7.3
2BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

Cathro, milaca catena

Extent: 10 to 35 percent of the unit
Landform(s): moraines, interdrumlins
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material over dense loamy till
Restrictive feature(s): densic material at 40 to 80 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly 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: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 31 in	muck	moderately rapid	10.89 to 14.00 in	
A -- 31 to 37 in	loam	moderate	1.18 to 1.42 in	5.6 to 6.5
BC -- 37 to 62 in	fine sandy loam	slow	2.02 to 3.02 in	5.6 to 7.3
BCd -- 62 to 80 in	fine sandy loam	very slow	0.89 to 1.42 in	5.6 to 7.3

C125A--Hulligan loam, depressional, 0 to 1 percent slopes

Hulligan, depressional

Extent: 70 to 85 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 1 percent
Parent material: loamy glaciofluvial deposits and/or 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): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .37
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	5.1 to 6.5
Bw -- 9 to 17 in	loam	moderate	0.79 to 1.50 in	5.1 to 6.5
Bg -- 17 to 27 in	loam	moderate	0.92 to 1.94 in	5.1 to 6.5
2Cg -- 27 to 60 in	gravelly coarse sand	very rapid	0.33 to 1.96 in	5.6 to 6.5

C126B--Balmlake-Rosy complex, 1 to 6 percent slopes

Balmlake

Extent: 50 to 80 percent of the unit
Landform(s): lake plains
Slope gradient: 1 to 6 percent
Parent material: loamy 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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .37
Land capability, nonirrigated: 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	very fine sandy loam	moderate	1.57 to 2.17 in	5.1 to 6.5
B/E -- 10 to 15 in	loam	moderate	0.41 to 0.97 in	5.1 to 6.5
Bt -- 15 to 41 in	loam	moderate	1.82 to 5.72 in	5.1 to 7.3
2BC,2C -- 41 to 80 in	stratified loamy very fine sand to silty clay loam	rapid	3.12 to 8.57 in	5.1 to 7.3

Rosy

Extent: 15 to 30 percent of the unit
Landform(s): lake plains
Slope gradient: 1 to 4 percent
Parent material: loamy glaciolacustrine deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .43
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	very fine sandy loam	moderate	1.45 to 1.99 in	5.1 to 6.5
E -- 9 to 20 in	loamy very fine sand	moderately rapid	0.99 to 2.09 in	5.1 to 6.5
Bt -- 20 to 54 in	loam	moderate	2.71 to 7.45 in	5.1 to 7.3
2C -- 54 to 80 in	stratified loamy very fine sand to silty clay loam	rapid	2.08 to 5.72 in	5.1 to 7.3

C127A--Whited silt loam, 0 to 2 percent slopes

Whited

Extent: 70 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 2 percent
Parent material: glaciolacustrine mantled outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.6 to 7.3
E -- 8 to 12 in	silt loam	moderate	0.67 to 0.87 in	5.6 to 7.3
E/B -- 12 to 17 in	silt loam	moderate	0.56 to 1.13 in	5.6 to 7.3
Bt -- 17 to 42 in	silty clay	slow	2.02 to 5.04 in	5.6 to 7.8
BCg -- 42 to 55 in	silty clay loam	moderately slow	2.34 to 2.86 in	5.6 to 7.8
2C -- 55 to 80 in	gravelly coarse sand	very rapid	0.25 to 1.49 in	5.6 to 7.3

C130B--Mora, stony-Chetek complex, 2 to 6 percent slopes

Mora, stony

Extent: 40 to 85 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 3 to 6 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 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) .15
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 12 in	fine sandy loam	moderately rapid	0.43 to 0.75 in	5.1 to 6.5
B/E, Bt -- 12 to 36 in	fine sandy loam	moderately rapid	2.40 to 4.56 in	5.1 to 6.5
BC -- 36 to 46 in	fine sandy loam	slow	0.82 to 1.23 in	5.6 to 7.3
BCd -- 46 to 80 in	fine sandy loam	very slow	1.69 to 2.71 in	5.6 to 7.3

Chetek

Extent: 5 to 45 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 2 to 6 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	fine sandy loam	moderately rapid	0.72 to 0.92 in	5.1 to 6.0
E -- 5 to 12 in	fine sandy loam	moderately rapid	0.67 to 1.14 in	5.1 to 6.0
Bt1 -- 12 to 18 in	sandy loam	moderately rapid	0.57 to 1.20 in	5.1 to 6.0
2Bt2 -- 18 to 25 in	gravelly loamy coarse sand	very rapid	0.07 to 0.64 in	5.1 to 6.5
2BC, 2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C133A--Brennyville, stony-Scottlake complex, 0 to 3 percent slopes

Brennyville, wet, stony

Extent: 60 to 80 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 3 percent
Parent material: silt mantled dense loamy till
Restrictive feature(s): densic material at 40 to 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): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.50 to 1.89 in	5.1 to 6.5
B/E -- 8 to 11 in	silt loam	moderate	0.63 to 0.69 in	5.1 to 6.5
Bt1 -- 11 to 21 in	silt loam	moderate	1.67 to 2.17 in	5.1 to 6.5
2Bt2, 2Bt3 -- 21 to 38 in	fine sandy loam	moderately rapid	1.56 to 3.12 in	5.1 to 7.3
2BC -- 38 to 45 in	fine sandy loam	slow	0.54 to 0.80 in	5.6 to 7.3
2BCd -- 45 to 80 in	fine sandy loam	very slow	1.75 to 2.80 in	5.6 to 7.3

Scott Lake

Extent: 15 to 30 percent of the unit
Landform(s): end moraines, moraines
Slope gradient: 0 to 3 percent
Parent material: drift
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loam	moderate	1.18 to 1.50 in	5.1 to 6.5
E -- 8 to 11 in	fine sandy loam	moderately rapid	0.31 to 0.60 in	5.1 to 6.5
B/E -- 11 to 17 in	fine sandy loam	moderately rapid	0.53 to 1.12 in	5.1 to 6.5
Bt -- 17 to 25 in	loam	moderate	0.74 to 1.57 in	5.1 to 6.5
2C -- 25 to 80 in	gravelly coarse sand	very rapid	0.55 to 3.28 in	5.1 to 6.5

C133A--Brennyville, stony-Scottlake complex, 0 to 3 percent slopes

C134A--Rosy very fine sandy loam, 0 to 4 percent slopes

Rosy

Extent: 60 to 80 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 4 percent
Parent material: loamy glaciolacustrine
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .43
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Ap --	0 to 9 in	very fine sandy loam	moderate	1.45 to 1.99 in	5.1 to 6.5
E --	9 to 20 in	loamy very fine sand	moderately rapid	0.99 to 2.09 in	5.1 to 6.5
Bt --	20 to 54 in	loam	moderate	2.71 to 7.45 in	5.1 to 7.3
2C --	54 to 80 in	stratified loamy very fine sand to silty clay loam	moderately rapid	2.08 to 5.72 in	5.1 to 7.3

C135A--Lewis Lake silt loam, 1 to 3 percent slopes

Lewis lake

Extent: 80 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 1 to 3 percent
Parent material: glaciolacustrine mantled outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 3s
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.6 to 7.3
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.61 in	5.6 to 7.3
Bt -- 12 to 37 in	silty clay	slow	2.02 to 5.04 in	5.6 to 7.8
2BC, 2C -- 37 to 80 in	gravelly coarse sand	very rapid	0.43 to 2.57 in	5.6 to 7.3

C135B--Lewis Lake silt loam, 3 to 6 percent slopes

Lewis lake

Extent: 85 to 95 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 3 to 6 percent
Parent material: glaciolacustrine mantled outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 2e
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.6 to 7.3
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.61 in	5.6 to 7.3
Bt -- 12 to 37 in	silty clay	slow	2.02 to 5.04 in	5.6 to 7.8
2BC, 2C -- 37 to 80 in	gravelly coarse sand	very rapid	0.43 to 2.57 in	5.6 to 7.3

C135C2--Lewis Lake silt loam, 6 to 12 percent slopes, moderately eroded

Lewis lake, moderately eroded

Extent: 90 to 99 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 6 to 12 percent
Parent material: glaciolacustrine mantled outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 3e
Hydric soil: no
Hydrologic group: D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	silt loam	moderate	1.81 to 2.17 in	5.6 to 7.3
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.61 in	5.6 to 7.3
Bt -- 12 to 37 in	silty clay	slow	2.02 to 5.04 in	5.6 to 7.8
2BC, 2C -- 37 to 80 in	gravelly coarse sand	very rapid	0.43 to 2.57 in	5.6 to 7.3

C139A--Minocqua silt loam, depressional, thick solum, 0 to 1 percent slopes

Minocqua, depressional

Extent: 70 to 95 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 0 to 1 percent
Parent material: 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) .32
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	silt loam	moderate	1.65 to 1.89 in	5.1 to 6.5
Bg1 -- 8 to 23 in	silt loam	moderate	2.39 to 3.29 in	5.1 to 6.5
2Bg2 -- 23 to 50 in	sandy loam	moderate	2.44 to 4.89 in	5.1 to 6.5
3C -- 50 to 80 in	gravelly coarse sand	very rapid	0.30 to 1.80 in	5.1 to 6.5

C140A--Hillview fine sandy loam, 0 to 2 percent slopes

Hillview

Extent: 65 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 0 to 2 percent
Parent material: loamy glaciolacustrine
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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .37
Land capability, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	very fine sandy loam	moderate	1.42 to 1.73 in	5.1 to 6.5
Btg -- 8 to 42 in	loam	moderate	2.74 to 7.54 in	5.1 to 7.3
Cg -- 42 to 60 in	stratified loamy very fine sand to silty clay loam	moderately rapid	1.42 to 3.90 in	5.1 to 7.3

C143B--Alban fine sandy loam, 1 to 8 percent slopes

Alban

Extent: 75 to 90 percent of the unit
Landform(s): lake plains
Slope gradient: 1 to 8 percent
Parent material: loamy glaciolacustrine
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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2e
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.10 to 1.42 in	5.1 to 6.5
E -- 8 to 20 in	loamy fine sand	rapid	0.98 to 2.07 in	4.5 to 6.5
E/B, B/E -- 20 to 44 in	loamy fine sand	moderately rapid	1.92 to 5.28 in	4.5 to 6.5
C -- 44 to 60 in	stratified silt loam to fine sand	rapid	0.79 to 3.46 in	4.5 to 6.5

C144A--Coin silt loam, 0 to 2 percent slopes

Coin

Extent: 70 to 85 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 2 percent
Parent material: glaciolacustrine mantled outwash
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): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	silt loam	moderate	1.57 to 1.89 in	5.6 to 7.3
E -- 8 to 13 in	silt loam	moderate	0.87 to 1.13 in	5.6 to 7.3
B/E -- 13 to 19 in	silty clay loam	moderately slow	0.65 to 1.30 in	5.6 to 7.3
Bt -- 19 to 38 in	silty clay	slow	1.54 to 3.86 in	5.6 to 7.8
2BC, 2C -- 38 to 80 in	gravelly coarse sand	very rapid	0.42 to 2.50 in	5.6 to 7.3

C146A--Haybrook fine sandy loam, 0 to 2 percent slopes, stony

Haybrook, stony

Extent: 65 to 90 percent of the unit
Landform(s): drumlins, moraines
Slope gradient: 0 to 2 percent
Parent material: dense loamy till
Restrictive feature(s): densic material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: 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: 4w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	fine sandy loam	moderately rapid	0.99 to 1.28 in	5.1 to 6.5
Eg -- 7 to 10 in	fine sandy loam	moderately rapid	0.30 to 0.61 in	5.1 to 6.5
Btg, Bt -- 10 to 37 in	loam	moderate	2.44 to 5.16 in	5.1 to 6.5
BC -- 37 to 49 in	fine sandy loam	slow	0.94 to 1.42 in	5.6 to 7.3
BCd -- 49 to 80 in	fine sandy loam	very slow	1.56 to 2.49 in	5.6 to 7.3

C147A--Blackhoof-Cathro-Baden complex, depressional, 0 to 1 percent slopes

Blackhoof, depressional

Extent: 60 to 80 percent of the unit
Landform(s): depressions on till plains, depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: thin highly decomposed 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): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
Oa --	0 to 12 in	muck	moderately rapid	4.13 to 5.31 in	
A --	12 to 15 in	silt loam	moderate	0.63 to 0.76 in	4.5 to 6.0
Bg --	15 to 17 in	silt loam	moderate	0.30 to 0.43 in	4.5 to 6.0
2Bw --	17 to 42 in	loam	moderate	3.28 to 4.79 in	5.1 to 6.5
2C --	42 to 80 in	loam	slow	4.54 to 7.18 in	6.1 to 7.8

C147A--Blackhoof-Cathro-Baden complex, depressional, 0 to 1 percent slopes

Baden, depressional

Extent: 10 to 20 percent of the unit
Landform(s): depressions on till plains, drainageways on till plains, depressions on moraines, drainageways on moraines
Slope gradient: 0 to 1 percent
Parent material: silty 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): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .02
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 2 in	muck	moderately rapid	0.69 to 0.89 in	
A -- 2 to 6 in	mucky silt loam	moderate	0.75 to 0.94 in	4.5 to 6.0
Eg,Bg -- 6 to 20 in	silt loam	moderate	2.13 to 3.12 in	4.5 to 6.0
2Bw -- 20 to 45 in	loam	slow	3.22 to 4.71 in	5.6 to 7.3
2C -- 45 to 80 in	loam	slow	4.56 to 6.66 in	6.1 to 7.8

Cathro, depressional

Extent: 10 to 20 percent of the unit
Landform(s): depressions on till plains, 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): 1
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .02
Land capability, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 40 in	mucky silt loam	moderately slow	0.95 to 1.04 in	5.1 to 6.5
2Cg -- 40 to 50 in	stratified sandy loam to silty clay loam	slow	1.08 to 2.26 in	5.6 to 7.3
2C -- 50 to 80 in	loam	slow	3.89 to 5.69 in	6.1 to 7.8

C147A--Blackhoof-Cathro-Baden complex, depressional, 0 to 1 percent slopes

D2A--Elkriver fine sandy loam, 0 to 2 percent slopes, rarely flooded

Elkriver, rarely flooded

Extent: 80 to 100 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: rare
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2s
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	fine sandy loam	moderately rapid	1.38 to 1.77 in	5.1 to 7.3
A1,A3 -- 10 to 35 in	fine sandy loam	moderately rapid	3.53 to 4.79 in	5.1 to 7.3
Bw -- 35 to 39 in	fine sandy loam	moderately rapid	0.51 to 0.75 in	5.6 to 7.8
2C -- 39 to 80 in	sand	very rapid	1.64 to 2.87 in	5.6 to 7.8

D3A--Elkriver fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Elkriver, occasionally flooded

Extent: 75 to 95 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: occasional
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 2w
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	fine sandy loam	moderately rapid	1.38 to 1.77 in	5.1 to 7.3
A1,A3 -- 10 to 26 in	fine sandy loam	moderately rapid	2.26 to 3.07 in	5.1 to 7.3
Bw -- 26 to 32 in	very fine sandy loam	moderate	0.77 to 1.12 in	5.6 to 7.8
2C -- 32 to 80 in	sand	very rapid	1.92 to 3.36 in	5.6 to 7.8

D9B--Stonelake-Sanburn complex, 1 to 6 percent slopes

Stonelake

Extent: 55 to 80 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 1 to 6 percent
Parent material: 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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .05
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 4 in	gravelly loamy sand	rapid	0.20 to 0.35 in	5.1 to 6.5
Bw -- 4 to 11 in	gravelly coarse sand	very rapid	0.07 to 0.64 in	5.1 to 6.5
Bt -- 11 to 24 in	very gravelly coarse sand	very rapid	0.13 to 0.91 in	5.1 to 6.5
BC, C -- 24 to 80 in	gravelly sand	rapid	0.56 to 3.35 in	5.1 to 7.3

Sanburn

Extent: 20 to 45 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 1 to 6 percent
Parent material: 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) .20
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 5 in	sandy loam	moderately rapid	0.46 to 0.77 in	5.1 to 6.5
Bt -- 5 to 20 in	gravelly sandy loam	moderately rapid	1.05 to 2.24 in	5.1 to 6.5
2BC,2C -- 20 to 80 in	gravelly coarse sand	very rapid	1.20 to 3.59 in	5.1 to 6.5

D30A--Seelyeville and Markey soils, depressional, 0 to 1 percent slopes

Markey, depressional

Extent: 0 to 100 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 1 percent
Parent material: muck herbaceous organic material over sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
A -- 36 to 42 in	loamy sand	rapid	0.38 to 0.94 in	5.6 to 7.3
Cg -- 42 to 80 in	sand	rapid	1.13 to 3.02 in	5.6 to 7.3

Seelyeville, depressional

Extent: 0 to 100 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed organic material
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: occasional
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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2,Oa3 -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

D38A--Cantlin loamy fine sand, 0 to 3 percent slopes

Cantlin

Extent: 80 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 3 percent
Parent material: glaciofluvial
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .20
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy fine sand	rapid	0.71 to 0.87 in	5.1 to 6.5
Bw -- 8 to 22 in	loamy fine sand	rapid	0.71 to 1.42 in	5.1 to 7.3
BC, C -- 22 to 80 in	fine sand	rapid	2.89 to 4.05 in	5.1 to 7.3

D44A--Isanti loamy fine sand, 0 to 2 percent slopes

Isanti

Extent: 80 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 2 percent
Parent material: glaciofluvial
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .28
Land capability, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 12 in	loamy fine sand	rapid	0.94 to 1.30 in	5.1 to 6.5
Bg -- 12 to 36 in	loamy sand	rapid	1.44 to 3.60 in	5.6 to 7.3
Cg -- 36 to 80 in	sand	rapid	1.32 to 3.53 in	5.6 to 7.3

D45A--Soderville loamy fine sand, 0 to 3 percent slopes

Soderville

Extent: 65 to 85 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 3 percent
Parent material: glaciofluvial
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .32
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy fine sand	rapid	0.71 to 0.87 in	5.1 to 6.5
E -- 8 to 30 in	fine sand	rapid	1.32 to 2.43 in	5.1 to 6.5
Bt -- 30 to 45 in	loamy fine sand	rapid	0.75 to 1.50 in	5.1 to 7.3
E&Bt -- 45 to 80 in	fine sand	rapid	1.75 to 3.50 in	5.1 to 7.3

D46A--Lino loamy fine sand, 0 to 2 percent slopes

Lino

Extent: 80 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 2 percent
Parent material: glaciofluvial
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): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .32
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A/D
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	loamy fine sand	rapid	0.64 to 0.78 in	5.1 to 6.5
Bw -- 7 to 45 in	fine sand	rapid	2.27 to 4.16 in	5.1 to 7.3
C -- 45 to 60 in	fine sand	rapid	0.75 to 1.05 in	5.1 to 7.3

D50A--Isanti fine sandy loam, depressional, 0 to 1 percent slopes

Isanti, depressional

Extent: 80 to 90 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 1 percent
Parent material: glaciofluvial
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): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .28
Land capability, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential for frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 16 in	fine sandy loam	moderately rapid	1.94 to 2.42 in	5.1 to 6.5
Bg -- 16 to 28 in	loamy fine sand	rapid	0.71 to 1.30 in	5.1 to 7.3
Cg -- 28 to 80 in	fine sand	rapid	2.60 to 3.64 in	5.6 to 7.3

D60A--Zimmerman fine sand, 0 to 3 percent slopes

Zimmerman

Extent: 85 to 95 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 0 to 3 percent
Parent material: glaciofluvial
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): 1
Wind erodibility index (WEI): 250
Kw factor (surface layer) .10
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	fine sand	rapid	0.43 to 0.57 in	5.1 to 6.5
Bw -- 7 to 27 in	fine sand	rapid	1.20 to 2.21 in	5.1 to 7.3
E&Bt -- 27 to 80 in	fine sand	rapid	2.64 to 5.28 in	5.1 to 7.3

D60B--Zimmerman fine sand, 3 to 6 percent slopes

Zimmerman

Extent: 85 to 95 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 3 to 6 percent
Parent material: glaciofluvial
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): 1
Wind erodibility index (WEI): 250
Kw factor (surface layer) .10
Land capability, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	fine sand	rapid	0.43 to 0.57 in	5.1 to 6.5
Bw -- 7 to 27 in	fine sand	rapid	1.20 to 2.21 in	5.1 to 7.3
E&Bt -- 27 to 80 in	fine sand	rapid	2.64 to 5.28 in	5.1 to 7.3

D60C--Zimmerman fine sand, 6 to 12 percent slopes

Zimmerman

Extent: 80 to 95 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 6 to 12 percent
Parent material: glaciofluvial
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): 1
Wind erodibility index (WEI): 250
Kw factor (surface layer) .10
Land capability, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 7 in	fine sand	rapid	0.43 to 0.57 in	5.1 to 6.5
Bw -- 7 to 27 in	fine sand	rapid	1.20 to 2.21 in	5.1 to 7.3
E&Bt -- 27 to 80 in	fine sand	rapid	2.64 to 5.28 in	5.1 to 7.3

D60E--Zimmerman fine sand, 12 to 30 percent slopes

Zimmerman

Extent: 90 to 100 percent of the unit
Landform(s): lake plains, outwash plains
Slope gradient: 12 to 30 percent
Parent material: glaciofluvial
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): 1
Wind erodibility index (WEI): 250
Kw factor (surface layer) .10
Land capability, nonirrigated: 6e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	fine sand	rapid	0.22 to 0.28 in	5.1 to 6.5
Bw -- 3 to 25 in	fine sand	rapid	1.32 to 2.43 in	5.1 to 7.3
E&Bt -- 25 to 80 in	fine sand	rapid	2.74 to 5.47 in	5.1 to 7.3

GP--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 70 to 90 percent of the unit
Landform(s): moraines, stream terraces, outwash plains
Slope gradient: 0 to 45 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

Udipsamments

Extent: 10 to 30 percent of the unit
Landform(s): moraines, stream terraces, outwash plains
Slope gradient: 0 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

M-W--Water, miscellaneous

Water, miscellaneous

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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

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:

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*

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.