

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

[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)

Udorthents, loamy, (cut and fill land)

Extent: 100 percent of the unit

Landform(s): fills on moraines, beveled cuts on moraines

Slope gradient: 0 to 6 percent

Parent material: variable soil material

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

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: no

Hydrologic group:

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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1007--Udorthents, shallow (sanitary landfill)

Udorthents, shallow (sanitary landfill)

Extent: 100 percent of the unit

Landform(s): sanitary landfills on moraines

Slope gradient:

Parent material: variable soil material

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

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: no

Hydrologic group:

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1012A--Lobo-Waskish complex, 0 to 2 percent slopes

Lobo

Extent: 50 to 80 percent of the unit

Landform(s): raised bogs on end moraines, raised bogs on outwash plains, raised bogs on till plains

Slope gradient: 0 to 2 percent

Parent material: 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 38 in	peat	very rapid	21.00 to 24.82 in	
Oe -- 38 to 80 in	mucky peat	rapid	18.78 to 22.95 in	

Waskish

Extent: 20 to 50 percent of the unit

Landform(s): raised bogs on end moraines, raised bogs on outwash plains, raised bogs on till plains

Slope gradient: 0 to 2 percent

Parent material: 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 14 in	peat	very rapid	7.80 to 9.21 in	
Oa -- 14 to 16 in	muck	moderately rapid	0.69 to 0.89 in	
Oi -- 16 to 80 in	mucky peat	very rapid	35.08 to 41.46 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1014A--Uskabwanka peat, 0 to 1 percent slopes

Uskabwanka

Extent: 50 to 80 percent of the unit

Landform(s): closed depressions on lake plains, closed depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 40 in	mucky peat	rapid	13.64 to 16.67 in	
2Oe2 -- 40 to 70 in	water	impermeable		
Oe3 -- 70 to 80 in	mucky peat	rapid	4.43 to 5.41 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1020A--Bowstring and Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded

Bowstring, frequently flooded

Extent: 0 to 90 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: organic materials mixed with 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)

Land capability, nonirrigated 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 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
O'a -- 47 to 80 in	muck	moderately rapid	11.57 to 14.88 in	

Fluvaquents, frequently flooded

Extent: 0 to 90 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 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 loamy coarse sand	moderately rapid	4.44 to 16.28 in	5.6 to 7.3

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1021A--Rifle soils, 0 to 1 percent slopes

Rifle

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> swamps on end moraines, swamps on outwash plains, swamps on till plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated Tw:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Rifle, depressional

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> swamps on end moraines, swamps on outwash plains, swamps on till plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated Tw:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1035--Urban land

Urban land

<p><i>Extent:</i> 90 to 100 percent of the unit</p> <p><i>Landform(s):</i> urban land on moraines</p> <p><i>Slope gradient:</i> 0 to 8 percent</p> <p><i>Parent material:</i> fill material from surrounding uplands, gravel pits and blasted bedrock.</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i></p> <p><i>Hydric soil:</i> unranked</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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1048--Dumps, iron mine

Dumps, iron mine

<p><i>Extent:</i> 100 percent of the unit</p> <p><i>Landform(s):</i> spoil piles on moraines</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i> variable soil material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i></p> <p><i>Hydric soil:</i> unranked</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

1049--Pits, iron mine

Pits, iron mine

Extent: 100 percent of the unit

Landform(s): openpit mines on moraines

Slope gradient:

Parent material: variable soil 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: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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1050--Tailings basin

Tailings basin

Extent: 100 percent of the unit

Landform(s): spoil piles on moraines

Slope gradient:

Parent material: metal ore extraction mine spoil

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: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

A1B--Graycalm-Grayling complex, 1 to 8 percent slopes

Graycalm

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

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .10
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	4.5 to 6.0
Bw -- 2 to 37 in	loamy sand	rapid	2.10 to 3.85 in	4.5 to 6.0
E and Bt -- 37 to 48 in	sand	rapid	0.55 to 0.99 in	5.1 to 6.0
C -- 48 to 80 in	coarse sand	very rapid	0.64 to 2.23 in	5.1 to 6.5

Grayling

Extent: 30 to 50 percent of the unit
Landform(s): outwash plains
Slope gradient: 1 to 8 percent
Parent material: sandy 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) .10
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.25 to 0.38 in	4.5 to 6.0
Bw -- 3 to 22 in	coarse sand	very rapid	0.57 to 1.70 in	4.5 to 6.0
C -- 22 to 80 in	coarse sand	very rapid	1.16 to 4.05 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

A3B--Wurtsmith-Friendship complex, 1 to 4 percent slopes

Wurtsmith

Extent: 30 to 60 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 4 percent

Parent material: sandy 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) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw -- 3 to 18 in	sand	rapid	0.45 to 1.65 in	4.5 to 6.0
BC -- 18 to 33 in	sand	rapid	0.30 to 1.05 in	4.5 to 6.0
C -- 33 to 80 in	sand	rapid	0.94 to 3.28 in	5.1 to 6.5

Friendship

Extent: 30 to 55 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 4 percent

Parent material: sandy 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) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 24 in	sand	rapid	0.63 to 2.30 in	4.5 to 6.0
Bw2 -- 24 to 40 in	sand	rapid	0.32 to 1.13 in	4.5 to 6.0
C -- 40 to 80 in	sand	rapid	0.80 to 2.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

A4A--Meehan loamy sand, 0 to 2 percent slopes

Meehan

Extent: 70 to 90 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 12 in	loamy sand	rapid	0.52 to 0.95 in	4.5 to 6.0
Bw2 -- 12 to 47 in	sand	rapid	0.70 to 3.15 in	4.5 to 6.0
C -- 47 to 80 in	coarse sand	very rapid	0.66 to 2.31 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

A21B--Graycalm-Keenan complex, 1 to 8 percent slopes

Graycalm

Extent: 30 to 60 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 8 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	4.5 to 6.0
Bw -- 2 to 37 in	loamy sand	rapid	2.10 to 3.85 in	4.5 to 6.0
E and Bt -- 37 to 48 in	sand	rapid	0.55 to 0.99 in	5.1 to 6.0
C -- 48 to 80 in	coarse sand	very rapid	0.64 to 2.23 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

A21B--Graycalm-Keenan complex, 1 to 8 percent slopes

Keenan

Extent: 15 to 40 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 6 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

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) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.71 in	4.5 to 6.0
Bw1 --	4 to 12 in	loamy fine sand	rapid	0.31 to 0.87 in	4.5 to 6.5
Bw2 --	12 to 32 in	fine sand	rapid	0.60 to 2.01 in	5.1 to 6.5
2Bw3 --	32 to 54 in	stratified loamy fine sand to loamy very fine sand to fine sandy loam to very fine sandy loam to silt loam	moderately rapid	3.75 to 4.85 in	5.1 to 6.5
2C --	54 to 80 in	stratified loamy fine sand to loamy very fine sand to fine sandy loam to very fine sandy loam to silt loam	moderately rapid	4.42 to 5.72 in	5.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B1C--Taylor silty clay loam, 4 to 12 percent slopes

Taylor

Extent: 75 to 90 percent of the unit

Landform(s): lake plains

Slope gradient: 4 to 12 percent

Parent material: clayey 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B1D--Taylor silty clay loam, 12 to 25 percent slopes

Taylor

Extent: 75 to 90 percent of the unit

Landform(s): lake plains

Slope gradient: 12 to 25 percent

Parent material: clayey 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B2A--Indus-Woodslake, depressional, complex, 0 to 1 percent slopes

Indus

Extent: 55 to 75 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Eg -- 4 to 7 in	clay	slow	0.31 to 0.60 in	5.1 to 7.3
Btg -- 7 to 34 in	clay	very slow	2.14 to 2.68 in	5.6 to 7.3
Bkg -- 34 to 50 in	clay	very slow	1.29 to 1.94 in	7.4 to 8.4
Cg -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Woodslake, depressional

Extent: 20 to 40 percent of the unit

Landform(s): depressions on lake plains, swales on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silty clay loam	moderately slow	1.49 to 1.63 in	5.6 to 6.5
Bg -- 7 to 18 in	clay	very slow	0.88 to 1.21 in	5.6 to 7.3
Cg1 -- 18 to 36 in	clay	very slow	1.42 to 1.77 in	6.6 to 7.8
Cg2 -- 36 to 80 in	clay	very slow	3.53 to 5.29 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B3B--Alango-Indus complex, 1 to 4 percent slopes

Alango

Extent: 50 to 75 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 4 percent

Parent material: clayey glaciolacustrine deposits

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) .28

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	silty clay loam	moderately slow	0.41 to 0.45 in	5.1 to 6.5
Eg -- 2 to 10 in	silty clay loam	moderately slow	1.02 to 1.57 in	5.1 to 7.3
Btg -- 10 to 28 in	clay	very slow	1.45 to 1.81 in	5.6 to 7.3
Bkg -- 28 to 60 in	clay	very slow	2.55 to 3.83 in	7.4 to 8.4
Cg -- 60 to 80 in	clay	very slow	1.61 to 2.41 in	7.4 to 8.4

Indus

Extent: 15 to 35 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 1 to 2 percent

Parent material: clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Eg -- 4 to 7 in	clay	slow	0.31 to 0.60 in	5.1 to 7.3
Btg -- 7 to 34 in	clay	very slow	2.14 to 2.68 in	5.6 to 7.3
Bkg -- 34 to 50 in	clay	very slow	1.29 to 1.94 in	7.4 to 8.4
Cg -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B4A--Indus-Dora, depressional, complex, 0 to 2 percent slopes

Indus

Extent: 55 to 80 percent of the unit

Landform(s): rises on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Eg -- 4 to 7 in	clay	slow	0.31 to 0.60 in	5.1 to 7.3
Btg -- 7 to 34 in	clay	very slow	2.14 to 2.68 in	5.6 to 7.3
Bkg -- 34 to 50 in	clay	very slow	1.29 to 1.94 in	7.4 to 8.4
Cg -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Dora, depressional

Extent: 20 to 40 percent of the unit

Landform(s): drainageways on lake plains, depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over clayey glaciolacustrine deposits

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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe -- 0 to 6 in	mucky peat	rapid	2.66 to 3.25 in	
Oa -- 6 to 22 in	muck	moderately rapid	6.46 to 7.26 in	
A -- 22 to 26 in	mucky silty clay loam	slow	0.59 to 1.18 in	6.1 to 7.3
Cg1 -- 26 to 36 in	clay	very slow	0.79 to 0.98 in	6.6 to 7.8
Cg2 -- 36 to 80 in	clay	very slow	3.53 to 5.29 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B4A--Indus-Dora, depressional, complex, 0 to 2 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B5B--Alango-Taylor-Woodslake, depressional, complex, 0 to 6 percent slopes

Alango

Extent: 40 to 60 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 4 percent

Parent material: clayey glaciolacustrine deposits

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) .28

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	silty clay loam	moderately slow	0.41 to 0.45 in	5.1 to 6.5
Eg -- 2 to 10 in	silty clay loam	moderately slow	1.02 to 1.57 in	5.1 to 7.3
Btg -- 10 to 28 in	clay	very slow	1.45 to 1.81 in	5.6 to 7.3
Bkg -- 28 to 60 in	clay	very slow	2.55 to 3.83 in	7.4 to 8.4
Cg -- 60 to 80 in	clay	very slow	1.61 to 2.41 in	7.4 to 8.4

Woodslake, depressional

Extent: 10 to 25 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silty clay loam	moderately slow	1.49 to 1.63 in	5.6 to 6.5
Bg -- 7 to 18 in	clay	very slow	0.88 to 1.21 in	5.6 to 7.3
Cg1 -- 18 to 36 in	clay	very slow	1.42 to 1.77 in	6.6 to 7.8
Cg2 -- 36 to 80 in	clay	very slow	3.53 to 5.29 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B5B--Alango-Taylor-Woodslake, depressional, complex, 0 to 6 percent slopes

Taylor

<p><i>Extent:</i> 15 to 25 percent of the unit</p> <p><i>Landform(s):</i> lake plains</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> clayey glaciolacustrine deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .32</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B6B--Morcom-Thistledew complex, 0 to 6 percent slopes

Morcom

Extent: 40 to 60 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 4 percent

Parent material: sandy outwash over clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	fine sandy loam	moderately rapid	0.50 to 0.57 in	5.1 to 6.5
E -- 3 to 8 in	sandy loam	moderately rapid	0.47 to 0.76 in	5.1 to 6.5
Bw -- 8 to 19 in	loamy sand	rapid	0.88 to 1.21 in	5.1 to 6.5
2B/E -- 19 to 24 in	sandy clay loam	moderate	0.72 to 0.97 in	5.6 to 7.3
3Bt -- 24 to 28 in	clay	very slow	0.31 to 0.47 in	5.6 to 7.3
3Bk -- 28 to 44 in	clay	very slow	1.29 to 1.94 in	7.4 to 8.4
3C -- 44 to 80 in	clay	very slow	2.87 to 4.30 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B6B--Morcom-Thistledew complex, 0 to 6 percent slopes

Thistledew

Extent: 20 to 40 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 6 percent

Parent material: sandy outwash over clayey glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 6.5
Bw -- 3 to 29 in	loamy sand	rapid	1.56 to 2.86 in	5.1 to 6.5
2Bt1 -- 29 to 43 in	sandy clay loam	moderate	1.93 to 2.62 in	5.6 to 7.3
3Bt2 -- 43 to 50 in	clay	very slow	0.57 to 0.85 in	5.6 to 7.3
3C -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B7D--Udorthents, slumped-Thistledew-Taylor complex, 10 to 25 percent slopes

Udorthents, slumped

Extent: 40 to 60 percent of the unit

Landform(s): lake plains

Slope gradient: 10 to 25 percent

Parent material: glaciolacustrine sediments and outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loam	moderate	1.02 to 1.13 in	5.1 to 6.5
C1 -- 5 to 18 in	fine sandy loam	moderate	1.95 to 2.47 in	5.1 to 7.3
C2 -- 18 to 28 in	loamy fine sand	rapid	0.49 to 0.98 in	5.6 to 7.3
2C3 -- 28 to 50 in	stratified fine sandy loam to clay loam	moderately slow	3.09 to 4.19 in	5.6 to 7.8
3C4 -- 50 to 80 in	silty clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Thistledew

Extent: 20 to 40 percent of the unit

Landform(s): lake plains

Slope gradient: 10 to 25 percent

Parent material: sandy outwash and/or beach deposits over glaciolacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 6.5
Bw -- 3 to 29 in	loamy sand	rapid	1.56 to 2.86 in	5.1 to 6.5
2Bt1 -- 29 to 43 in	sandy clay loam	moderate	1.93 to 2.62 in	5.6 to 7.3
3Bt2 -- 43 to 50 in	clay	very slow	0.57 to 0.85 in	5.6 to 7.3
3C -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B7D--Udorthents, slumped-Thistledew-Taylor complex, 10 to 25 percent slopes

Taylor

Extent: 10 to 20 percent of the unit

Landform(s): lake plains

Slope gradient: 10 to 25 percent

Parent material: clayey glaciolacustrine sediments

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) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B8A--Bearville loamy sand, 0 to 2 percent slopes

Bearville

Extent: 65 to 85 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: sandy outwash and/or beach deposits over glaciolacustrine sediments

Restrictive feature(s): abrupt textural change at 10 to 20 i

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

Representative soil profile:

		Texture	Permeability	Available water capacity	pH
A --	0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	5.1 to 6.5
Eg --	2 to 16 in	loamy sand	rapid	1.13 to 1.56 in	5.1 to 6.5
2Btg1 --	16 to 25 in	sandy clay loam	moderate	1.27 to 1.72 in	5.6 to 7.3
3Btg2 --	25 to 35 in	clay	very slow	0.79 to 1.18 in	5.6 to 7.3
3BCg --	35 to 80 in	clay	very slow	3.59 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B9A--Greaney and Dora soils, 0 to 1 percent slopes, frequently flooded

Dora, frequently flooded

Extent: 0 to 95 percent of the unit

Landform(s): oxbows on flood plains, flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over clayey 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe -- 0 to 6 in	mucky peat	rapid	2.66 to 3.25 in	
Oa -- 6 to 24 in	muck	moderately rapid	7.24 to 8.15 in	
A -- 24 to 36 in	mucky silty clay loam	slow	1.77 to 3.54 in	6.1 to 7.3
Cg -- 36 to 80 in	stratified clay loam to silty clay loam to silty clay to clay	slow	4.41 to 5.73 in	6.6 to 8.4

Greaney, frequently flooded

Extent: 0 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: clayey 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Bg -- 4 to 30 in	silty clay	slow	2.86 to 5.20 in	5.6 to 7.3
Cg -- 30 to 80 in	stratified clay loam to silty clay loam to silty clay to clay	slow	5.00 to 6.50 in	6.6 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B10B--Rollins sandy loam, 2 to 8 percent slopes

Rollins

Extent: 75 to 90 percent of the unit

Landform(s): kames

Slope gradient: 2 to 8 percent

Parent material: loamy material over 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) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B10D--Rollins sandy loam, 8 to 18 percent slopes

Rollins

Extent: 80 to 90 percent of the unit

Landform(s): kames

Slope gradient: 8 to 18 percent

Parent material: loamy material over 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) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B11B--Taylor-Taylor, sandy substratum, complex, 2 to 6 percent slopes

Taylor

Extent: 40 to 60 percent of the unit

Landform(s): kames

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine sediments

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) .32

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B11B--Taylor-Taylor, sandy substratum, complex, 2 to 6 percent slopes

Taylor, sandy substratum

Extent: 30 to 50 percent of the unit

Landform(s): kames

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine sediments over sandy 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 63 in	clay	very slow	2.65 to 3.97 in	7.4 to 8.4
2C -- 63 to 80 in	gravelly coarse sand	very rapid	0.34 to 1.02 in	6.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B11C--Taylor-Taylor, sandy substratum, complex, 6 to 12 percent slopes

Taylor

Extent: 40 to 60 percent of the unit

Landform(s): kames

Slope gradient: 6 to 12 percent

Parent material: clayey glaciolacustrine sediments

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) .32

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	6.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B11C--Taylor-Taylor, sandy substratum, complex, 6 to 12 percent slopes

Taylor, sandy substratum

Extent: 30 to 50 percent of the unit

Landform(s): kames

Slope gradient: 6 to 12 percent

Parent material: clayey glaciolacustrine sediments over sandy 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 63 in	clay	very slow	2.65 to 3.97 in	7.4 to 8.4
2C -- 63 to 80 in	gravelly coarse sand	very rapid	0.34 to 1.02 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B12D--Taylor-Greaney, frequently flooded, complex, 0 to 25 percent slopes

Taylor

Extent: 40 to 60 percent of the unit

Landform(s): flood plains

Slope gradient: 8 to 25 percent

Parent material: clayey 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
E -- 4 to 10 in	silty clay loam	moderately slow	0.77 to 1.18 in	5.1 to 7.3
B/E -- 10 to 14 in	silty clay	slow	0.56 to 0.87 in	5.6 to 7.3
Bt -- 14 to 30 in	clay	very slow	1.26 to 1.57 in	5.6 to 7.3
BC -- 30 to 38 in	clay	very slow	0.66 to 0.99 in	7.4 to 8.4
C -- 38 to 80 in	clay	very slow	3.34 to 5.01 in	7.4 to 8.4

Greaney, frequently flooded

Extent: 30 to 50 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: clayey 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Bg -- 4 to 30 in	silty clay	slow	2.86 to 5.20 in	5.6 to 7.3
Cg -- 30 to 80 in	stratified clay loam to silty clay loam to silty clay to clay	slow	5.00 to 6.50 in	6.6 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B15A--Morph fine sandy loam, 0 to 2 percent slopes

Morph

Extent: 75 to 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine sediments

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) .20

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.71 in	5.1 to 6.5
Eg -- 4 to 9 in	fine sandy loam	moderate	0.77 to 0.97 in	5.1 to 6.5
E/B -- 9 to 22 in	very fine sandy loam	moderate	1.95 to 2.47 in	5.1 to 6.5
Btg -- 22 to 31 in	loam	moderate	1.27 to 1.99 in	5.1 to 6.5
Cg -- 31 to 80 in	stratified loamy fine sand to fine sandy loam to very fine sandy loam to loam to silt loam	moderate	6.35 to 9.76 in	6.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B18A--Foglake-Hassman, depressional, complex, 0 to 2 percent slopes

Foglake

Extent: 40 to 60 percent of the unit

Landform(s): rises on lake plains, flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: 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 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Hassman, depressional

Extent: 20 to 40 percent of the unit

Landform(s): swales on lake plains, depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	5.1 to 6.5
Bg -- 10 to 32 in	silty clay	slow	1.98 to 4.19 in	5.1 to 7.3
BCg -- 32 to 45 in	silty clay	slow	1.17 to 2.47 in	5.6 to 7.8
Cg -- 45 to 80 in	silty clay	slow	3.15 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B19B--Longsiding-Foglake-Grasston complex, 0 to 6 percent slopes

Longsiding

<p><i>Extent:</i> 35 to 60 percent of the unit</p> <p><i>Landform(s):</i> lake plains</p> <p><i>Slope gradient:</i> 1 to 4 percent</p> <p><i>Parent material:</i> glaciolacustrine deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .43</p> <p><i>Land capability, nonirrigated</i> 3w</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.55 in	5.1 to 7.3
Bt1,Bt3 -- 12 to 35 in	silty clay	slow	2.09 to 4.41 in	5.1 to 7.3
Bk,C -- 35 to 80 in	silty clay loam	moderately slow	8.08 to 9.87 in	7.4 to 8.4

Foglake

<p><i>Extent:</i> 15 to 35 percent of the unit</p> <p><i>Landform(s):</i> lake plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> glaciolacustrine deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .43</p> <p><i>Land capability, nonirrigated</i> 4w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B19B--Longsiding-Foglake-Grasston complex, 0 to 6 percent slopes

Grasston

Extent: 10 to 20 percent of the unit

Landform(s): lake plains

Slope gradient: 3 to 6 percent

Parent material: 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 14 in	silty clay loam	moderately slow	0.56 to 1.02 in	5.1 to 7.3
Bt1,Bt2 -- 14 to 42 in	silty clay	slow	2.52 to 5.31 in	5.1 to 7.3
Bk,C -- 42 to 80 in	silty clay loam	moderately slow	6.80 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B23A--Effie-Ashlake complex, MLRA 88, 0 to 2 percent slopes

Effie

Extent: 50 to 65 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 1 percent

Parent material: 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) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.39 to 0.43 in	5.1 to 7.3
Eg -- 2 to 5 in	loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 5 to 8 in	silty clay loam	slow	0.39 to 0.52 in	5.1 to 7.3
Btg -- 8 to 20 in	silty clay	slow	1.22 to 2.20 in	5.1 to 7.8
BCg -- 20 to 64 in	silty clay loam	moderately slow	6.17 to 7.94 in	7.4 to 8.4
Cg -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.83 in	7.4 to 8.4

Ashlake

Extent: 30 to 45 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 2 percent

Parent material: 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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loam	moderate	0.24 to 0.26 in	5.1 to 7.3
E -- 1 to 4 in	loam	moderate	0.36 to 0.52 in	5.1 to 7.3
E/B -- 4 to 9 in	loam	moderate	0.72 to 0.97 in	5.1 to 7.3
Bt -- 9 to 26 in	silty clay	slow	1.69 to 3.05 in	5.1 to 7.3
Bk -- 26 to 80 in	clay loam	moderately slow	7.55 to 9.71 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B23A--Effie-Ashlake complex, MLRA 88, 0 to 2 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B24B--Ashlake-Suomi-Effie complex, MLRA 88, 1 to 4 percent slopes

Ashlake

Extent: 25 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 3 percent

Parent material: 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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loam	moderate	0.24 to 0.26 in	5.1 to 7.3
E -- 1 to 4 in	loam	moderate	0.36 to 0.52 in	5.1 to 7.3
E/B -- 4 to 9 in	loam	moderate	0.72 to 0.97 in	5.1 to 7.3
Bt -- 9 to 26 in	silty clay	slow	1.69 to 3.05 in	5.1 to 7.3
Bk -- 26 to 80 in	clay loam	moderately slow	7.55 to 9.71 in	7.4 to 8.4

Suomi

Extent: 30 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 4 percent

Parent material: 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) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B24B--Ashlake-Suomi-Effie complex, MLRA 88, 1 to 4 percent slopes

Effie

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 2 percent

Parent material: 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) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.39 to 0.43 in	5.1 to 7.3
Eg -- 2 to 5 in	loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 5 to 8 in	silty clay loam	slow	0.39 to 0.52 in	5.1 to 7.3
Btg -- 8 to 20 in	silty clay	slow	1.22 to 2.20 in	5.1 to 7.8
BCg -- 20 to 64 in	silty clay loam	moderately slow	6.17 to 7.94 in	7.4 to 8.4
Cg -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.83 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B25C--Suomi-Ashlake complex, MLRA 88, 6 to 15 percent slopes

Suomi

Extent: 70 to 90 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 15 percent

Parent material: 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) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Ashlake

Extent: 5 to 25 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 6 percent

Parent material: 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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loam	moderate	0.24 to 0.26 in	5.1 to 7.3
E -- 1 to 4 in	loam	moderate	0.36 to 0.52 in	5.1 to 7.3
E/B -- 4 to 9 in	loam	moderately slow	0.72 to 0.97 in	5.1 to 7.3
Bt -- 9 to 26 in	silty clay	slow	1.69 to 3.05 in	5.1 to 7.3
Bk -- 26 to 80 in	clay loam	moderately slow	7.55 to 9.71 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B26A--Daisybay-Greenwood complex, 0 to 1 percent slopes

Daisybay

<p><i>Extent:</i> 45 to 80 percent of the unit</p> <p><i>Landform(s):</i> bogs on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over clayey glaciolacustrine sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated:</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 7 in	peat	very rapid	3.90 to 4.61 in	
Oe -- 7 to 30 in	mucky peat	rapid	10.28 to 12.56 in	
Oa -- 30 to 35 in	muck	moderately rapid	1.79 to 2.30 in	
Cg1 -- 35 to 42 in	clay	very slow	0.57 to 0.71 in	6.6 to 7.8
Cg2 -- 42 to 80 in	clay	very slow	3.02 to 4.54 in	7.4 to 8.4

Greenwood

<p><i>Extent:</i> 20 to 55 percent of the unit</p> <p><i>Landform(s):</i> bogs on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated:</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 24 in	mucky peat	rapid	6.38 to 7.80 in	
Oe2 -- 24 to 80 in	mucky peat	rapid	25.16 to 30.75 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B36B--Lavell-Shawano complex, 1 to 6 percent slopes

Shawano

Extent: 25 to 55 percent of the unit

Landform(s): outwash plains, lake plains

Slope gradient: 1 to 6 percent

Parent material: eolian and/or glaciolacustrine sand

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 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw -- 5 to 21 in	loamy fine sand	rapid	1.10 to 1.73 in	5.1 to 6.5
C -- 21 to 80 in	fine sand	rapid	3.54 to 5.91 in	5.1 to 6.5

Lavell

Extent: 30 to 55 percent of the unit

Landform(s): outwash plains, lake plains

Slope gradient: 1 to 6 percent

Parent material: eolian and/or glaciolacustrine sand

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) .17

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw1 -- 5 to 18 in	loamy fine sand	rapid	0.78 to 1.30 in	4.5 to 6.5
Bw2 -- 18 to 42 in	fine sand	rapid	1.44 to 2.40 in	5.1 to 6.5
C -- 42 to 80 in	fine sand	rapid	2.27 to 3.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B37B--Westoo-Lavell complex, 0 to 6 percent slopes

Westoo

<p><i>Extent:</i> 30 to 50 percent of the unit</p> <p><i>Landform(s):</i> lake plains, outwash plains</p> <p><i>Slope gradient:</i> 0 to 4 percent</p> <p><i>Parent material:</i> eolian deposits and/or glaciolacustrine deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .20</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw1 -- 5 to 17 in	loamy fine sand	rapid	1.06 to 1.89 in	4.5 to 6.5
Bw2 -- 17 to 44 in	loamy fine sand	rapid	1.63 to 2.72 in	5.1 to 6.5
C -- 44 to 74 in	fine sand	rapid	1.80 to 2.99 in	5.1 to 6.5
Cg -- 74 to 80 in	fine sand	rapid	0.35 to 0.59 in	5.1 to 6.5

Lavell

<p><i>Extent:</i> 25 to 40 percent of the unit</p> <p><i>Landform(s):</i> lake plains, outwash plains</p> <p><i>Slope gradient:</i> 1 to 6 percent</p> <p><i>Parent material:</i> eolian and/or glaciolacustrine sand</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .17</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw1 -- 5 to 18 in	loamy fine sand	rapid	0.78 to 1.30 in	4.5 to 6.5
Bw2 -- 18 to 42 in	fine sand	rapid	1.44 to 2.40 in	5.1 to 6.5
C -- 42 to 80 in	fine sand	rapid	2.27 to 3.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B41B--Friendship loamy sand, 0 to 4 percent slopes

Friendship

Extent: 65 to 85 percent of the unit

Landform(s): rises on lake plains, rises on outwash plains

Slope gradient: 0 to 4 percent

Parent material: sandy 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) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 24 in	sand	rapid	0.63 to 2.30 in	4.5 to 6.0
Bw2 -- 24 to 40 in	sand	rapid	0.32 to 1.13 in	4.5 to 6.0
C -- 40 to 80 in	sand	rapid	0.80 to 2.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B45A--Dora muck, depressional, taylor catena, 0 to 1 percent slopes

Dora, depressional

Extent: 60 to 90 percent of the unit

Landform(s): swamps on lake plains

Slope gradient: 0 to 1 percent

Parent material: organic material over clayey glaciolacustrine sediments

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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 28 in	muck	moderately rapid	9.78 to 12.58 in	
Cg1 --	28 to 34 in	clay	very slow	0.47 to 0.59 in	6.6 to 7.8
Cg2 --	34 to 80 in	clay	very slow	3.69 to 5.53 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B46A--Dora mucky peat, taylor catena, 0 to 1 percent slopes

Dora

Extent: 60 to 90 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over clayey glaciolacustrine deposits

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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe --	0 to 6 in	mucky peat	rapid	2.66 to 3.25 in	
Oa --	6 to 22 in	muck	moderately rapid	5.65 to 7.26 in	
A --	22 to 26 in	mucky silty clay loam	slow	0.59 to 1.18 in	6.1 to 7.3
Cg1 --	26 to 36 in	clay	very slow	0.79 to 0.98 in	6.6 to 7.8
Cg2 --	36 to 80 in	clay	very slow	3.53 to 5.29 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B55A--Kooch-Kab-Ratroot complex, 0 to 4 percent slopes

Kooch

Extent: 30 to 60 percent of the unit

Landform(s): till plains

Slope gradient: 1 to 4 percent

Parent material: clayey till

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) .32

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silt loam	moderate	0.63 to 0.76 in	5.1 to 7.3
E -- 3 to 5 in	silt loam	moderate	0.33 to 0.43 in	5.1 to 7.3
E/B -- 5 to 11 in	silt loam	moderate	0.53 to 1.30 in	5.1 to 7.3
Bt -- 11 to 22 in	clay	slow	0.99 to 2.20 in	5.6 to 7.8
Cg -- 22 to 80 in	clay	slow	4.63 to 11.57 in	7.4 to 8.4

Kab

Extent: 20 to 50 percent of the unit

Landform(s): drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: clayey till

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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	5.1 to 7.3
Eg -- 4 to 7 in	silt loam	moderate	0.54 to 0.69 in	5.1 to 7.3
B/E -- 7 to 13 in	silt loam	moderate	0.53 to 1.30 in	5.1 to 7.3
Btg -- 13 to 29 in	clay	slow	1.45 to 3.23 in	5.6 to 7.8
Cg -- 29 to 80 in	clay	slow	4.06 to 10.16 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B55A--Kooch-Kab-Ratroot complex, 0 to 4 percent slopes

Ratroot

Extent: 10 to 20 percent of the unit

Landform(s): depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: clayey 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)

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe -- 0 to 4 in	mucky peat	rapid	1.77 to 2.17 in	5.1 to 6.5
A -- 4 to 10 in	clay	slow	0.47 to 1.18 in	7.4 to 8.4
Btg -- 10 to 37 in	clay	slow	2.44 to 5.43 in	5.6 to 7.8
Cg -- 37 to 80 in	clay	slow	3.43 to 8.58 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B64B--Vasso-Keenan complex, 1 to 6 percent slopes

Vasso

Extent: 30 to 50 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 3 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.75 in	4.5 to 6.0
E --	4 to 6 in	fine sandy loam	moderately rapid	0.18 to 0.33 in	4.5 to 6.0
Bw1 --	6 to 18 in	loamy fine sand	rapid	0.37 to 1.22 in	4.5 to 6.5
Bw2 --	18 to 38 in	fine sand	rapid	0.60 to 2.01 in	5.1 to 6.5
2Bg --	38 to 50 in	silt loam	moderate	2.01 to 2.60 in	5.6 to 6.5
2Cg --	50 to 80 in	silt loam	moderate	5.09 to 6.58 in	5.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B64B--Vasso-Keenan complex, 1 to 6 percent slopes

Keenan

Extent: 25 to 45 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 6 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

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) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.71 in	4.5 to 6.0
Bw1 --	4 to 12 in	loamy fine sand	rapid	0.31 to 0.87 in	4.5 to 6.5
Bw2 --	12 to 32 in	fine sand	rapid	0.60 to 2.01 in	5.1 to 6.5
2Bw3 --	32 to 54 in	silt loam	moderate	3.75 to 4.85 in	5.6 to 6.5
2C --	54 to 80 in	silt loam	moderate	4.42 to 5.72 in	5.6 to 7.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B79B--Sugarbush-Graycalm complex, 2 to 8 percent slopes

Sugarbush

Extent: 50 to 60 percent of the unit

Landform(s): beach ridges, moraines, outwash plains

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly glaciofluvial 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) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 7.3
E -- 3 to 13 in	loamy sand	rapid	0.59 to 1.08 in	5.6 to 7.3
Bt -- 13 to 25 in	sandy loam	moderately rapid	1.34 to 1.59 in	5.6 to 7.3
2C -- 25 to 80 in	gravelly coarse sand	very rapid	1.09 to 2.19 in	7.4 to 8.4

Graycalm

Extent: 20 to 30 percent of the unit

Landform(s): beach ridges, moraines, outwash plains

Slope gradient: 4 to 8 percent

Parent material: sandy glaciofluvial deposits

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): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .02

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sand	rapid	0.22 to 0.28 in	3.5 to 6.5
Bw -- 3 to 22 in	sand	rapid	1.13 to 2.08 in	3.5 to 7.3
E -- 22 to 35 in	sand	rapid	0.78 to 1.43 in	3.5 to 7.3
E and Bt -- 35 to 60 in	sand	rapid	1.24 to 3.97 in	3.5 to 7.3
C -- 60 to 80 in	sand	rapid	0.40 to 1.41 in	5.6 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B79D--Sugarbush-Graycalm complex, 8 to 18 percent slopes

Sugarbush

Extent: 55 to 75 percent of the unit

Landform(s): moraines, outwash plains

Slope gradient: 8 to 18 percent

Parent material: sandy and gravelly outwash

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) .20

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.47 in	5.6 to 6.5
E -- 3 to 13 in	sand	rapid	0.30 to 1.08 in	5.6 to 6.5
Bt -- 13 to 25 in	coarse sandy loam	moderately rapid	1.34 to 1.95 in	6.1 to 7.3
2C -- 25 to 80 in	gravelly coarse sand	very rapid	1.09 to 3.28 in	7.4 to 8.4

Graycalm

Extent: 15 to 30 percent of the unit

Landform(s): moraines, outwash plains

Slope gradient: 8 to 18 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	4.5 to 6.0
Bw -- 2 to 37 in	loamy sand	rapid	2.10 to 3.85 in	4.5 to 6.0
E and Bt -- 37 to 48 in	sand	rapid	0.55 to 0.99 in	5.1 to 6.0
C -- 48 to 80 in	coarse sand	very rapid	0.64 to 2.23 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B80A--Rifle soils, taylor catena, 0 to 1 percent slopes

Rifle

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Rifle, depressional

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on lake plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B82A--Greenwood soils, taylor catena, 0 to 1 percent slopes

Greenwood

Extent: 0 to 95 percent of the unit

Landform(s): raised bogs on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 24 in	mucky peat	rapid	6.38 to 7.80 in	
Oe2 -- 24 to 80 in	mucky peat	rapid	25.16 to 30.75 in	

Greenwood, depressional

Extent: 0 to 95 percent of the unit

Landform(s): bogs on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 24 in	mucky peat	rapid	6.38 to 7.80 in	
Oe2 -- 24 to 80 in	mucky peat	rapid	25.16 to 30.75 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B84B--Eutrudepts, occasionally flooded-Greaney, frequently flooded, complex, 0 to 4 percent slopes

Eutrudepts, occasionally flooded

Extent: 35 to 60 percent of the unit

Landform(s): flood-plain steps on flood plains, bars on flood plains

Slope gradient: 1 to 4 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
Bg -- 8 to 52 in	stratified fine sandy loam to silt loam to silty clay loam to silty clay	moderately slow	4.85 to 8.82 in	5.6 to 7.3
Cg -- 52 to 80 in	stratified silt loam to silty clay loam to silty clay to clay	slow	2.80 to 3.63 in	6.6 to 8.4

Greaney, frequently flooded

Extent: 25 to 50 percent of the unit

Landform(s): flood-plain steps on 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silty clay loam	moderately slow	0.83 to 0.91 in	5.1 to 6.5
Bg -- 4 to 30 in	silty clay	slow	2.86 to 5.20 in	5.6 to 7.3
Cg -- 30 to 80 in	stratified silty clay loam to silty clay to clay loam to clay	slow	5.00 to 6.50 in	6.6 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B151A--Kab-Kooch complex, 0 to 4 percent slopes

Kab

Extent: 30 to 60 percent of the unit
Landform(s): drainageways on till plains
Slope gradient: 0 to 2 percent
Parent material: clayey till
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): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.79 to 0.94 in	5.1 to 7.3
Eg -- 4 to 7 in	silt loam	moderate	0.54 to 0.69 in	5.1 to 7.3
B/E -- 7 to 13 in	silt loam	moderate	0.53 to 1.30 in	5.1 to 7.3
Btg -- 13 to 29 in	clay	slow	1.45 to 3.23 in	5.6 to 7.8
Cg -- 29 to 80 in	clay	slow	4.06 to 10.16 in	7.4 to 8.4

Kooch

Extent: 25 to 50 percent of the unit
Landform(s): till plains
Slope gradient: 1 to 4 percent
Parent material: clayey till
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) .32
Land capability, nonirrigated 3w
Hydric soil: no
Hydrologic group: C/D
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silt loam	moderate	0.63 to 0.76 in	5.1 to 7.3
E -- 3 to 5 in	silt loam	moderate	0.33 to 0.43 in	5.1 to 7.3
E/B -- 5 to 11 in	silt loam	moderate	0.53 to 1.30 in	5.1 to 7.3
Bt -- 11 to 22 in	clay	slow	0.99 to 2.20 in	5.6 to 7.8
Cg -- 22 to 80 in	clay	slow	4.63 to 11.57 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B255A--Beseman and Merwin soils, suomi catena, 0 to 1 percent slopes

Beseman

Extent: 35 to 60 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
Cg -- 36 to 80 in	loam	moderate	5.73 to 8.38 in	7.4 to 8.4

Merwin

Extent: 35 to 60 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 6 in	peat	very rapid	3.25 to 3.84 in	
Oe -- 6 to 46 in	mucky peat	rapid	18.07 to 22.09 in	
Cg -- 46 to 80 in	loam	moderate	4.40 to 6.43 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B256A--Cathro and Tacoosh soils, suomi catena, 0 to 1 percent slopes

Cathro

Extent: 35 to 60 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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 1.13 in	5.1 to 6.5
Cg -- 40 to 80 in	loam	moderate	5.17 to 7.56 in	7.4 to 8.4

Tacoosh

Extent: 35 to 60 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 32 in	mucky peat	rapid	9.04 to 11.04 in	
Oa -- 32 to 36 in	muck	moderately rapid	1.38 to 1.77 in	
Cg -- 36 to 80 in	loam	moderate	5.73 to 8.38 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B274A--Rifle soils, spooner catena, 0 to 1 percent slopes

Rifle

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Rifle, depressional

<p><i>Extent:</i> 0 to 95 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B275A--Rifle soils, suomi catena, 0 to 1 percent slopes

Rifle

<i>Extent:</i> 0 to 95 percent of the unit	<i>Soil loss tolerance (T factor):</i> 2
<i>Landform(s):</i> depressions on lake plains	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> herbaceous organic material	<i>Kw factor (surface layer)</i>
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> A/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Rifle, depressional

<i>Extent:</i> 0 to 95 percent of the unit	<i>Soil loss tolerance (T factor):</i> 2
<i>Landform(s):</i> depressions on lake plains	<i>Wind erodibility group (WEG):</i> 8
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 0
<i>Parent material:</i> herbaceous organic material	<i>Kw factor (surface layer)</i>
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> A/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B276A--Cathro and Tacoosh soils, spooner catena, 0 to 1 percent slopes

Cathro

<i>Extent:</i> 35 to 60 percent of the unit	<i>Soil loss tolerance (T factor):</i> 1
<i>Landform(s):</i> depressions on lake plains	<i>Wind erodibility group (WEG):</i> 8
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 0
<i>Parent material:</i> herbaceous organic material over silty glaciolacustrine deposits	<i>Kw factor (surface layer)</i>
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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 1.13 in	5.1 to 6.5
Cg -- 40 to 80 in	silt loam	moderate	6.76 to 8.75 in	7.4 to 8.4

Tacoosh

<i>Extent:</i> 35 to 60 percent of the unit	<i>Soil loss tolerance (T factor):</i> 1
<i>Landform(s):</i> depressions on lake plains	<i>Wind erodibility group (WEG):</i> 5
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 56
<i>Parent material:</i> herbaceous organic material over silty glaciolacustrine deposits	<i>Kw factor (surface layer)</i>
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 32 in	mucky peat	rapid	9.04 to 11.04 in	
Oa -- 32 to 36 in	muck	moderately rapid	1.38 to 1.77 in	
Cg -- 36 to 80 in	silt loam	moderate	7.50 to 9.70 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B277A--Greenwood soils, suomi catena, 0 to 1 percent slopes

Greenwood

Extent: 0 to 95 percent of the unit

Landform(s): raised bogs on till plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 24 in	mucky peat	rapid	6.38 to 7.80 in	
Oe2 -- 24 to 80 in	mucky peat	rapid	25.16 to 30.75 in	

Greenwood, depressional

Extent: 0 to 95 percent of the unit

Landform(s): depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 10 in	peat	very rapid	5.41 to 6.40 in	
Oe1 -- 10 to 24 in	mucky peat	rapid	6.38 to 7.80 in	
Oe2 -- 24 to 80 in	mucky peat	rapid	25.16 to 30.75 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B279A--Markey and Lougee soils, 0 to 1 percent slopes

Markey

<p><i>Extent:</i> 35 to 60 percent of the unit</p> <p><i>Landform(s):</i> depressions on beach ridges, depressions on beach ridges, depressions on outwash plains, depressions on outwash plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material over sandy glaciofluvial deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated:</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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Representative soil profile:	Texture	Permeability	Available water capacity	pH
Oa -- 0 to 32 in	muck	moderately rapid	11.16 to 14.35 in	
Cg -- 32 to 80 in	loamy sand	rapid	2.40 to 4.80 in	3.5 to 7.3

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B279A--Markey and Lougee soils, 0 to 1 percent slopes

Lougee

<p><i>Extent:</i> 35 to 60 percent of the unit</p> <p><i>Landform(s):</i> depressions on beach ridges, depressions on beach ridges, depressions on outwash plains, depressions on outwash plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> herbaceous organic material over sandy glaciofluvial deposits</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer):</i></p> <p><i>Land capability, nonirrigated Tw:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oi -- 0 to 3 in	peat	very rapid	1.73 to 2.05 in	
Oe -- 3 to 12 in	mucky peat	rapid	3.90 to 4.76 in	
Oa -- 12 to 28 in	muck	moderately rapid	5.51 to 7.09 in	
2A -- 28 to 31 in	mucky loamy fine sand	rapid	0.39 to 0.47 in	3.8 to 4.7
2Cg1 -- 31 to 43 in	fine sand	rapid	0.83 to 1.06 in	4.6 to 5.6
2Cg2 -- 43 to 55 in	fine sand	rapid	0.83 to 1.06 in	4.6 to 5.6
2Cg3 -- 55 to 80 in	fine sand	rapid	1.74 to 2.23 in	4.6 to 5.6

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

B281C--Thistledew-Pequaywan complex, 2 to 12 percent slopes

Thistledew

Extent: 40 to 80 percent of the unit

Landform(s): lake plains

Slope gradient: 4 to 12 percent

Parent material: sandy outwash and/or beach deposits over glaciolacustrine sediments

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	5.1 to 6.5
Bw -- 3 to 29 in	loamy sand	rapid	1.56 to 2.86 in	5.1 to 6.5
2Bt1 -- 29 to 43 in	sandy clay loam	moderate	1.93 to 2.62 in	5.6 to 7.3
3Bt2 -- 43 to 50 in	clay	very slow	0.57 to 0.85 in	5.6 to 7.3
3C -- 50 to 80 in	clay	very slow	2.39 to 3.59 in	7.4 to 8.4

Pequaywan

Extent: 5 to 30 percent of the unit

Landform(s): drainageways on lake plains

Slope gradient: 2 to 4 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw1,Bw2 -- 2 to 20 in	loam	moderate	2.72 to 3.98 in	4.5 to 6.0
Bw3 -- 20 to 30 in	sandy loam	moderately rapid	0.79 to 1.77 in	4.5 to 6.0
2C -- 30 to 80 in	very gravelly sand	rapid	0.50 to 2.00 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

DA--Denied access

Denied Access

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: unranked

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F2B--Eaglesnest-Wahlsten complex, 2 to 8 percent slopes, bouldery

Eaglesnest, bouldery

Extent: 30 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F2B--Eaglesnest-Wahlsten complex, 2 to 8 percent slopes, bouldery

Wahlsten, bouldery

Extent: 20 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F3D--Eveleth-Eaglesnest-Conic complex, 6 to 18 percent slopes, bouldery

Eveleth, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 -- 4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC -- 23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd -- 43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Eaglesnest, bouldery

Extent: 15 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 10 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F3D--Eveleth-Eaglesnest-Conic complex, 6 to 18 percent slopes, bouldery

Conic, bouldery

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 12 to 30 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F4E--Eveleth, bouldery-Conic, bouldery-Rock outcrop complex, 18 to 30 percent slopes

Eveleth, bouldery

Extent: 45 to 65 percent of the unit

Landform(s): moraines

Slope gradient: 18 to 30 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 -- 4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC -- 23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd -- 43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F4E--Eveleth, bouldery-Conic, bouldery-Rock outcrop complex, 18 to 30 percent slopes

Conic, bouldery

Extent: 20 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 18 to 30 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 12 to 30 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 10 to 20 percent of the unit

Landform(s): moraines

Slope gradient: 18 to 30 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F5B--Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0 to 8 percent slopes

Babbitt, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 4 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F5B--Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0 to 8 percent slopes

Wahlsten, bouldery

Extent: 20 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 3 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Aquepts, rubbly, depressional

Extent: 10 to 20 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F5B--Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0 to 8 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F6B--Soudan-Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery

Soudan, bouldery

Extent: 35 to 55 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: sandy outwash and/or eloian material over dense lodgment 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) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	fine sandy loam	moderately rapid	0.44 to 0.57 in	4.5 to 6.0
Bw1 -- 3 to 17 in	sandy loam	moderately rapid	1.38 to 2.34 in	4.5 to 6.0
Bw2 -- 17 to 36 in	loamy sand	rapid	0.94 to 1.89 in	4.5 to 6.0
2BC -- 36 to 57 in	very cobbly sandy loam	moderately slow	0.85 to 1.91 in	5.1 to 6.5
2Cd -- 57 to 80 in	very cobbly sandy loam	slow	0.46 to 1.14 in	5.1 to 6.5

Eaglesnest, bouldery

Extent: 15 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F6B--Soudan-Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery

Babbitt, bouldery

Extent: 15 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 4 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F7B--Biwabik-Graycalm complex, 1 to 8 percent slopes

Biwabik

Extent: 40 to 70 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 8 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and Bt -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Graycalm

Extent: 25 to 55 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 8 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	4.5 to 6.0
Bw -- 2 to 37 in	loamy sand	rapid	2.10 to 3.85 in	4.5 to 6.0
E and Bt -- 37 to 48 in	sand	rapid	0.55 to 0.99 in	5.1 to 6.0
C -- 48 to 80 in	coarse sand	very rapid	0.64 to 2.23 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F8D--Biwabik-Graycalm-Friendship complex, pitted, 0 to 18 percent slopes

Biwabik

Extent: 30 to 60 percent of the unit

Landform(s): pitted outwash plains

Slope gradient: 8 to 18 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and Bt -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Graycalm

Extent: 30 to 60 percent of the unit

Landform(s): pitted outwash plains

Slope gradient: 8 to 18 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	4.5 to 6.0
Bw -- 2 to 37 in	loamy sand	rapid	2.10 to 3.85 in	4.5 to 6.0
E and Bt -- 37 to 48 in	sand	rapid	0.55 to 0.99 in	5.1 to 6.0
C -- 48 to 80 in	coarse sand	very rapid	0.64 to 2.23 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F8D--Biwabik-Graycalm-Friendship complex, pitted, 0 to 18 percent slopes

Friendship, depressional

Extent: 10 to 20 percent of the unit

Landform(s): depressions on pitted outwash plains

Slope gradient: 0 to 3 percent

Parent material: sandy 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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 24 in	sand	rapid	0.63 to 2.30 in	4.5 to 6.0
Bw2 -- 24 to 40 in	sand	rapid	0.32 to 1.13 in	4.5 to 6.0
C -- 40 to 80 in	sand	rapid	0.80 to 2.78 in	5.1 to 6.5

F9B--Cloquet loam, 2 to 8 percent slopes

Cloquet

Extent: 75 to 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 8 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw -- 2 to 22 in	loam	moderate	3.01 to 4.42 in	4.5 to 6.0
2C -- 22 to 80 in	very gravelly loamy coarse sand	rapid	0.58 to 2.31 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F10D--Cloquet-Pequaywan complex, pitted, 0 to 18 percent slopes

Cloquet

Extent: 65 to 80 percent of the unit

Landform(s): pitted outwash plains

Slope gradient: 8 to 18 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw -- 2 to 22 in	loam	moderate	3.01 to 4.42 in	4.5 to 6.0
2C -- 22 to 80 in	very gravelly loamy coarse sand	rapid	0.58 to 2.31 in	5.1 to 6.5

Pequaywan

Extent: 10 to 20 percent of the unit

Landform(s): depressions on pitted outwash plains

Slope gradient: 0 to 2 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw1,Bw2 -- 2 to 20 in	loam	moderate	2.72 to 3.98 in	4.5 to 6.0
Bw3 -- 20 to 30 in	sandy loam	moderately rapid	0.79 to 1.77 in	4.5 to 6.0
2C -- 30 to 80 in	very gravelly sand	rapid	0.50 to 2.00 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F10E--Cloquet-Pequaywan complex, pitted, 0 to 45 percent slopes

Cloquet

Extent: 60 to 80 percent of the unit

Landform(s): pitted outwash plains

Slope gradient: 18 to 45 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw -- 2 to 22 in	loam	moderate	3.01 to 4.42 in	4.5 to 6.0
2C -- 22 to 80 in	very gravelly loamy coarse sand	rapid	0.58 to 2.31 in	5.1 to 6.5

Pequaywan

Extent: 10 to 20 percent of the unit

Landform(s): depressions on pitted outwash plains

Slope gradient: 0 to 3 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw1,Bw2 -- 2 to 20 in	loam	moderate	2.72 to 3.98 in	4.5 to 6.0
Bw3 -- 20 to 30 in	sandy loam	moderately rapid	0.79 to 1.77 in	4.5 to 6.0
2C -- 30 to 80 in	very gravelly sand	rapid	0.50 to 2.00 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F11B--Eaglesnest stony loam, 2 to 8 percent slopes, bouldery

Eaglesnest, bouldery

Extent: 70 to 90 percent of the unit

Landform(s): till plains

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F12B--Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery

Eaglesnest, bouldery

Extent: 35 to 55 percent of the unit

Landform(s): rises on till plains

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Babbitt, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): flats on till plains

Slope gradient: 1 to 4 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F12B--Eaglesnest-Babbitt complex, 1 to 8 percent slopes, bouldery

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F13A--Babbitt, bouldery-Aquepts, rubbly, complex, 0 to 3 percent slopes

Babbitt, bouldery

Extent: 35 to 55 percent of the unit

Landform(s): rises on till plains

Slope gradient: 0 to 3 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Aquepts, rubbly, depressional

Extent: 30 to 50 percent of the unit

Landform(s): depressions on till plains, drainageways on till plains

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F14D--Eveleth stony loam, 8 to 18 percent slopes, bouldery

Eveleth, bouldery

Extent: 80 to 95 percent of the unit

Landform(s): till plains

Slope gradient: 8 to 18 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 -- 4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC -- 23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd -- 43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F15E--Rollins cobbly sandy loam, 18 to 35 percent slopes, stony

Rollins, stony

Extent: 85 to 95 percent of the unit

Landform(s): eskers

Slope gradient: 18 to 35 percent

Parent material: loamy material over 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	cobbly sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

F16B--Shawano loamy fine sand, 1 to 8 percent slopes

Shawano

Extent: 75 to 95 percent of the unit

Landform(s): end moraines

Slope gradient: 1 to 8 percent

Parent material: eolian sand

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 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw -- 5 to 21 in	loamy fine sand	rapid	1.10 to 1.73 in	5.1 to 6.5
C -- 21 to 80 in	fine sand	rapid	3.54 to 5.91 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F17A--Aquepts, 0 to 2 percent slopes, rubbly

Aquepts, rubbly, depressional

Extent: 65 to 90 percent of the unit

Landform(s): depressions on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F19A--Pequaywan loam, 0 to 3 percent slopes

Pequaywan

Extent: 75 to 95 percent of the unit

Landform(s): flats on outwash plains, rises on outwash plains

Slope gradient: 0 to 3 percent

Parent material: loamy material over gravelly 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) .28

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw1,Bw2 -- 2 to 20 in	loam	moderate	2.72 to 3.98 in	4.5 to 6.0
Bw3 -- 20 to 30 in	sandy loam	moderately rapid	0.79 to 1.77 in	4.5 to 6.0
2C -- 30 to 80 in	very gravelly sand	rapid	0.50 to 2.00 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F21C--Quetico, stony-Rock outcrop complex, 2 to 15 percent slopes

Quetico, stony

Extent: 30 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 15 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 4 to 10 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.11 to 0.17 in	4.5 to 6.0
Bw -- 1 to 7 in	gravelly fine sandy loam	moderately rapid	0.47 to 0.77 in	4.5 to 6.0
R -- 7 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 20 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 15 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F21D--Quetico, stony-Rock outcrop complex, 15 to 35 percent slopes

Quetico, stony

Extent: 30 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 35 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 4 to 10 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.11 to 0.17 in	4.5 to 6.0
Bw -- 1 to 7 in	gravelly fine sandy loam	moderately rapid	0.47 to 0.77 in	4.5 to 6.0
R -- 7 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 20 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 35 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F21F--Quetico, stony-Rock outcrop complex, 35 to 60 percent slopes

Quetico, stony

Extent: 30 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 35 to 60 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 4 to 10 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	fine sandy loam	moderately rapid	0.11 to 0.17 in	4.5 to 6.0
Bw -- 1 to 7 in	gravelly fine sandy loam	moderately rapid	0.47 to 0.77 in	4.5 to 6.0
R -- 7 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 25 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 35 to 60 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F23B--Rollins-Biwabik complex, 1 to 8 percent slopes

Rollins

Extent: 25 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material: loamy material over 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) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Biwabik

Extent: 20 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and B -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F24A--Gnesen loam, 0 to 3 percent slopes

Gnesen

Extent: 75 to 90 percent of the unit

Landform(s): rises on outwash plains, flats on outwash plains

Slope gradient: 0 to 3 percent

Parent material: loamy material over gravelly 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) .37

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loam	moderately rapid	0.63 to 0.69 in	4.5 to 6.0
Bw -- 3 to 30 in	sandy loam	moderately rapid	2.94 to 5.09 in	4.5 to 6.0
2C -- 30 to 80 in	gravelly sand	rapid	0.50 to 3.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F25D--Rollins-Cloquet complex, 8 to 18 percent slopes

Rollins

<p><i>Extent:</i> 45 to 65 percent of the unit</p> <p><i>Landform(s):</i> pitted outwash plains</p> <p><i>Slope gradient:</i> 8 to 18 percent</p> <p><i>Parent material:</i> loamy material over gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .20</p> <p><i>Land capability, nonirrigated</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Cloquet

<p><i>Extent:</i> 25 to 35 percent of the unit</p> <p><i>Landform(s):</i> pitted outwash plains</p> <p><i>Slope gradient:</i> 8 to 18 percent</p> <p><i>Parent material:</i> loamy material over gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 3</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderately rapid	0.39 to 0.43 in	4.5 to 6.0
Bw -- 2 to 22 in	loam	moderate	3.01 to 4.42 in	4.5 to 6.0
2C -- 22 to 80 in	very gravelly loamy coarse sand	rapid	0.58 to 2.31 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F26C--Shagawa-Beargrease complex, 2 to 15 percent slopes, extremely bouldery

Shagawa, extremely bouldery

Extent: 30 to 60 percent of the unit

Landform(s): end moraines

Slope gradient: 2 to 15 percent

Parent material: loamy material over glacial till

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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.44 to 0.57 in	4.5 to 6.0
Bw1 -- 3 to 13 in	stony loam	moderate	0.79 to 1.48 in	4.5 to 6.0
2Bw2 -- 13 to 32 in	very gravelly coarse sandy loam	moderately rapid	1.13 to 1.70 in	5.1 to 6.5
2C -- 32 to 80 in	extremely gravelly loamy coarse sand	rapid	1.44 to 3.84 in	5.1 to 6.5

Beargrease, extremely bouldery

Extent: 25 to 50 percent of the unit

Landform(s): end moraines

Slope gradient: 2 to 15 percent

Parent material: loamy material over sandy-skeletal outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .10

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very stony loam	moderate	0.22 to 0.31 in	4.5 to 6.0
Bw1 -- 2 to 14 in	very stony sandy loam	moderately rapid	0.73 to 1.59 in	4.5 to 6.0
2Bw2 -- 14 to 22 in	extremely stony loamy coarse sand	rapid	0.08 to 0.39 in	4.5 to 6.0
2BC -- 22 to 46 in	extremely gravelly coarse sand	very rapid	0.24 to 0.96 in	4.5 to 6.5
2C -- 46 to 80 in	extremely cobbly coarse sand	very rapid	0.34 to 1.35 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F26E--Shagawa-Beargrease complex, 8 to 30 percent slopes, extremely bouldery

Shagawa, extremely bouldery

Extent: 30 to 60 percent of the unit

Landform(s): end moraines

Slope gradient: 8 to 30 percent

Parent material: loamy material over glacial till

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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.44 to 0.57 in	4.5 to 6.0
Bw1 -- 3 to 13 in	stony loam	moderate	0.79 to 1.48 in	4.5 to 6.0
2Bw2 -- 13 to 32 in	very gravelly coarse sandy loam	moderately rapid	1.13 to 1.70 in	5.1 to 6.5
2C -- 32 to 80 in	extremely gravelly loamy coarse sand	rapid	1.44 to 3.84 in	5.1 to 6.5

Beargrease, extremely bouldery

Extent: 25 to 45 percent of the unit

Landform(s): end moraines

Slope gradient: 8 to 30 percent

Parent material: loamy material over sandy-skeletal outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .10

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very stony loam	moderate	0.22 to 0.31 in	4.5 to 6.0
Bw1 -- 2 to 14 in	very stony sandy loam	moderately rapid	0.73 to 1.59 in	4.5 to 6.0
2Bw2 -- 14 to 22 in	extremely stony loamy coarse sand	rapid	0.08 to 0.39 in	4.5 to 6.0
2BC -- 22 to 46 in	extremely gravelly coarse sand	very rapid	0.24 to 0.96 in	4.5 to 6.5
2C -- 46 to 80 in	extremely cobbly coarse sand	very rapid	0.34 to 1.35 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F26G--Shagawa-Beargrease complex, 35 to 60 percent slopes, extremely bouldery

Shagawa, extremely bouldery

Extent: 30 to 60 percent of the unit

Landform(s): end moraines

Slope gradient: 35 to 60 percent

Parent material: loamy material over glacial till

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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.44 to 0.57 in	4.5 to 6.0
Bw1 -- 3 to 13 in	stony loam	moderate	0.79 to 1.48 in	4.5 to 6.0
2Bw2 -- 13 to 32 in	very gravelly coarse sandy loam	moderately rapid	1.13 to 1.70 in	5.1 to 6.5
2C -- 32 to 80 in	extremely gravelly loamy coarse sand	rapid	1.44 to 3.84 in	5.1 to 6.5

Beargrease, extremely bouldery

Extent: 25 to 45 percent of the unit

Landform(s): end moraines

Slope gradient: 35 to 60 percent

Parent material: loamy material over sandy-skeletal outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .10

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very stony loam	moderate	0.22 to 0.31 in	4.5 to 6.0
Bw1 -- 2 to 14 in	very stony sandy loam	moderately rapid	0.73 to 1.59 in	4.5 to 6.0
2Bw2 -- 14 to 22 in	extremely stony loamy coarse sand	rapid	0.08 to 0.39 in	4.5 to 6.0
2BC -- 22 to 46 in	extremely gravelly coarse sand	very rapid	0.24 to 0.96 in	4.5 to 6.5
2C -- 46 to 80 in	extremely cobbly coarse sand	very rapid	0.34 to 1.35 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F28B--Oysterlake complex, 0 to 4 percent slopes, extremely stony

Oysterlake, extremely stony

<i>Extent:</i> 40 to 65 percent of the unit	<i>Soil loss tolerance (T factor):</i> 3
<i>Landform(s):</i> rises on outwash plains	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 4 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> loamy material over sandy-skeletal outwash	<i>Kw factor (surface layer)</i> .15
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7s
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> C
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	stony loam	moderate	0.55 to 0.75 in	4.5 to 6.0
Bw1 -- 4 to 16 in	stony loam	moderate	0.85 to 1.83 in	4.5 to 6.0
Bw2 -- 16 to 26 in	gravelly loam	moderate	0.59 to 1.38 in	4.5 to 6.5
2BC -- 26 to 42 in	extremely gravelly coarse sand	very rapid	0.16 to 0.65 in	5.1 to 6.5
2C -- 42 to 80 in	extremely cobbly coarse sand	very rapid	0.38 to 1.51 in	5.1 to 6.5

Oysterlake, wet, extremely stony

<i>Extent:</i> 20 to 45 percent of the unit	<i>Soil loss tolerance (T factor):</i> 3
<i>Landform(s):</i> flats on outwash plains, swales on outwash plains	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> loamy material over sandy-skeletal outwash	<i>Kw factor (surface layer)</i> .15
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 7s
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> somewhat poorly drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	stony loam	moderate	0.55 to 0.75 in	4.5 to 6.0
Bw1 -- 4 to 16 in	stony loam	moderate	0.85 to 1.83 in	4.5 to 6.0
Bw2 -- 16 to 26 in	gravelly loam	moderate	0.59 to 1.38 in	4.5 to 6.5
2BC -- 26 to 42 in	extremely gravelly coarse sand	very rapid	0.16 to 0.65 in	5.1 to 6.5
2C -- 42 to 80 in	extremely cobbly coarse sand	very rapid	0.38 to 1.51 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F30G--Conic, very bouldery-Insula, very bouldery-Rock outcrop complex, 20 to 70 percent slopes

Conic, very bouldery

<p><i>Extent:</i> 30 to 60 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 20 to 50 percent</p> <p><i>Parent material:</i> loamy drift over dense gravelly lodgment till over bedrock</p> <p><i>Restrictive feature(s):</i> densic material at 12 to 30 inches lithic bedrock at 20 to 40 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 7e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Insula, very bouldery

<p><i>Extent:</i> 15 to 40 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 20 to 50 percent</p> <p><i>Parent material:</i> loamy drift over bedrock</p> <p><i>Restrictive feature(s):</i> lithic bedrock at 10 to 20 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .15</p> <p><i>Land capability, nonirrigated</i> 7e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	gravelly sandy loam	moderately rapid	0.28 to 0.44 in	4.5 to 6.0
Bw1 -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.63 to 1.26 in	4.5 to 6.0
Bw2 -- 11 to 17 in	gravelly fine sandy loam	moderately rapid	0.41 to 0.89 in	5.1 to 6.5
R -- 17 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F30G--Conic, very bouldery-Insula, very bouldery-Rock outcrop complex, 20 to 70 percent slopes

Rock outcrop

Extent: 10 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 20 to 70 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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F34A--Cathro muck, depressional, 0 to 1 percent slopes

Cathro, depressional

Extent: 60 to 90 percent of the unit

Landform(s): swamps on end moraines, swamps on outwash plains, swamps on till plains

Slope gradient: 0 to 1 percent

Parent material: organic material over glaciofluvial sediments

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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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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 1.13 in 5.1 to 6.5
2Cg --	40 to 80 in	stratified loamy fine sand to loam	moderate	5.17 to 7.56 in 5.1 to 7.3

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35D--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 18 percent slopes

Eveleth, bouldery

Extent: 25 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 --	4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 --	13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC --	23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd --	43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35D--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 18 percent slopes

Conic, bouldery

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 8 to 18 percent</p> <p><i>Parent material:</i> loamy drift over dense gravelly lodgment till over bedrock</p> <p><i>Restrictive feature(s):</i> densic material at 12 to 30 inches lithic bedrock at 20 to 40 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 6e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Aquepts, rubbly, depressional

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> glaciofluvial sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated</i> 8s</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35D--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 18 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35E--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 30 percent slopes

Eveleth, bouldery

Extent: 25 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 18 to 30 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 --	4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 --	13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC --	23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd --	43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35E--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 30 percent slopes

Conic, bouldery

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 18 to 30 percent</p> <p><i>Parent material:</i> loamy drift over dense gravelly lodgment till over bedrock</p> <p><i>Restrictive feature(s):</i> densic material at 12 to 30 inches lithic bedrock at 20 to 40 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 6e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Aquepts, rubbly, depressional

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines</p> <p><i>Slope gradient:</i> 0 to 3 percent</p> <p><i>Parent material:</i> glaciofluvial sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated</i> 8s</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F35E--Eveleth, bouldery-Conic, bouldery-Aquepts, rubbly, complex, 0 to 30 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F36D--Conic, bouldery-Insula, bouldery-Rock outcrop complex, 8 to 25 percent slopes

Conic, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 25 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 12 to 30 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Insula, bouldery

Extent: 20 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 25 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	gravelly sandy loam	moderately rapid	0.28 to 0.44 in	4.5 to 6.0
Bw1 -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.63 to 1.26 in	4.5 to 6.0
Bw2 -- 11 to 17 in	gravelly fine sandy loam	moderately rapid	0.41 to 0.89 in	5.1 to 6.5
R -- 17 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F36D--Conic, bouldery-Insula, bouldery-Rock outcrop complex, 8 to 25 percent slopes

Rock outcrop

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 25 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F37B--Foglake-Babbitt, bouldery, complex, 0 to 4 percent slopes

Foglake

Extent: 40 to 60 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: 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 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Babbitt, bouldery

Extent: 20 to 45 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 4 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F38B--Longsiding-Eaglesnest, bouldery, complex, 1 to 8 percent slopes

Longsiding

Extent: 40 to 60 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 8 percent

Parent material: glaciolacustrine deposits

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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.55 in	5.1 to 7.3
Bt1, Bt3 -- 12 to 35 in	silty clay	slow	2.09 to 4.41 in	5.1 to 7.3
Bk, C -- 35 to 80 in	silty clay loam	moderately slow	8.08 to 9.87 in	7.4 to 8.4

Eaglesnest, bouldery

Extent: 25 to 45 percent of the unit

Landform(s): lake plains

Slope gradient: 3 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F39A--Foglake, bouldery-Aquepts, rubbly-Hassman, depressional, complex, 0 to 2 percent slopes

Foglake, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: 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 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Aquepts, rubbly, depressional

Extent: 20 to 40 percent of the unit

Landform(s): drainageways on lake plains, swales on lake plains

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F39A--Foglake, bouldery-Aquepts, rubbly-Hassman, depressional, complex, 0 to 2 percent slopes

Hassman, depressional

Extent: 15 to 30 percent of the unit

Landform(s): drainageways on lake plains, swales on lake plains

Slope gradient: 0 to 1 percent

Parent material: glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	5.1 to 6.5
Bg -- 10 to 32 in	silty clay	slow	1.98 to 4.19 in	5.1 to 7.3
BCg -- 32 to 45 in	silty clay	slow	1.17 to 2.47 in	5.6 to 7.8
Cg -- 45 to 80 in	silty clay	slow	3.15 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F40B--Rollins cobbly sandy loam, 2 to 8 percent slopes

Rollins

Extent: 70 to 90 percent of the unit

Landform(s): kames, outwash plains

Slope gradient: 2 to 8 percent

Parent material: loamy material over 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	cobbly sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F40D--Rollins cobbly sandy loam, 8 to 18 percent slopes

Rollins

<p><i>Extent:</i> 70 to 90 percent of the unit</p> <p><i>Landform(s):</i> kames, outwash plains</p> <p><i>Slope gradient:</i> 8 to 18 percent</p> <p><i>Parent material:</i> loamy material over gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .15</p> <p><i>Land capability, nonirrigated</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	cobbly sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F41B--Wurtsmith-Friendship complex, MLRA 93, 1 to 4 percent slopes

Wurtsmith

Extent: 30 to 60 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 4 percent

Parent material: sandy 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) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw -- 3 to 18 in	sand	rapid	0.45 to 1.65 in	4.5 to 6.0
BC -- 18 to 33 in	sand	rapid	0.30 to 1.05 in	4.5 to 6.0
C -- 33 to 80 in	sand	rapid	0.94 to 3.28 in	5.1 to 6.5

Friendship

Extent: 30 to 55 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 4 percent

Parent material: sandy 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) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 24 in	sand	rapid	0.63 to 2.30 in	4.5 to 6.0
Bw2 -- 24 to 40 in	sand	rapid	0.32 to 1.13 in	4.5 to 6.0
C -- 40 to 80 in	sand	rapid	0.80 to 2.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F116A--Mooselake muck, 0 to 1 percent slopes

Mooselake

Extent: 60 to 85 percent of the unit

Landform(s): swamps on end moraines, swamps on outwash plains, swamps on till plains

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
Oe -- 36 to 80 in	mucky peat	rapid	19.84 to 24.25 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F151A--Tacoosh mucky peat, dense substratum, 0 to 1 percent slopes

Tacoosh, dense substratum

<p><i>Extent:</i> 60 to 90 percent of the unit</p> <p><i>Landform(s):</i> swamps on moraines, swamps on interdrumlins</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy material over dense loamy till</p> <p><i>Restrictive feature(s):</i> densic material at 40 to 80 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated 7w</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 7 in	mucky peat	rapid	3.19 to 3.90 in	
Oe2 -- 7 to 30 in	mucky peat	rapid	10.28 to 12.56 in	
Oa -- 30 to 40 in	muck	moderately rapid	3.58 to 4.61 in	
2Cg -- 40 to 48 in	stratified loamy fine sand to loam	moderate	1.02 to 1.50 in	5.1 to 7.3
3Cd -- 48 to 80 in	gravelly sandy loam	very slow	1.28 to 2.87 in	5.6 to 6.8

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F164B--Beargrease-Biwabik-Rollins complex, 2 to 8 percent slopes, very stony

Beargrease, very stony

Extent: 35 to 60 percent of the unit

Landform(s): end moraines

Slope gradient: 2 to 8 percent

Parent material: loamy material over sandy-skeletal outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .10

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very stony loam	moderate	0.22 to 0.31 in	4.5 to 6.0
Bw1 -- 2 to 14 in	very stony sandy loam	moderately rapid	0.73 to 1.59 in	4.5 to 6.0
2Bw2 -- 14 to 22 in	extremely stony loamy coarse sand	rapid	0.08 to 0.39 in	4.5 to 6.0
2BC -- 22 to 46 in	extremely gravelly coarse sand	very rapid	0.24 to 0.96 in	4.5 to 6.5
2C -- 46 to 80 in	extremely cobbly coarse sand	very rapid	0.34 to 1.35 in	5.1 to 6.5

Rollins, very stony

Extent: 15 to 35 percent of the unit

Landform(s): end moraines

Slope gradient: 2 to 8 percent

Parent material: loamy material over sandy-skeletal 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	cobbly sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F164B--Beargrease-Biwabik-Rollins complex, 2 to 8 percent slopes, very stony

Biwabik, very stony

Extent: 15 to 35 percent of the unit

Landform(s): end moraines

Slope gradient: 2 to 8 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and B -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F164E--Beargrease-Biwabik-Rollins complex, 8 to 35 percent slopes, very stony

Beargrease, very stony

Extent: 35 to 60 percent of the unit

Landform(s): end moraines

Slope gradient: 8 to 35 percent

Parent material: loamy material over sandy-skeletal outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 7

Wind erodibility index (WEI): 38

Kw factor (surface layer) .10

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	very stony loam	moderate	0.22 to 0.31 in	4.5 to 6.0
Bw1 -- 2 to 14 in	very stony sandy loam	moderately rapid	0.73 to 1.59 in	4.5 to 6.0
2Bw2 -- 14 to 22 in	extremely stony loamy coarse sand	rapid	0.08 to 0.39 in	4.5 to 6.0
2BC -- 22 to 46 in	extremely gravelly coarse sand	very rapid	0.24 to 0.96 in	4.5 to 6.5
2C -- 46 to 80 in	extremely cobbly coarse sand	very rapid	0.34 to 1.35 in	5.1 to 6.5

Rollins, very stony

Extent: 15 to 35 percent of the unit

Landform(s): end moraines

Slope gradient: 8 to 35 percent

Parent material: loamy material over sandy-skeletal 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	cobbly sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F164E--Beargrease-Biwabik-Rollins complex, 8 to 35 percent slopes, very stony

Biwabik, very stony

Extent: 15 to 35 percent of the unit

Landform(s): end moraines

Slope gradient: 8 to 35 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and B -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F165C--Insula, very bouldery-Rock outcrop-Wahlsten, very bouldery, complex, 2 to 12 percent slopes

Rock outcrop

Extent: 20 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Insula, very bouldery

Extent: 20 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 12 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	gravelly sandy loam	moderately rapid	0.28 to 0.44 in	4.5 to 6.0
Bw1 -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.63 to 1.26 in	4.5 to 6.0
Bw2 -- 11 to 17 in	gravelly fine sandy loam	moderately rapid	0.41 to 0.89 in	5.1 to 6.5
R -- 17 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F165C--Insula, very bouldery-Rock outcrop-Wahlsten, very bouldery, complex, 2 to 12 percent slopes

Wahlsten, very bouldery

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 --	3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 --	9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd --	17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R --	37 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F166A--Aquepts, rubbly-Tacoosh-Rifle complex, 0 to 2 percent slopes

Aquepts, rubbly, depressional

<p><i>Extent:</i> 30 to 50 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> glaciofluvial sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 8</p> <p><i>Wind erodibility index (WEI):</i> 0</p> <p><i>Kw factor (surface layer)</i> .05</p> <p><i>Land capability, nonirrigated</i> 8s</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> B/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Tacoosh, depressional

<p><i>Extent:</i> 15 to 30 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over glaciofluvial sediments</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 1</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 7w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 7 in	mucky peat	rapid	3.19 to 3.90 in	
Oe2 -- 7 to 30 in	mucky peat	rapid	10.28 to 12.56 in	
Oa -- 30 to 40 in	muck	moderately rapid	3.58 to 4.61 in	
2Bg -- 40 to 56 in	very stony loam	moderate	0.63 to 2.05 in	5.1 to 6.5
2Cg -- 56 to 80 in	cobbly sandy loam	moderately slow	1.68 to 3.84 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F166A--Aquepts, rubbly-Tacoosh-Rifle complex, 0 to 2 percent slopes

Rifle

Extent: 15 to 30 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 12 in	mucky peat	rapid	5.31 to 6.50 in	
Oe2 -- 12 to 42 in	mucky peat	rapid	13.64 to 16.67 in	
Oa -- 42 to 52 in	muck	moderately rapid	3.44 to 4.43 in	
Oe3 -- 52 to 80 in	mucky peat	rapid	12.58 to 15.37 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F167B--Wahlsten, bouldery-Insula, bouldery-Rock outcrop complex, 1 to 10 percent slopes

Wahlsten, bouldery

Extent: 25 to 45 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Insula, bouldery

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 10 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	gravelly sandy loam	moderately rapid	0.28 to 0.44 in	4.5 to 6.0
Bw1 -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.63 to 1.26 in	4.5 to 6.0
Bw2 -- 11 to 17 in	gravelly fine sandy loam	moderately rapid	0.41 to 0.89 in	5.1 to 6.5
R -- 17 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F167B--Wahlsten, bouldery-Insula, bouldery-Rock outcrop complex, 1 to 10 percent slopes

Rock outcrop

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F168A--Foglake-Hassman, depressional, complex, MLRA 93A, 0 to 2 percent slopes

Foglake

Extent: 35 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Hassman, depressional

Extent: 25 to 50 percent of the unit

Landform(s): depressions

Slope gradient: 0 to 1 percent

Parent material: glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	5.1 to 6.5
Bg -- 10 to 32 in	silty clay	slow	1.98 to 4.19 in	5.1 to 7.3
BCg -- 32 to 45 in	silty clay	slow	1.17 to 2.47 in	5.6 to 7.8
Cg -- 45 to 80 in	silty clay	slow	3.15 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F169B--Longsiding-Grasston complex, 1 to 6 percent slopes

Longsiding

Extent: 35 to 55 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 4 percent

Parent material: glaciolacustrine deposits

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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.55 in	5.1 to 7.3
Bt1,Bt3 -- 12 to 35 in	silty clay	slow	2.09 to 4.41 in	5.1 to 7.3
Bk,C -- 35 to 80 in	silty clay loam	moderately slow	8.08 to 9.87 in	7.4 to 8.4

Grasston

Extent: 10 to 35 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 6 percent

Parent material: 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 14 in	silty clay loam	moderately slow	0.56 to 1.02 in	5.1 to 7.3
Bt1,Bt2 -- 14 to 42 in	silty clay	slow	2.52 to 5.31 in	5.1 to 7.3
Bk,C -- 42 to 80 in	silty clay loam	moderately slow	6.80 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F172B--Westoo-Barber-Vasso complex, MLRA 93A, 0 to 6 percent slopes

Westoo

Extent: 20 to 40 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 6 percent

Parent material: eolian 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	loamy fine sand	rapid	0.51 to 0.67 in	4.5 to 6.0
Bw1 -- 5 to 17 in	loamy fine sand	rapid	1.06 to 1.89 in	4.5 to 6.5
Bw2 -- 17 to 44 in	loamy fine sand	rapid	1.63 to 2.72 in	5.1 to 6.5
C -- 44 to 74 in	fine sand	rapid	1.80 to 2.99 in	5.1 to 6.5
Cg -- 74 to 80 in	fine sand	rapid	0.35 to 0.59 in	5.1 to 6.5

Barber

Extent: 20 to 40 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 4 percent

Parent material: eolian deposits and/or glaciolacustrine deposits

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	fine sandy loam	moderately rapid	0.82 to 0.92 in	4.5 to 6.0
E -- 5 to 8 in	fine sandy loam	moderately rapid	0.28 to 0.47 in	4.5 to 6.0
Bw1 -- 8 to 19 in	loamy fine sand	rapid	1.10 to 1.76 in	4.5 to 6.5
Bw2 -- 19 to 27 in	loamy fine sand	rapid	0.50 to 0.83 in	5.1 to 6.5
Bg -- 27 to 53 in	fine sand	rapid	1.56 to 2.60 in	5.1 to 6.5
C -- 53 to 80 in	fine sand	rapid	1.61 to 2.68 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F172B--Westoo-Barber-Vasso complex, MLRA 93A, 0 to 6 percent slopes

Vasso

Extent: 15 to 25 percent of the unit

Landform(s): lake plains

Slope gradient: 0 to 3 percent

Parent material: sandy eolian or glaciolacustrine material and underlying loamy glaciolacustrine sediments

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.75 in	4.5 to 6.0
E -- 4 to 6 in	fine sandy loam	moderately rapid	0.18 to 0.33 in	4.5 to 6.0
Bw1 -- 6 to 18 in	loamy fine sand	rapid	0.37 to 1.22 in	4.5 to 6.5
Bw2 -- 18 to 38 in	fine sand	rapid	0.60 to 2.01 in	5.1 to 6.5
2Bg -- 38 to 50 in	stratified loamy fine sand to loamy very fine sand to fine sandy loam to very fine sandy loam to silt loam	moderately rapid	1.30 to 1.89 in	5.1 to 6.5
2Cg -- 50 to 80 in	stratified loamy fine sand to loamy very fine sand to fine sandy loam to very fine sandy loam to silt loam	moderately rapid	3.29 to 4.79 in	5.6 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F173A--Wabuse-Vasso complex, MLRA 93A, 0 to 3 percent slopes

Wabuse

Extent: 30 to 50 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

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) .17

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	4.5 to 6.0
Bg1 --	9 to 16 in	loamy fine sand	rapid	0.28 to 0.78 in	4.5 to 6.0
Bg2 --	16 to 27 in	loamy sand	rapid	0.44 to 1.21 in	5.1 to 6.5
Bg3 --	27 to 32 in	loamy coarse sand	rapid	0.19 to 0.52 in	5.1 to 6.5
2Bg4 --	32 to 54 in	silt loam	moderate	3.75 to 4.85 in	5.6 to 6.5
2Cg --	54 to 80 in	silt loam	moderate	4.42 to 5.20 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F173A--Wabuse-Vasso complex, MLRA 93A, 0 to 3 percent slopes

Vasso

Extent: 20 to 40 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	fine sandy loam	moderately rapid	0.63 to 0.75 in	4.5 to 6.0
E --	4 to 6 in	fine sandy loam	moderately rapid	0.18 to 0.33 in	4.5 to 6.0
Bw1 --	6 to 18 in	loamy fine sand	rapid	0.37 to 1.22 in	4.5 to 6.5
Bw2 --	18 to 38 in	fine sand	rapid	0.60 to 2.01 in	5.1 to 6.5
2Bg --	38 to 50 in	silt loam	moderate	2.01 to 2.60 in	5.6 to 6.5
2Cg --	50 to 80 in	silt loam	moderate	5.09 to 5.98 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F176A--Sago muck, depressional, 0 to 1 percent slopes

Sago, depressional

Extent: 70 to 90 percent of the unit

Landform(s): depressions on outwash plains, drainageways on outwash plains, flats on outwash plains, depressions on till plains, drainageways on till plains, flats on till plains

Slope gradient: 0 to 1 percent

Parent material: organic material over glaciofluvial sediments

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)

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 13 in	muck	moderately rapid	4.55 to 5.85 in	
A --	13 to 15 in	fine sandy loam	moderately rapid	0.22 to 0.41 in	4.5 to 6.0
Bg --	15 to 41 in	stratified loamy fine sand to loamy very fine sand to fine sandy loam to very fine sandy loam to silt loam	moderately rapid	3.38 to 4.94 in	5.1 to 6.5
Cg --	41 to 80 in	stratified loamy fine sand to silt loam	moderately rapid	5.07 to 7.41 in	5.6 to 7.3

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F189B--Suomi-Ashlake complex, 1 to 8 percent slopes

Suomi

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 3 to 8 percent

Parent material: 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) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Ashlake

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 4 percent

Parent material: 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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loam	moderate	0.24 to 0.26 in	5.1 to 7.3
E -- 1 to 4 in	loam	moderate	0.36 to 0.52 in	5.1 to 7.3
E/B -- 4 to 9 in	loam	moderate	0.72 to 0.97 in	5.1 to 7.3
Bt -- 9 to 26 in	silty clay	slow	1.69 to 3.05 in	5.1 to 7.3
Bk -- 26 to 80 in	clay loam	moderately slow	7.55 to 9.71 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F190B--Ashlake-Effie complex, 0 to 4 percent slopes

Ashlake

Extent: 45 to 75 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 4 percent

Parent material: 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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 1 in	loam	moderate	0.24 to 0.26 in	5.1 to 7.3
E -- 1 to 4 in	loam	moderate	0.36 to 0.52 in	5.1 to 7.3
E/B -- 4 to 9 in	loam	moderate	0.72 to 0.97 in	5.1 to 7.3
Bt -- 9 to 26 in	silty clay	slow	1.69 to 3.05 in	5.1 to 7.3
Bk -- 26 to 80 in	clay loam	moderately slow	7.55 to 9.71 in	7.4 to 8.4

Effie

Extent: 15 to 35 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: 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) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.39 to 0.43 in	5.1 to 7.3
Eg -- 2 to 5 in	loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 5 to 8 in	silty clay loam	slow	0.39 to 0.52 in	5.1 to 7.3
Btg -- 8 to 20 in	silty clay	slow	1.22 to 2.20 in	5.1 to 7.8
BCg -- 20 to 64 in	silty clay loam	moderately slow	6.17 to 7.94 in	7.4 to 8.4
Cg -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.83 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F190B--Ashlake-Effie complex, 0 to 4 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F191A--Little Swan-Spooner complex, 0 to 3 percent slopes

Little Swan

Extent: 40 to 65 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: silty glaciolacustrine deposits

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) .43

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.6 to 7.3
E -- 4 to 11 in	silt loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt -- 11 to 32 in	silty clay loam	moderately slow	3.76 to 4.59 in	6.1 to 7.3
Cg1 -- 32 to 41 in	silt loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Cg2 -- 41 to 80 in	silt loam	moderate	6.63 to 8.57 in	7.4 to 8.4

Spooner

Extent: 20 to 40 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 5 in	silt loam	moderate	1.13 to 1.23 in	5.6 to 7.3
Eg -- 5 to 9 in	very fine sandy loam	moderate	0.67 to 0.87 in	5.6 to 7.3
Btg -- 9 to 30 in	silty clay loam	moderately slow	3.76 to 4.59 in	6.1 to 7.3
Bkg -- 30 to 57 in	silt loam	moderate	4.62 to 5.98 in	7.4 to 8.4
Cg -- 57 to 80 in	silt loam	moderate	3.88 to 5.02 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F192B--Baudette-Littleswan complex, 1 to 8 percent slopes

Baudette

Extent: 40 to 65 percent of the unit

Landform(s): lake plains

Slope gradient: 3 to 8 percent

Parent material: silty 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.6 to 7.3
E -- 4 to 8 in	silt loam	moderate	0.74 to 0.95 in	5.6 to 7.3
B/E -- 8 to 13 in	silty clay loam	moderately slow	0.80 to 1.04 in	6.1 to 7.3
Bt -- 13 to 39 in	silty clay loam	moderately slow	4.35 to 5.63 in	6.1 to 7.8
C -- 39 to 80 in	silt loam	moderate	7.03 to 9.09 in	7.4 to 8.4

Littleswan

Extent: 15 to 40 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 4 percent

Parent material: silty glaciolacustrine deposits

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) .43

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.6 to 7.3
E -- 4 to 11 in	silt loam	moderate	1.20 to 1.56 in	5.6 to 7.3
Bt -- 11 to 32 in	silty clay loam	moderately slow	3.76 to 4.59 in	6.1 to 7.3
Cg1 -- 32 to 41 in	silt loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Cg2 -- 41 to 80 in	silt loam	moderate	6.63 to 8.57 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F193A--Effie-Hamre complex, 0 to 2 percent slopes

Effie

Extent: 30 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: 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) .28

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loam	moderate	0.39 to 0.43 in	5.1 to 7.3
Eg -- 2 to 5 in	loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 5 to 8 in	silty clay loam	slow	0.39 to 0.52 in	5.1 to 7.3
Btg -- 8 to 20 in	silty clay	slow	1.22 to 2.20 in	5.1 to 7.8
BCg -- 20 to 64 in	silty clay loam	moderately slow	6.17 to 7.94 in	7.4 to 8.4
Cg -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.83 in	7.4 to 8.4

Hamre

Extent: 15 to 40 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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)

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 10 in	muck	moderately rapid	3.94 to 4.43 in	
A -- 10 to 15 in	loam	moderate	1.02 to 1.13 in	5.1 to 7.3
Bg -- 15 to 27 in	silty clay loam	moderately slow	1.71 to 2.20 in	6.1 to 7.8
BCg -- 27 to 35 in	silty clay loam	moderately slow	1.10 to 1.42 in	7.4 to 8.4
Cg -- 35 to 80 in	clay loam	moderately slow	6.28 to 8.08 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F193A--Effie-Hamre complex, 0 to 2 percent slopes

F194D--Suomi loam, 8 to 18 percent slopes

Suomi

Extent: 55 to 75 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: 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) .28

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F195B--Aquepts-Wahlsten-Rock outcrop complex, 1 to 8 percent slopes, very stony

Typic Epiaquepts, very stony, moderately deep

Extent: 15 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 5 percent

Parent material: loamy drift

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
R -- 30 to 80 in	bedrock	very slow		

Wahlsten, very stony

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 5 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F195B--Aquepts-Wahlsten-Rock outcrop complex, 1 to 8 percent slopes, very stony

Rock outcrop

Extent: 10 to 20 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F196A--Spoooner-Sax complex, 0 to 1 percent slopes

Spoooner

Extent: 40 to 50 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 1 percent

Parent material: silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 5 in	silt loam	moderate	1.13 to 1.23 in	5.6 to 7.3
Eg -- 5 to 9 in	very fine sandy loam	moderate	0.67 to 0.87 in	5.6 to 7.3
Btg -- 9 to 30 in	silty clay loam	moderately slow	3.76 to 4.59 in	6.1 to 7.3
Bkg -- 30 to 57 in	silt loam	moderate	4.62 to 5.98 in	7.4 to 8.4
Cg -- 57 to 80 in	silt loam	moderate	3.88 to 5.02 in	7.4 to 8.4

Sax

Extent: 20 to 50 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over silty glaciolacustrine deposits

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)

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 13 in	muck	moderately rapid	4.55 to 6.24 in	
A -- 13 to 15 in	silt loam	moderate	0.43 to 0.51 in	5.6 to 7.3
Bg -- 15 to 36 in	silt loam	moderate	3.76 to 4.59 in	5.6 to 7.3
Cg -- 36 to 80 in	silt loam	moderate	7.50 to 9.70 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F197B--Cutaway-Biwabik complex, 1 to 8 percent slopes

Cutaway

<p><i>Extent:</i> 40 to 60 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> sandy outwash over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 4</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .10</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
E -- 3 to 14 in	sand	very rapid	0.33 to 0.99 in	5.1 to 6.5
E/B -- 14 to 31 in	sand	rapid	0.51 to 1.86 in	4.5 to 6.0
2Bt -- 31 to 39 in	silty clay	slow	0.79 to 1.42 in	5.1 to 7.3
2Bk -- 39 to 50 in	clay loam	moderately slow	1.54 to 1.98 in	7.4 to 8.4
2C -- 50 to 80 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Biwabik

<p><i>Extent:</i> 20 to 40 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .15</p> <p><i>Land capability, nonirrigated</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and Bt -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F197B--Cutaway-Biwabik complex, 1 to 8 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F198D--Cutaway-Suomi-Conic, bouldery, complex, 6 to 25 percent slopes

Cutaway

<p><i>Extent:</i> 25 to 50 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> sandy outwash over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 4</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .10</p> <p><i>Land capability, nonirrigated</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
E -- 3 to 14 in	sand	very rapid	0.33 to 0.99 in	5.1 to 6.5
E/B -- 14 to 31 in	sand	rapid	0.51 to 1.86 in	4.5 to 6.0
2Bt -- 31 to 39 in	silty clay	slow	0.79 to 1.42 in	5.1 to 7.3
2Bk -- 39 to 50 in	clay loam	moderately slow	1.54 to 1.98 in	7.4 to 8.4
2C -- 50 to 80 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Suomi

<p><i>Extent:</i> 20 to 50 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 8 to 18 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 3e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F198D--Cutaway-Suomi-Conic, bouldery, complex, 6 to 25 percent slopes

Conic, bouldery

Extent: 10 to 20 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 25 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 12 to 30 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F199B--Cutaway-Suomi complex, 1 to 8 percent slopes

Cutaway

<p><i>Extent:</i> 15 to 40 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> sandy outwash over till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 4</p> <p><i>Wind erodibility group (WEG):</i> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .10</p> <p><i>Land capability, nonirrigated</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
E -- 3 to 14 in	sand	very rapid	0.33 to 0.99 in	5.1 to 6.5
E/B -- 14 to 31 in	sand	rapid	0.51 to 1.86 in	4.5 to 6.0
2Bt -- 31 to 39 in	silty clay	slow	0.79 to 1.42 in	5.1 to 7.3
2Bk -- 39 to 50 in	clay loam	moderately slow	1.54 to 1.98 in	7.4 to 8.4
2C -- 50 to 80 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Suomi

<p><i>Extent:</i> 10 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 5</p> <p><i>Wind erodibility index (WEI):</i> 56</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated</i> 2e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	loam	moderate	0.79 to 0.87 in	5.1 to 7.3
E -- 4 to 7 in	silt loam	moderate	0.47 to 0.69 in	5.1 to 7.3
B/E -- 7 to 11 in	silty clay loam	slow	0.55 to 0.75 in	5.1 to 7.3
Bt -- 11 to 39 in	silty clay	slow	2.80 to 5.03 in	5.1 to 7.3
BC -- 39 to 80 in	clay loam	moderately slow	5.73 to 7.37 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F199B--Cutaway-Suomi complex, 1 to 8 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F200A--Northwood-Hassman-Cathro soils, 0 to 1 percent slopes

Northwood

<i>Extent:</i> 0 to 90 percent of the unit	<i>Soil loss tolerance (T factor):</i> 1
<i>Landform(s):</i> depressions on moraines	<i>Wind erodibility group (WEG):</i> 2
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 134
<i>Parent material:</i> herbaceous organic material over sandy glaciolacustrine deposits over till	<i>Kw factor (surface layer)</i>
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 6w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 9 in	muck	moderately rapid	3.62 to 4.07 in	
A -- 9 to 14 in	sandy loam	moderately rapid	0.67 to 0.77 in	4.5 to 6.0
Bg -- 14 to 24 in	sand	very rapid	0.30 to 0.89 in	5.1 to 6.5
2BCkg -- 24 to 64 in	silty clay loam	moderately slow	5.62 to 7.23 in	7.4 to 8.4
2Cg -- 64 to 80 in	clay loam	moderately slow	2.20 to 2.83 in	7.4 to 8.4

Hassman, depressional

<i>Extent:</i> 0 to 90 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> clayey glaciolacustrine deposits	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 6w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	5.1 to 6.5
Bg -- 10 to 32 in	silty clay	slow	1.98 to 4.19 in	5.1 to 7.3
BCg -- 32 to 45 in	silty clay	slow	1.17 to 2.47 in	5.6 to 7.8
Cg -- 45 to 80 in	silty clay	slow	3.15 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F200A--Northwood-Hassman-Cathro soils, 0 to 1 percent slopes

Cathro

Extent: 0 to 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over 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)

Land capability, nonirrigated 7w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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 1.13 in	5.1 to 6.5
Cg -- 40 to 80 in	loam	moderate	5.17 to 7.56 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F201B--Rollins-Biwabik-Friendship complex, 0 to 8 percent slopes

Rollins

<p><i>Extent:</i> 30 to 50 percent of the unit</p> <p><i>Landform(s):</i> moraines, outwash plains</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> loamy drift over gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .20</p> <p><i>Land capability, nonirrigated</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Biwabik

<p><i>Extent:</i> 30 to 50 percent of the unit</p> <p><i>Landform(s):</i> moraines, outwash plains</p> <p><i>Slope gradient:</i> 1 to 8 percent</p> <p><i>Parent material:</i> gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .15</p> <p><i>Land capability, nonirrigated</i> 4s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and Bt -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F201B--Rollins-Biwabik-Friendship complex, 0 to 8 percent slopes

Friendship

Extent: 5 to 20 percent of the unit

Landform(s): moraines, outwash plains

Slope gradient: 0 to 4 percent

Parent material: sandy 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) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
Bw1 -- 3 to 24 in	sand	rapid	0.63 to 2.30 in	4.5 to 6.0
Bw2 -- 24 to 40 in	sand	rapid	0.32 to 1.13 in	4.5 to 6.0
C -- 40 to 80 in	sand	rapid	0.80 to 2.78 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F202B--Ricelake-Cutaway complex, 1 to 4 percent slopes

Ricelake

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 3 percent

Parent material: sandy outwash over 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy sand	rapid	0.16 to 0.24 in	5.1 to 6.5
E -- 2 to 23 in	sand	very rapid	0.63 to 1.88 in	5.1 to 6.5
Bt -- 23 to 30 in	sandy loam	moderately rapid	0.78 to 1.13 in	5.6 to 7.3
Bw -- 30 to 35 in	sand	very rapid	0.15 to 0.46 in	5.6 to 7.3
2C -- 35 to 80 in	clay loam	moderately slow	6.28 to 8.08 in	7.4 to 8.4

Cutaway

Extent: 20 to 40 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 4 percent

Parent material: sandy outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	loamy sand	rapid	0.31 to 0.38 in	4.5 to 6.0
E -- 3 to 14 in	sand	very rapid	0.33 to 0.99 in	5.1 to 6.5
E/B -- 14 to 31 in	sand	rapid	0.51 to 1.86 in	4.5 to 6.0
2Bt -- 31 to 39 in	silty clay	slow	0.79 to 1.42 in	5.1 to 7.3
2Bk -- 39 to 50 in	clay loam	moderately slow	1.54 to 1.98 in	7.4 to 8.4
2C -- 50 to 80 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F202B--Ricelake-Cutaway complex, 1 to 4 percent slopes

F204D--Debs silt loam, MLRA 93A, 8 to 18 percent slopes

Debs

Extent: 60 to 85 percent of the unit

Landform(s): lake plains

Slope gradient: 8 to 18 percent

Parent material: silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	silt loam	moderate	0.69 to 0.76 in	5.6 to 7.3
E -- 3 to 5 in	silt loam	moderate	0.33 to 0.43 in	5.6 to 7.3
Bt -- 5 to 28 in	silty clay loam	moderately slow	3.88 to 5.02 in	6.1 to 7.8
Bk -- 28 to 45 in	silt loam	moderate	2.88 to 3.72 in	7.4 to 8.4
C -- 45 to 80 in	silt loam	moderate	5.96 to 7.71 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F205D--Rollins-Biwabik complex, suomi catena, 8 to 18 percent slopes

Rollins

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: loamy material over 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) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.51 to 0.72 in	4.5 to 6.0
Bw -- 5 to 14 in	gravelly sandy loam	moderately rapid	0.81 to 1.45 in	4.5 to 6.0
2BC -- 14 to 25 in	very gravelly sand	rapid	0.22 to 0.55 in	4.5 to 6.0
2C -- 25 to 80 in	very gravelly coarse sand	very rapid	0.55 to 2.74 in	5.1 to 6.5

Biwabik

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 18 percent

Parent material: gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	sandy loam	moderately rapid	0.24 to 0.30 in	4.5 to 6.0
Bw -- 2 to 9 in	gravelly sandy loam	moderately rapid	0.64 to 0.92 in	4.5 to 6.0
E -- 9 to 32 in	gravelly loamy sand	rapid	0.69 to 1.60 in	4.5 to 6.0
E and Bt -- 32 to 64 in	gravelly loamy sand	rapid	0.97 to 1.94 in	5.1 to 6.0
C -- 64 to 80 in	gravelly coarse sand	very rapid	0.31 to 0.94 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F206B--Wahlsten, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 12 percent slopes

Wahlsten, bouldery

<p><i>Extent:</i> 30 to 60 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 3 to 8 percent</p> <p><i>Parent material:</i> loamy drift over dense gravelly lodgment till over bedrock</p> <p><i>Restrictive feature(s):</i> densic material at 15 to 35 inches lithic bedrock at 20 to 40 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .20</p> <p><i>Land capability, nonirrigated</i> 6s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stonny loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stonny loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Rock outcrop

<p><i>Extent:</i> 10 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 0 to 12 percent</p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> lithic bedrock at 0 to 0 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 8s</p> <p><i>Hydric soil:</i> unranked</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F206B--Wahlsten, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 12 percent slopes

Aquepts, rubbly, depressional

Extent: 5 to 20 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F206D--Wahlsten, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 25 percent slopes

Rock outcrop

Extent: 20 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 25 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Wahlsten, bouldery

Extent: 20 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F206D--Wahlsten, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 25 percent slopes

Aquepts, rubbly, depressional

Extent: 5 to 25 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg --	4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg --	40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F207F--Insula, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 50 percent slopes

Insula, bouldery

Extent: 30 to 60 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 35 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	gravelly sandy loam	moderately rapid	0.28 to 0.44 in	4.5 to 6.0
Bw1 -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.63 to 1.26 in	4.5 to 6.0
Bw2 -- 11 to 17 in	gravelly fine sandy loam	moderately rapid	0.41 to 0.89 in	5.1 to 6.5
R -- 17 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 20 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 50 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F207F--Insula, bouldery-Rock outcrop-Aquepts, rubbly, complex, 0 to 50 percent slopes

Aquepts, rubbly, depressional

Extent: 5 to 25 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 1 percent

Parent material: glaciofluvial sediments

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) .05

Land capability, nonirrigated 8s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg --	4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg --	40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F208B--Babbitt, bouldery-Wahlsten, bouldery-Canthook complex, 0 to 8 percent slopes

Babbitt, bouldery

Extent: 20 to 50 percent of the unit

Landform(s): -- error in exists on --

Slope gradient: 0 to 3 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 --	5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 --	14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC --	30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd --	50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F208B--Babbitt, bouldery-Wahlsten, bouldery-Canthook complex, 0 to 8 percent slopes

Wahlsten, bouldery

Extent: 20 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 8 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 15 to 35 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 9 in	stony loam	moderate	0.59 to 1.06 in	4.5 to 6.0
Bw2 -- 9 to 17 in	gravelly loam	moderate	0.63 to 1.26 in	5.1 to 6.5
2Cd -- 17 to 37 in	very gravelly sandy loam	slow	0.60 to 1.41 in	5.1 to 6.5
R -- 37 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F208B--Babbitt, bouldery-Wahlsten, bouldery-Canthook complex, 0 to 8 percent slopes

Canthook

Extent: 10 to 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

Restrictive feature(s): abrupt textural change at 20 to 39 i

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

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
Eg,Bg --	4 to 26 in	loamy sand	rapid	1.10 to 1.76 in	5.6 to 7.3
2Bt --	26 to 38 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	1.71 to 1.95 in	5.6 to 7.3
2BC --	38 to 54 in	silty clay loam	slow	2.83 to 3.15 in	7.4 to 8.4
2C --	54 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	4.68 to 5.20 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F209D--Conic, bouldery-Rock outcrop-Eaglesnest, bouldery, complex, 0 to 18 percent slopes

Conic, bouldery

Extent: 30 to 50 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 18 percent

Parent material: loamy drift over dense gravelly lodgment till over bedrock

Restrictive feature(s): densic material at 12 to 30 inches
lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Rock outcrop

Extent: 10 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 18 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 0 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 8s

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F209D--Conic, bouldery-Rock outcrop-Eaglesnest, bouldery, complex, 0 to 18 percent slopes

Eaglesnest, bouldery

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 10 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 -- 3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 -- 6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 -- 20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC -- 28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd -- 41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F209E--Conic, bouldery-Rock outcrop-Eveleth, bouldery, complex, 0 to 35 percent slopes

Conic, bouldery

<p><i>Extent:</i> 30 to 50 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 2 to 18 percent</p> <p><i>Parent material:</i> loamy drift over dense gravelly lodgment till over bedrock</p> <p><i>Restrictive feature(s):</i> densic material at 12 to 30 inches lithic bedrock at 20 to 40 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 6e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	stony loam	moderate	0.31 to 0.50 in	4.5 to 6.0
Bw -- 3 to 9 in	stony loam	moderate	0.53 to 0.89 in	4.5 to 6.0
BC -- 9 to 18 in	cobbly sandy loam	moderate	0.63 to 1.27 in	5.1 to 6.5
Cd -- 18 to 29 in	very gravelly coarse sandy loam	slow	0.22 to 0.77 in	5.1 to 6.5
R -- 29 to 80 in	bedrock	very slow		

Rock outcrop

<p><i>Extent:</i> 10 to 30 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i> 0 to 35 percent</p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> lithic bedrock at 0 to 0 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated</i> 8s</p> <p><i>Hydric soil:</i> unranked</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F209E--Conic, bouldery-Rock outcrop-Eveleth, bouldery, complex, 0 to 35 percent slopes

Eveleth, bouldery

Extent: 15 to 30 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 35 percent

Parent material: loamy drift over dense gravelly lodgment till

Restrictive feature(s): densic material at 35 to 55 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	stony loam	moderate	0.51 to 0.75 in	4.5 to 6.0
Bw1 --	4 to 13 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 --	13 to 23 in	cobbly loam	moderate	0.69 to 1.57 in	5.1 to 6.5
2BC --	23 to 43 in	very gravelly sandy loam	moderately slow	0.80 to 1.81 in	5.1 to 6.5
2Cd --	43 to 80 in	very gravelly sandy loam	slow	0.74 to 1.85 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F210B--Babbitt-Lithic Endoaquepts-Eaglesnest complex, 0 to 8 percent slopes, bouldery

Babbitt, bouldery

Extent: 20 to 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 3 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	stony loam	moderate	0.67 to 0.97 in	4.5 to 6.0
Bw1 -- 5 to 14 in	stony loam	moderate	0.72 to 1.45 in	4.5 to 6.0
Bw2 -- 14 to 30 in	gravelly sandy loam	moderate	1.10 to 2.36 in	5.1 to 6.5
2BC -- 30 to 50 in	very gravelly sandy loam	moderately slow	1.20 to 2.81 in	5.1 to 6.5
2Cd -- 50 to 80 in	very gravelly sandy loam	slow	0.60 to 1.50 in	5.1 to 6.5

Lithic Endoaquepts, bouldery

Extent: 5 to 15 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: loamy drift over bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer)

Land capability, nonirrigated 6s

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe -- 0 to 3 in	mucky peat	rapid	1.42 to 1.73 in	
A -- 3 to 11 in	gravelly sandy loam	moderately rapid	0.71 to 1.10 in	4.5 to 6.0
Bg -- 11 to 18 in	gravelly fine sandy loam	moderately rapid	0.50 to 1.06 in	5.1 to 6.5
R -- 18 to 80 in	bedrock	very slow		

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F210B--Babbitt-Lithic Endoaquepts-Eaglesnest complex, 0 to 8 percent slopes, bouldery

Eaglesnest, bouldery

Extent: 10 to 20 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: loamy drift over dense gravelly lodgment 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .15

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 3 in	stony loam	moderate	0.41 to 0.60 in	4.5 to 6.0
Bw1 --	3 to 6 in	stony loam	moderate	0.22 to 0.44 in	4.5 to 6.0
Bw2 --	6 to 20 in	stony sandy loam	moderate	0.99 to 2.13 in	5.1 to 6.5
Bw3 --	20 to 28 in	very stony sandy loam	moderate	0.47 to 1.02 in	5.1 to 6.5
2BC --	28 to 41 in	very cobbly sandy loam	moderately slow	0.52 to 1.17 in	5.1 to 6.5
2Cd --	41 to 80 in	very cobbly sandy loam	slow	0.78 to 1.95 in	5.1 to 6.5

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F211B--Durkeelake-Canthook-Longsiding complex, 0 to 6 percent slopes

Durkeelake

Extent: 20 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

Restrictive feature(s): abrupt textural change at 20 to 39 i

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 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 6 in	fine sandy loam	moderately rapid	0.77 to 0.89 in	5.6 to 7.3
E,Bw --	6 to 22 in	loamy sand	rapid	0.81 to 1.29 in	5.6 to 7.3
B/E --	22 to 31 in	loam, fine sandy loam	moderate	1.47 to 1.65 in	5.6 to 7.3
2Bt --	31 to 34 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	0.50 to 0.57 in	5.6 to 7.3
2BC --	34 to 37 in	silty clay loam	slow	0.50 to 0.55 in	7.4 to 8.4
2C --	37 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	7.72 to 8.58 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F211B--Durkeelake-Canhook-Longsiding complex, 0 to 6 percent slopes

Canhook

Extent: 20 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine deposits

Restrictive feature(s): abrupt textural change at 20 to 39 i

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
Eg,Bg -- 4 to 26 in	loamy sand	rapid	1.10 to 1.76 in	5.6 to 7.3
2Bt -- 26 to 38 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	1.71 to 1.95 in	5.6 to 7.3
2BC -- 38 to 54 in	silty clay loam	slow	2.83 to 3.15 in	7.4 to 8.4
2C -- 54 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	4.68 to 5.20 in	7.4 to 8.4

Longsiding

Extent: 10 to 25 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 3 percent

Parent material: glaciolacustrine deposits

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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.55 in	5.1 to 7.3
Bt1,Bt3 -- 12 to 35 in	silty clay	slow	2.09 to 4.41 in	5.1 to 7.3
Bk,C -- 35 to 80 in	silty clay loam	moderately slow	8.08 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F211B--Durkeelake-Canthook-Longsiding complex, 0 to 6 percent slopes

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F212A--Canthook-Bootleg-Foglake complex, 0 to 3 percent slopes

Canthook

Extent: 20 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 2 to 3 percent

Parent material: clayey glaciolacustrine deposits

Restrictive feature(s): abrupt textural change at 20 to 39 i

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
Eg,Bg -- 4 to 26 in	loamy sand	rapid	1.10 to 1.76 in	5.6 to 7.3
2Bt -- 26 to 38 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	1.71 to 1.95 in	5.6 to 7.3
2BC -- 38 to 54 in	silty clay loam	slow	2.83 to 3.15 in	7.4 to 8.4
2C -- 54 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	4.68 to 5.20 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F212A--Canthook-Bootleg-Foglake complex, 0 to 3 percent slopes

Bootleg

Extent: 20 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

Restrictive feature(s): abrupt textural change at 20 to 39 i

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) .15

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 6 in	fine sandy loam	moderately rapid	0.77 to 0.89 in	5.6 to 7.3
Eg,Bg --	6 to 21 in	loamy sand	rapid	0.75 to 1.20 in	5.6 to 7.3
2Bt --	21 to 38 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	2.43 to 2.77 in	5.6 to 7.3
2BCtg --	38 to 48 in	silty clay loam	slow	1.77 to 1.97 in	7.4 to 8.4
2C --	48 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	5.74 to 6.38 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F212A--Canthook-Bootleg-Foglake complex, 0 to 3 percent slopes

Foglake

Extent: 10 to 30 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F213B--Longsiding-Canthook-Foglake complex, 0 to 6 percent slopes

Longsiding

Extent: 30 to 50 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 3 percent

Parent material: glaciolacustrine deposits

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 3w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	1.99 to 2.17 in	5.1 to 6.5
B/E -- 9 to 12 in	silty clay loam	moderately slow	0.30 to 0.55 in	5.1 to 7.3
Bt1,Bt3 -- 12 to 35 in	silty clay	slow	2.09 to 4.41 in	5.1 to 7.3
Bk,C -- 35 to 80 in	silty clay loam	moderately slow	8.08 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F213B--Longsiding-Canthook-Foglake complex, 0 to 6 percent slopes

Canthook

Extent: 20 to 30 percent of the unit

Landform(s): flats on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy eolian, glaciolacustrine or outwash material and underlying loamy glaciolacustrine sediments

Restrictive feature(s): abrupt textural change at 20 to 39 i

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

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 4 in	sandy loam	moderately rapid	0.51 to 0.59 in	5.6 to 7.3
Eg,Bg --	4 to 26 in	loamy sand	rapid	1.10 to 1.76 in	5.6 to 7.3
2Bt --	26 to 38 in	stratified silty clay loam to clay loam to loam to fine sandy loam to sandy loam	moderately slow	1.71 to 1.95 in	5.6 to 7.3
2BC --	38 to 54 in	silty clay loam	slow	2.83 to 3.15 in	7.4 to 8.4
2C --	54 to 80 in	stratified silty clay loam to silty clay to silt loam	slow	4.68 to 5.20 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F213B--Longsiding-Canthook-Foglake complex, 0 to 6 percent slopes

Foglake

Extent: 15 to 25 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F214A--Aquepts, rubbly-Foglake-Hassman, depressional, complex, 0 to 2 percent slopes

Aquepts, rubbly, depressional

Extent: 20 to 40 percent of the unit
Landform(s): drainageways on moraines
Slope gradient: 0 to 1 percent
Parent material: glaciofluvial sediments
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): 8
Wind erodibility index (WEI): 0
Kw factor (surface layer) .05
Land capability, nonirrigated 8s
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 4 in	extremely stony sandy loam	moderate	0.16 to 0.31 in	4.5 to 6.0
Bg -- 4 to 40 in	very stony loam	moderate	1.45 to 4.71 in	4.5 to 6.0
Cg -- 40 to 80 in	cobbly sandy loam	moderately slow	2.78 to 6.36 in	5.1 to 6.5

Foglake

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

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .43
Land capability, nonirrigated 4w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	5.1 to 6.5
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	2.76 to 5.83 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

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F214A--Aquepts, rubbly-Foglake-Hassman, depressional, complex, 0 to 2 percent slopes

Hassman, depressional

Extent: 10 to 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: glaciolacustrine deposits

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) .28

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	5.1 to 6.5
Bg --	10 to 32 in	silty clay	slow	1.98 to 4.19 in	5.1 to 7.3
BCg --	32 to 45 in	silty clay	slow	1.17 to 2.47 in	5.6 to 7.8
Cg --	45 to 80 in	silty clay	slow	3.15 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

F216A--Mooselake muck, suomi catena, 0 to 1 percent slopes

Mooselake

Extent: 60 to 85 percent of the unit

Soil loss tolerance (T factor): 2

Landform(s): swamps on end moraines, swamps on outwash plains, swamps on till plains

Wind erodibility group (WEG): 2

Slope gradient: 0 to 1 percent

Wind erodibility index (WEI): 134

Parent material: organic material

Kw factor (surface layer)

Restrictive feature(s): greater than 60 inches

Land capability, nonirrigated 7w

Flooding: none

Hydric soil: yes

Ponding: frequent

Hydrologic group: A/D

Drainage class: very poorly drained

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 36 in	muck	moderately rapid	12.54 to 16.12 in	
Oe -- 36 to 80 in	mucky peat	rapid	19.84 to 24.25 in	

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

GP--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 60 to 95 percent of the unit

Landform(s): borrow pits on moraines, gravel pits on outwash plains, gravel pits on stream terraces

Slope gradient: 0 to 50 percent

Parent material: sandy and gravelly outwash

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: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Udipsamments

Extent: 5 to 40 percent of the unit

Landform(s): moraines, outwash plains, stream terraces, -- error in exists on --

Slope gradient: 0 to 25 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

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: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

I-W--Water, intermittent

Water, intermittent

Extent: 100 percent of the unit

Landform(s): lakeshores on lakes

Slope gradient: 0 to 0 percent

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: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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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: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

St. Louis County, Minnesota, Crane Lake Part

NOTCOM--No Digital Data Available

NOTCOM

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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W--Water

Water

Extent: 100 percent of the unit

Landform(s): lakes

Slope gradient: 0 to 0 percent

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: unranked

Hydrologic group:

Potential for frost action:

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