

Map Unit Description (MN)

Stearns County, Minnesota

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

5A--Dakota loam, 0 to 2 percent slopes

Dakota

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

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>
Ap,AB -- 0 to 16 in	loam	moderate	3.23 to 3.55 in	5.1 to 7.3
Bt -- 16 to 31 in	silt loam	moderate	2.24 to 2.84 in	5.1 to 7.3
2BC -- 31 to 45 in	coarse sand	rapid	0.28 to 1.93 in	5.1 to 7.3
2C -- 45 to 60 in	gravelly coarse sand	rapid	0.30 to 1.50 in	5.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

5B--Dakota loam, 2 to 6 percent slopes

Dakota

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.1 to 7.3
Bt -- 14 to 27 in	silt loam	moderate	1.95 to 2.47 in	5.1 to 7.3
2BC -- 31 to 45 in	coarse sand	rapid	0.28 to 1.93 in	5.1 to 7.3
2C -- 45 to 60 in	gravelly coarse sand	rapid	0.30 to 1.50 in	5.1 to 7.8

7A--Hubbard loamy sand, 0 to 2 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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>
Ap,AB -- 0 to 14 in	loamy sand	rapid	1.13 to 1.70 in	5.1 to 7.3
Bw,BC -- 14 to 48 in	sand	rapid	1.02 to 2.37 in	5.1 to 7.3
C -- 48 to 60 in	sand	rapid	0.35 to 0.83 in	6.1 to 7.3

Map Unit Description (MN)

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7B--Hubbard loamy sand, 2 to 6 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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>
Ap,AB -- 0 to 14 in	loamy sand	rapid	1.13 to 1.70 in	5.1 to 7.3
Bw,BC -- 14 to 48 in	sand	rapid	1.02 to 2.37 in	5.1 to 7.3
C -- 48 to 60 in	sand	rapid	0.35 to 0.83 in	6.1 to 7.3

7C--Hubbard loamy sand, 6 to 12 percent slopes

Hubbard

Extent: 90 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

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>
Ap,AB -- 0 to 13 in	loamy sand	rapid	1.04 to 1.56 in	5.1 to 7.3
Bw,BC -- 13 to 48 in	sand	rapid	1.05 to 2.45 in	5.1 to 7.3
C -- 48 to 60 in	sand	rapid	0.35 to 0.83 in	6.1 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

25--Becker fine sandy loam

Becker

Extent: 90 percent of the unit

Landform(s): stream terraces, flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2s

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>
A1 -- 0 to 16 in	fine sandy loam	moderately rapid	2.58 to 3.23 in	5.6 to 7.3
A2 -- 16 to 33 in	fine sandy loam	moderately rapid	2.54 to 3.39 in	5.6 to 7.3
2Bw -- 33 to 47 in	loamy fine sand	rapid	0.69 to 1.38 in	6.1 to 7.8
2C -- 47 to 60 in	fine sand	rapid	0.26 to 0.91 in	6.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

32B--Nebish sandy loam, 2 to 8 percent slopes

Nebish

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
E -- 5 to 12 in	sandy loam	moderately rapid	0.74 to 1.27 in	5.6 to 7.3
Bt -- 12 to 38 in	sandy clay loam	moderate	3.96 to 5.01 in	5.6 to 7.8
C -- 38 to 60 in	fine sandy loam	moderate	2.38 to 4.11 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

32C--Nebish sandy loam, 8 to 15 percent slopes

Nebish

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

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	sandy loam	moderately rapid	0.51 to 0.71 in	5.6 to 7.3
E -- 4 to 9 in	sandy loam	moderately rapid	0.56 to 0.97 in	5.6 to 7.3
Bt -- 9 to 31 in	sandy clay loam	moderate	3.31 to 4.19 in	5.6 to 7.8
C -- 31 to 60 in	fine sandy loam	moderate	3.16 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

32E--Nebish sandy loam, 15 to 25 percent slopes

Nebish

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 6e

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 5 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
E -- 5 to 10 in	sandy loam	moderately rapid	0.52 to 0.90 in	5.6 to 7.3
Bt -- 10 to 31 in	sandy clay loam	moderate	3.19 to 4.04 in	5.6 to 7.8
C -- 31 to 60 in	fine sandy loam	moderate	3.16 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

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32F--Nebish sandy loam, 25 to 40 percent slopes

Nebish

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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	sandy loam	moderately rapid	0.41 to 0.57 in	5.6 to 7.3
E -- 3 to 9 in	sandy loam	moderately rapid	0.65 to 1.12 in	5.6 to 7.3
Bt -- 9 to 24 in	sandy clay loam	moderate	2.24 to 2.84 in	5.6 to 7.8
C -- 24 to 60 in	fine sandy loam	moderate	3.94 to 6.81 in	7.4 to 8.4

35--Blue Earth mucky silt loam

Blue Earth

Extent: 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth

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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 3w

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	1.06 to 1.42 in	7.4 to 8.4
Cg -- 6 to 38 in	mucky silt loam	moderate	5.81 to 7.75 in	7.4 to 8.4
2Cg -- 38 to 60 in	silt loam	moderate	3.03 to 3.46 in	7.4 to 8.4

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36--Flom loam

Flom

Extent: 90 percent of the unit

Landform(s): swales 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

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,A -- 0 to 17 in	loam	moderate	3.05 to 4.06 in	6.1 to 7.8
Bg -- 17 to 24 in	clay loam	moderately slow	1.06 to 1.35 in	6.6 to 8.4
Cg -- 24 to 60 in	loam	moderately slow	5.02 to 6.81 in	7.4 to 8.4

38B--Waukon loam, 2 to 6 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	6.1 to 7.3
Bt -- 7 to 29 in	loam	moderate	3.31 to 4.19 in	6.1 to 7.8
C -- 29 to 60 in	loam	moderate	4.61 to 5.83 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

38C--Waukon loam, 6 to 12 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	6.1 to 7.3
Bt -- 7 to 29 in	loam	moderate	3.31 to 4.19 in	6.1 to 7.8
C -- 29 to 60 in	loam	moderate	4.61 to 5.83 in	7.4 to 8.4

38D--Waukon loam, 12 to 18 percent slopes

Waukon

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .20

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	6.1 to 7.3
Bt -- 7 to 28 in	loam	moderate	3.13 to 3.96 in	6.1 to 7.8
C -- 28 to 60 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

41A--Estherville sandy loam, 0 to 2 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 2.13 in	5.6 to 7.3
Bw -- 12 to 21 in	sandy loam	moderately rapid	1.00 to 1.45 in	5.6 to 7.3
2C -- 21 to 60 in	gravelly coarse sand	rapid	0.78 to 1.56 in	6.6 to 8.4

41B--Estherville sandy loam, 2 to 6 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bw -- 10 to 15 in	sandy loam	moderately rapid	0.56 to 0.82 in	5.6 to 7.3
2C -- 15 to 60 in	gravelly coarse sand	rapid	0.90 to 1.80 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

41C--Estherville sandy loam, 6 to 12 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bw -- 8 to 15 in	sandy loam	moderately rapid	0.78 to 1.13 in	5.6 to 7.3
2C -- 15 to 60 in	gravelly coarse sand	rapid	0.90 to 1.80 in	6.6 to 8.4

69B--Fedji loamy sand, 2 to 6 percent slopes

Fedji

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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>
Ap,AB -- 0 to 12 in	loamy sand	rapid	1.18 to 1.54 in	5.6 to 6.5
Bw -- 12 to 27 in	fine sand	rapid	1.38 to 1.69 in	6.1 to 7.3
2Bw -- 27 to 40 in	loam	moderate	2.21 to 2.47 in	6.1 to 7.3
2C -- 40 to 60 in	loam	moderate	3.35 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

72--Shooker loam

Shooker

Extent: 90 percent of the unit

Landform(s): drainageways 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) .37

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.42 in	5.6 to 7.3
E -- 6 to 15 in	loam	moderate	1.81 to 2.17 in	5.6 to 7.3
Bt -- 15 to 36 in	loam	moderate	3.13 to 3.96 in	5.6 to 7.8
C -- 36 to 60 in	loam	moderate	2.64 to 4.56 in	7.4 to 8.4

75--Bluffton loam

Bluffton

Extent: 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: 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) .28

Land capability, nonirrigated: 3w

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>
A1,A2 -- 0 to 19 in	loam	moderate	3.78 to 4.54 in	5.6 to 7.3
Bg -- 19 to 33 in	clay loam	moderate	2.13 to 2.41 in	5.6 to 7.3
Cg -- 33 to 60 in	loam	moderately slow	4.02 to 5.09 in	7.4 to 8.4

Map Unit Description (MN)

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109--Cordova loam

Cordova

Extent: 90 percent of the unit

Landform(s): drainageways 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

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,AB -- 0 to 13 in	loam	moderate	2.34 to 2.86 in	6.1 to 7.3
Bt1,Bt2 -- 13 to 30 in	clay loam	moderately slow	2.54 to 3.22 in	5.1 to 6.5
Bt3 -- 30 to 41 in	loam	moderate	1.54 to 1.76 in	5.5 to 7.4
BC,C -- 41 to 60 in	loam	moderate	2.65 to 3.02 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

114--Glencoe loam

Glencoe

Extent: 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

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,A1 -- 0 to 16 in	loam	moderate	2.91 to 3.55 in	6.1 to 7.8
A2 -- 16 to 41 in	silty clay loam	moderate	4.46 to 5.46 in	6.1 to 7.8
Bg -- 41 to 55 in	silty clay loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Cg -- 55 to 60 in	loam	moderate	0.71 to 0.90 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

119B--Pomroy fine sand, 1 to 6 percent slopes

Pomroy

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 1 to 6 percent

Parent material: outwash over till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 1

Wind erodibility index (WEI): 250

Kw factor (surface layer) .10

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>
Ap -- 0 to 9 in	fine sand	rapid	0.91 to 1.09 in	5.1 to 6.5
E -- 9 to 25 in	fine sand	rapid	0.97 to 1.61 in	5.1 to 6.5
Bt -- 25 to 29 in	gravelly loamy fine sand	moderately slow	0.24 to 0.39 in	5.1 to 6.5
2BC -- 29 to 39 in	sandy loam	moderately slow	0.79 to 1.28 in	5.6 to 7.3
2Cd -- 39 to 60 in	sandy loam	slow	0.63 to 2.09 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

125--Beltrami loam

Beltrami

Extent: 90 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: 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: 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>
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	6.1 to 7.3
E -- 6 to 15 in	loam	moderately rapid	1.00 to 1.72 in	5.6 to 7.3
Bt -- 15 to 35 in	loam	moderate	3.01 to 3.81 in	5.6 to 7.8
C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

129--Cylinder loam

Cylinder

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

Hydric soil: no

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,AB -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 26 in	loam	moderate	2.01 to 2.24 in	6.1 to 7.3
2BC,2C -- 26 to 60 in	gravelly coarse sand	very rapid	0.68 to 1.35 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

133B--Dalbo loam, 2 to 8 percent slopes

Dalbo

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 8 percent

Parent material: lacustrine 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) .28

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,AE -- 0 to 6 in	loam	moderate	1.30 to 1.42 in	5.6 to 7.3
B/E -- 6 to 14 in	very fine sandy loam	moderate	1.82 to 1.98 in	5.6 to 7.3
Bt -- 14 to 30 in	clay loam	moderately slow	1.57 to 2.83 in	5.1 to 7.3
2C -- 30 to 60 in	clay	moderate	2.99 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

142--Nokay fine sandy loam

Nokay

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 1 to 2 percent

Parent material: till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

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	fine sandy loam	moderately rapid	0.51 to 0.71 in	4.5 to 5.5
E -- 4 to 12 in	sandy loam	moderately rapid	0.94 to 1.50 in	4.5 to 5.5
Btg -- 12 to 24 in	sandy loam	moderate	1.46 to 2.32 in	5.1 to 6.5
Bt -- 24 to 40 in	sandy loam	moderately slow	1.29 to 2.10 in	5.6 to 7.3
Cd -- 40 to 60 in	sandy loam	slow	0.59 to 1.97 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

144B--Flak sandy loam, 4 to 8 percent slopes

Flak

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 4 to 8 percent

Parent material: till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: 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	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 19 in	sandy loam	moderately rapid	1.89 to 2.52 in	5.1 to 6.5
Bt1 -- 19 to 30 in	sandy loam	moderate	1.32 to 1.76 in	5.1 to 6.5
Bt2 -- 30 to 42 in	sandy loam	moderately slow	0.98 to 1.59 in	5.1 to 7.3
Cd -- 42 to 60 in	sandy loam	slow	0.53 to 1.77 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

144C--Flak sandy loam, 8 to 15 percent slopes

Flak

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 8 to 15 percent

Parent material: till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 19 in	sandy loam	moderately rapid	1.89 to 2.52 in	5.1 to 6.5
Bt1 -- 19 to 30 in	sandy loam	moderate	1.32 to 1.76 in	5.1 to 6.5
Bt2 -- 30 to 42 in	sandy loam	moderately slow	0.98 to 1.59 in	5.1 to 7.3
Cd -- 42 to 60 in	sandy loam	slow	0.53 to 1.77 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

144E--Flak sandy loam, 15 to 25 percent slopes

Flak

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 15 to 25 percent

Parent material: till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 19 in	sandy loam	moderately rapid	1.89 to 2.52 in	5.1 to 6.5
Bt1 -- 19 to 30 in	sandy loam	moderate	1.32 to 1.76 in	5.1 to 6.5
Bt2 -- 30 to 42 in	sandy loam	moderately slow	0.98 to 1.59 in	5.1 to 7.3
Cd -- 42 to 60 in	sandy loam	slow	0.53 to 1.77 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

155B--Chetek sandy loam, 1 to 6 percent slopes

Chetek

Extent: 90 percent of the unit
Landform(s): outwash plains, stream terraces
Slope gradient: 1 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,E -- 0 to 13 in	sandy loam	moderately rapid	1.30 to 1.95 in	5.1 to 7.3
Bt -- 13 to 23 in	sandy loam	moderately rapid	0.79 to 1.28 in	5.1 to 7.3
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	5.1 to 7.3

156A--Fairhaven loam, 0 to 2 percent slopes

Fairhaven

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

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
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>
Ap,A -- 0 to 15 in	loam	moderate	3.29 to 3.59 in	5.6 to 7.3
Bw -- 15 to 30 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
2BC,2C -- 30 to 60 in	coarse sand	rapid	0.60 to 1.20 in	6.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

156B--Fairhaven loam, 2 to 6 percent slopes

Fairhaven

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	3.12 to 3.40 in	5.6 to 7.3
Bw -- 14 to 30 in	loam	moderate	3.15 to 3.46 in	5.6 to 7.3
2BC,2C -- 30 to 60 in	coarse sand	rapid	0.60 to 1.20 in	6.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

159B--Anoka loamy sand, 2 to 8 percent slopes

Anoka

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 2 to 8 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 4 in	loamy sand	rapid	0.35 to 0.43 in	5.6 to 6.5
E -- 4 to 14 in	loamy sand	rapid	0.96 to 1.17 in	5.6 to 6.5
Bt -- 14 to 36 in	very fine sandy loam	moderate	2.17 to 3.46 in	5.1 to 6.5
E&Bt -- 36 to 65 in	fine sand	rapid	1.75 to 2.33 in	6.1 to 7.3
C -- 65 to 75 in	fine sand	rapid	0.59 to 0.79 in	6.1 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

163B--Brainerd fine sandy loam, 1 to 4 percent slopes

Brainerd

Extent: 90 percent of the unit

Landform(s): drumlins, moraines

Slope gradient: 1 to 4 percent

Parent material: till

Restrictive feature(s): densic material at 30 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) .24

Land capability, nonirrigated: 2s

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 6 in	fine sandy loam	moderately rapid	0.77 to 1.06 in	4.5 to 6.0
E -- 6 to 15 in	fine sandy loam	moderately rapid	1.09 to 1.45 in	4.5 to 6.0
Bt -- 15 to 27 in	sandy loam	moderate	1.46 to 1.95 in	5.1 to 6.5
BC -- 27 to 55 in	fine sandy loam	moderately slow	2.24 to 3.63 in	5.1 to 7.3
Cd -- 55 to 60 in	sandy loam	slow	0.14 to 0.47 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

179B--Langola loamy sand, 1 to 4 percent slopes

Langola

Extent: 90 percent of the unit

Landform(s): moraines, outwash plains

Slope gradient: 1 to 4 percent

Parent material: outwash over till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

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>
Ap,AB -- 0 to 19 in	loamy sand	rapid	1.89 to 2.27 in	5.1 to 6.5
Bw -- 19 to 38 in	fine sand	rapid	1.54 to 1.93 in	5.1 to 6.5
2BC -- 38 to 49 in	sandy loam	moderately slow	0.85 to 1.38 in	5.1 to 7.3
2Cd -- 49 to 60 in	sandy loam	slow	0.33 to 1.10 in	6.1 to 7.3

180A--Gonvick loam, 1 to 2 percent slopes

Gonvick

Extent: 90 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: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

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>
Ap,A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.1 to 7.3
Bt -- 12 to 30 in	clay loam	moderate	2.72 to 3.44 in	6.6 to 7.3
C -- 30 to 60 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

180B--Gonvick loam, 2 to 4 percent slopes

Gonvick

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 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) .32

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>
Ap,A -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.1 to 7.3
Bt -- 12 to 30 in	clay loam	moderate	2.72 to 3.44 in	6.6 to 7.3
C -- 30 to 60 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4

181--Litchfield loamy sand

Litchfield

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 1 to 3 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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>
Ap,AB -- 0 to 19 in	loamy sand	rapid	1.89 to 2.27 in	5.1 to 7.3
Bw1,Bw2 -- 19 to 35 in	fine sand	rapid	0.97 to 1.78 in	5.1 to 7.3
Bw3,BC -- 35 to 43 in	fine sandy loam	moderately rapid	0.55 to 1.26 in	5.1 to 7.3
C -- 43 to 60 in	sand	rapid	0.85 to 1.69 in	5.6 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

183--Dassel sandy loam

Dassel

Extent: 90 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 3w

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>
Ap,AB --	0 to 11 in	sandy loam	moderately rapid	1.76 to 2.20 in	5.6 to 7.3
Bg --	11 to 28 in	sandy loam	moderately rapid	2.03 to 2.88 in	5.6 to 7.3
C --	28 to 60 in	loamy sand	rapid	2.55 to 3.19 in	6.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

200B--Holdingford sandy loam, 4 to 8 percent slopes

Holdingford

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 4 to 8 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	sandy loam	moderate	1.02 to 1.18 in	5.1 to 7.3
E --	8 to 12 in	sandy loam	moderate	0.43 to 0.55 in	5.1 to 7.3
Bt --	12 to 37 in	sandy loam	moderate	3.02 to 4.79 in	5.1 to 7.3
C --	37 to 60 in	sandy loam	moderate	2.74 to 3.20 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

200C--Holdingford sandy loam, 8 to 15 percent slopes

Holdingford

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 6 in	sandy loam	moderate	0.77 to 0.89 in	5.1 to 7.3
E -- 6 to 10 in	sandy loam	moderate	0.43 to 0.55 in	5.1 to 7.3
Bt -- 10 to 32 in	sandy loam	moderate	2.65 to 4.19 in	5.1 to 7.3
C -- 32 to 60 in	sandy loam	moderate	3.35 to 3.91 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

204B--Cushing sandy loam, 2 to 8 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 5 in	sandy loam	moderate	0.51 to 1.13 in	5.1 to 7.8
E -- 5 to 15 in	sandy loam	moderate	0.98 to 2.17 in	5.1 to 7.8
B/E -- 15 to 19 in	sandy loam	moderate	0.39 to 0.87 in	5.1 to 7.8
Bt -- 19 to 47 in	sandy clay loam	moderate	2.80 to 5.31 in	5.1 to 7.8
C -- 47 to 60 in	sandy loam	moderately slow	1.17 to 2.47 in	5.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

204C--Cushing sandy loam, 8 to 15 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<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	moderate	0.51 to 1.13 in	5.1 to 7.8
E -- 5 to 12 in	sandy loam	moderate	0.67 to 1.47 in	5.1 to 7.8
B/E -- 12 to 19 in	sandy loam	moderate	0.71 to 1.56 in	5.1 to 7.8
Bt -- 19 to 31 in	sandy clay loam	moderate	1.22 to 2.32 in	5.1 to 7.8
C -- 31 to 60 in	sandy loam	moderately slow	2.59 to 5.46 in	5.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

204E--Cushing sandy loam, 15 to 25 percent slopes

Cushing

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<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	moderate	0.39 to 0.87 in	5.1 to 7.8
E -- 4 to 10 in	sandy loam	moderate	0.59 to 1.30 in	5.1 to 7.8
B/E -- 10 to 16 in	sandy loam	moderate	0.63 to 1.39 in	5.1 to 7.8
Bt -- 16 to 27 in	sandy clay loam	moderate	1.10 to 2.09 in	5.1 to 7.8
C -- 27 to 60 in	sandy loam	moderately slow	2.94 to 6.21 in	5.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

207B--Nymore loamy sand, 2 to 8 percent slopes

Nymore

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> outwash plains, stream terraces</p> <p><i>Slope gradient:</i> 2 to 8 percent</p> <p><i>Parent material:</i> 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</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,AB -- 0 to 9 in	loamy sand	rapid	0.91 to 1.09 in	5.1 to 6.5
Bw -- 9 to 40 in	sand	rapid	0.62 to 2.49 in	5.1 to 6.5
C -- 40 to 60 in	sand	rapid	0.39 to 1.57 in	5.1 to 7.3

207C--Nymore loamy sand, 8 to 15 percent slopes

Nymore

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> outwash plains, stream terraces</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</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,AB -- 0 to 6 in	loamy sand	rapid	0.59 to 0.71 in	5.1 to 6.5
Bw -- 6 to 36 in	sand	rapid	0.60 to 2.39 in	5.1 to 6.5
C -- 36 to 60 in	sand	rapid	0.48 to 1.92 in	5.1 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

207E--Nymore loamy sand, 15 to 25 percent slopes

Nymore

Extent: 100 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 15 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,AB -- 0 to 5 in	loamy sand	rapid	0.51 to 0.61 in	5.1 to 6.5
Bw -- 5 to 29 in	sand	rapid	0.48 to 1.92 in	5.1 to 6.5
C -- 29 to 60 in	sand	rapid	0.61 to 2.46 in	5.1 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

218--Watab loamy fine sand

Watab

Extent: 90 percent of the unit

Landform(s): swales on interdrumlins, swales on moraines

Slope gradient: 1 to 2 percent

Parent material: outwash over till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 3w

Hydric soil: yes

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	loamy fine sand	rapid	0.91 to 1.09 in	5.1 to 6.0
E -- 9 to 20 in	fine sand	rapid	0.66 to 0.99 in	5.1 to 6.5
2Bw1 -- 20 to 24 in	gravelly fine sandy loam	moderately rapid	0.43 to 0.63 in	5.1 to 6.5
2Bw2 -- 24 to 44 in	sandy loam	moderately slow	1.61 to 2.41 in	5.6 to 7.3
2Cd -- 44 to 60 in	sandy loam	slow	0.47 to 1.57 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

233B--Growton sandy loam, 1 to 4 percent slopes

Growton

Extent: 90 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

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>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.13 in	5.1 to 7.3
E -- 7 to 11 in	sandy loam	moderately rapid	0.43 to 0.59 in	5.1 to 7.3
Bt -- 11 to 37 in	sandy loam	moderate	3.12 to 4.94 in	5.1 to 7.3
2C -- 37 to 60 in	sandy loam	moderate	2.74 to 3.88 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

236--Vallers loam

Vallers

Extent: 90 percent of the unit

Landform(s): flats on moraines, rims on depressions 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

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	loam	moderate	1.73 to 1.89 in	7.4 to 8.4
Bkg -- 8 to 15 in	loam	moderately slow	1.06 to 1.35 in	7.4 to 8.4
C -- 15 to 60 in	loam	moderately slow	7.63 to 8.53 in	7.4 to 8.4

255--Mayer loam

Mayer

Extent: 90 percent of the unit

Landform(s): flats on stream terraces, rims on depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,ABg -- 0 to 24 in	loam	moderate	4.80 to 5.28 in	7.4 to 8.4
Bg -- 24 to 40 in	loam	moderate	2.58 to 3.07 in	7.4 to 8.4
2Cg -- 40 to 60 in	sand	rapid	0.39 to 0.79 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

260--Duelm loamy sand

Duelm

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> stream terraces, outwash plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> 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> 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> .10</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> 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 19 in	loamy sand	rapid	1.51 to 2.27 in	5.6 to 7.3
Bw -- 19 to 30 in	loamy sand	rapid	0.66 to 1.21 in	5.1 to 7.3
BC,C -- 30 to 60 in	coarse sand	rapid	0.60 to 2.09 in	5.6 to 7.3

261--Isan loamy sand

Isan

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> depressions on stream terraces, depressions on outwash plains</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> outwash</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> 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> 4w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> A/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,AB -- 0 to 20 in	loamy sand	rapid	1.61 to 2.41 in	5.6 to 7.3
Bg -- 20 to 29 in	coarse sand	rapid	0.54 to 0.91 in	5.1 to 7.3
C -- 29 to 60 in	sand	rapid	1.23 to 1.84 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

281--Darfur coarse sandy loam

Darfur

Extent: 90 percent of the unit

Landform(s): drainageways on outwash plains, drainageways on stream terraces

Slope gradient: 0 to 1 percent

Parent material: outwash

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) .15

Land capability, nonirrigated: 2w

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>
A,AB --	0 to 17 in	coarse sandy loam	moderately rapid	2.54 to 2.88 in	6.1 to 7.3
Bg --	17 to 30 in	sandy loam	moderately rapid	1.95 to 2.21 in	6.6 to 7.8
Cg --	30 to 60 in	stratified loamy sand to sandy loam to sand	moderately rapid	2.39 to 2.99 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

292B--Alstad sandy loam, 1 to 4 percent slopes

Alstad

Extent: 90 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

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 7 in	sandy loam	moderate	0.85 to 1.28 in	5.1 to 7.3
E -- 7 to 13 in	sandy loam	moderate	0.53 to 1.30 in	5.1 to 7.3
Bt1,Bt2 -- 13 to 35 in	sandy clay loam	moderate	1.98 to 3.97 in	5.1 to 7.8
Bt3 -- 35 to 46 in	sandy loam	moderate	0.99 to 1.98 in	5.6 to 7.8
C -- 46 to 60 in	sandy loam	moderate	1.24 to 2.48 in	6.1 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

318--Mayer loam, depressional

Mayer, depressional

Extent: 100 percent of the unit

Landform(s): depressions on outwash plains, depressions on stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 24 in	loam	moderate	4.80 to 5.28 in	7.4 to 8.4
Bg -- 24 to 40 in	loam	moderate	2.58 to 3.07 in	7.4 to 8.4
2Cg -- 40 to 60 in	coarse sand	rapid	0.39 to 0.79 in	7.4 to 8.4

325--Prebish sandy loam, depressional

Prebish, depressional

Extent: 90 percent of the unit

Landform(s): depressions on moraines, depressions on interdrumlins

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: frequent

Drainage class: very 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: 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 18 in	sandy loam	moderately rapid	2.90 to 3.26 in	5.6 to 7.3
Bg -- 18 to 47 in	sandy loam	moderate	4.02 to 4.60 in	5.6 to 7.3
2Cd -- 47 to 60 in	sandy loam	slow	0.39 to 1.30 in	5.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

327A--Dickman sandy loam, 0 to 2 percent slopes

Dickman

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat 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: 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>
Ap,AB -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	5.6 to 6.5
Bw -- 14 to 19 in	sandy loam	moderately rapid	0.57 to 0.66 in	5.6 to 7.3
2BC,2C -- 19 to 60 in	coarse sand	rapid	0.82 to 2.87 in	5.6 to 7.8

327B--Dickman sandy loam, 2 to 6 percent slopes

Dickman

Extent: 95 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: 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: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	5.6 to 6.5
Bw -- 14 to 16 in	sandy loam	moderately rapid	0.24 to 0.28 in	5.6 to 7.3
2BC,2C -- 16 to 60 in	coarse sand	rapid	0.87 to 3.06 in	5.6 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

392--Biscay loam

Biscay

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

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer): .28
Land capability, nonirrigated: 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 16 in	loam	moderate	3.23 to 3.55 in	6.1 to 7.8
Bg -- 16 to 26 in	loam	moderate	1.67 to 1.87 in	6.6 to 7.8
2C -- 26 to 60 in	gravelly coarse sand	rapid	0.68 to 1.35 in	6.6 to 8.4

399--Biscay loam, depressional

Biscay, depressional

Extent: 100 percent of the unit
Landform(s): depressions on outwash plains, depressions on stream terraces
Slope gradient: 0 to 1 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer): .28
Land capability, nonirrigated: 3w
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,AB -- 0 to 23 in	loam	moderate	4.57 to 5.02 in	6.1 to 7.8
Bg -- 23 to 27 in	loam	moderate	0.74 to 0.82 in	6.6 to 7.8
2C -- 27 to 60 in	gravelly coarse sand	rapid	0.65 to 1.31 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

406B--Dorset sandy loam, 2 to 8 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 8 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: 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: 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 7 in	sandy loam	moderately rapid	0.92 to 1.06 in	5.6 to 7.3
E -- 7 to 10 in	sandy loam	moderately rapid	0.33 to 0.41 in	5.6 to 7.3
Bt -- 10 to 19 in	sandy loam	moderately rapid	1.09 to 1.72 in	5.6 to 7.3
2BC -- 19 to 23 in	loamy sand	rapid	0.24 to 0.39 in	6.1 to 7.8
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

406C--Dorset sandy loam, 8 to 15 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 8 to 15 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderately rapid	0.77 to 0.89 in	5.6 to 7.3
Bt -- 6 to 19 in	sandy loam	moderately rapid	1.56 to 2.47 in	5.6 to 7.3
2BC -- 19 to 23 in	loamy sand	rapid	0.24 to 0.39 in	6.1 to 7.8
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

406E--Dorset sandy loam, 15 to 25 percent slopes

Dorset

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 15 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A,E -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 7.3
Bt -- 8 to 19 in	sandy loam	moderately rapid	1.32 to 2.09 in	5.6 to 7.3
2BC -- 19 to 21 in	loamy sand	rapid	0.12 to 0.20 in	6.1 to 7.8
2C -- 21 to 60 in	gravelly coarse sand	rapid	0.78 to 1.56 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

413--Osakis loam

Osakis

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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>
Ap -- 0 to 9 in	loam	moderate	1.63 to 1.99 in	6.1 to 7.3
AB,Bw -- 9 to 19 in	sandy loam	moderately rapid	1.38 to 1.87 in	6.1 to 7.3
2Bw -- 19 to 24 in	loamy coarse sand	rapid	0.20 to 0.31 in	6.1 to 7.3
2C -- 24 to 60 in	gravelly coarse sand	rapid	0.72 to 1.43 in	7.4 to 8.4

414--Hamel loam

Hamel

Extent: 90 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 3 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

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>
A1,A2,AB -- 0 to 23 in	loam	moderate	4.57 to 5.48 in	5.6 to 7.3
Btg,Bg -- 23 to 41 in	clay loam	moderately slow	2.90 to 3.44 in	5.6 to 7.3
Cg -- 41 to 60 in	loam	moderate	2.65 to 3.40 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

421B--Ves loam, 2 to 6 percent slopes

Ves

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 12 in	loam	moderate	2.01 to 2.60 in	6.1 to 7.8
Bw -- 12 to 26 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Bk -- 26 to 34 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

421C--Ves loam, 6 to 12 percent slopes

Ves

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 10 in	loam	moderate	1.67 to 2.17 in	6.1 to 7.8
Bw -- 10 to 26 in	loam	moderate	2.42 to 3.07 in	6.6 to 7.8
Bk -- 26 to 34 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

446A--Normania loam, 1 to 3 percent slopes

Normania

Extent: 90 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: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

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>
Ap,AB -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bw -- 14 to 26 in	loam	moderate	1.77 to 2.24 in	6.6 to 7.8
Bk -- 26 to 34 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

446B--Normania loam, 3 to 5 percent slopes

Normania

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 3 to 5 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

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>
Ap,AB -- 0 to 12 in	loam	moderate	2.36 to 2.60 in	6.1 to 7.3
Bw -- 12 to 22 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
Bk -- 22 to 34 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

453B--DeMontreville loamy sand, 2 to 8 percent slopes

DeMontreville

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loamy sand	rapid	0.71 to 0.85 in	5.1 to 7.3
E -- 7 to 28 in	coarse sand	rapid	1.25 to 1.88 in	5.1 to 7.3
2Bt -- 28 to 45 in	sandy loam	moderately slow	1.35 to 2.37 in	5.6 to 6.5
2C -- 45 to 60 in	sandy loam	moderately slow	0.90 to 1.50 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

453C--DeMontreville loamy sand, 8 to 15 percent slopes

DeMontreville

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loamy sand	rapid	0.71 to 0.85 in	5.1 to 7.3
E -- 7 to 28 in	coarse sand	rapid	1.25 to 1.88 in	5.1 to 7.3
2Bt -- 28 to 45 in	sandy loam	moderately slow	1.35 to 2.37 in	5.6 to 6.5
2C -- 45 to 60 in	sandy loam	moderately slow	0.90 to 1.50 in	5.6 to 7.3

454B--Mahtomedi loamy coarse sand, 2 to 8 percent slopes

Mahtomedi

Extent: 90 percent of the unit

Landform(s): outwash plains, moraines

Slope gradient: 2 to 8 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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 8 in	loamy coarse sand	rapid	0.79 to 0.94 in	5.1 to 6.5
Bw -- 8 to 34 in	coarse sand	rapid	1.30 to 1.82 in	5.1 to 6.5
C -- 34 to 60 in	gravelly coarse sand	rapid	1.04 to 2.34 in	5.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

454C--Mahtomedi loamy coarse sand, 8 to 15 percent slopes

Mahtomedi

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> outwash plains, moraines</p> <p><i>Slope gradient:</i> 8 to 15 percent</p> <p><i>Parent material:</i> 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> 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> 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	loamy coarse sand	rapid	0.51 to 0.61 in	5.1 to 6.5
Bw -- 5 to 25 in	coarse sand	rapid	1.00 to 1.41 in	5.1 to 6.5
C -- 25 to 60 in	gravelly coarse sand	rapid	1.39 to 3.12 in	5.1 to 7.8

454E--Mahtomedi loamy coarse sand, 15 to 25 percent slopes

Mahtomedi

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> outwash plains, moraines</p> <p><i>Slope gradient:</i> 15 to 25 percent</p> <p><i>Parent material:</i> 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> 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> 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 2 in	loamy coarse sand	rapid	0.20 to 0.24 in	5.1 to 6.5
Bw -- 2 to 20 in	coarse sand	rapid	0.91 to 1.27 in	5.1 to 6.5
C -- 20 to 60 in	gravelly coarse sand	rapid	1.59 to 3.58 in	5.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

454F--Mahtomedi loamy coarse sand, 25 to 40 percent slopes

Mahtomedi

Extent: 90 percent of the unit

Landform(s): outwash plains, moraines

Slope gradient: 25 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .10

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 2 in	loamy coarse sand	rapid	0.20 to 0.24 in	5.1 to 6.5
Bw -- 2 to 20 in	coarse sand	rapid	0.91 to 1.27 in	5.1 to 6.5
C -- 20 to 60 in	gravelly coarse sand	rapid	1.59 to 3.58 in	5.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

459--Corunna loam

Corunna

Extent: 95 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: water-worked sediments over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.42 to 1.73 in	6.1 to 7.8
AB -- 8 to 19 in	sandy loam	moderately rapid	1.32 to 1.65 in	6.1 to 7.8
Bg1 -- 19 to 25 in	sandy loam	moderately rapid	0.76 to 0.94 in	6.1 to 7.8
Bg2 -- 25 to 32 in	loamy sand	rapid	0.60 to 0.94 in	6.1 to 7.8
2Cg -- 32 to 60 in	loam	moderate	4.47 to 5.59 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

461B--Koronis loam, 2 to 6 percent slopes

Koronis

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 8 in	loam	moderately rapid	1.57 to 1.73 in	5.6 to 7.3
Bt -- 8 to 27 in	loam	moderately rapid	2.89 to 3.67 in	5.6 to 7.3
C -- 27 to 60 in	loam	moderately rapid	3.59 to 5.23 in	7.4 to 8.4

465--Kalmarville sandy loam, frequently flooded

Kalmarville, frequently flooded

Extent: 100 percent of the unit

Landform(s): alluvial flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

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) .24

Land capability, nonirrigated: 5w

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>
A -- 0 to 42 in	sandy loam	moderately rapid	5.48 to 7.58 in	6.6 to 7.8
2C -- 42 to 60 in	coarse sand	very rapid	1.06 to 1.59 in	6.6 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

511--Marcellon loam

Marcellon

Extent: 90 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: 2e

Hydric soil: no

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,A -- 0 to 15 in	loam	moderate	2.54 to 3.59 in	5.6 to 7.3
Bt -- 15 to 32 in	sandy clay loam	moderate	2.03 to 3.05 in	5.6 to 7.3
C -- 32 to 60 in	sandy loam	moderately rapid	1.96 to 3.91 in	7.4 to 8.4

525--Muskego muck

Muskego

Extent: 90 percent of the unit

Landform(s): depressions

Slope gradient: 0 to 2 percent

Parent material: organic material over coprogenous earth

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: 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 31 in	muck	moderately rapid	10.89 to 14.00 in	
Lco -- 31 to 60 in	coprogenous earth	slow	5.17 to 6.90 in	

Map Unit Description (MN)

Stearns County, Minnesota

540--Seelyeville muck

Seelyeville

Extent: 100 percent of the unit

Landform(s): depressions

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) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2 -- 10 to 60 in	muck	moderately rapid	17.50 to 22.50 in	

541--Rifle mucky peat

Rifle

Extent: 90 percent of the unit

Landform(s): depressions

Slope gradient: 0 to 2 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) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe1 -- 0 to 8 in	mucky peat	rapid	3.78 to 4.57 in	
Oe2 -- 8 to 60 in	mucky peat	rapid	24.94 to 30.14 in	

Map Unit Description (MN)

Stearns County, Minnesota

543--Markey muck

Markey

Extent: 100 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: organic material over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 25 in	muck	moderately rapid	8.82 to 11.34 in	
2C -- 25 to 60 in	gravelly coarse sand	rapid	1.04 to 2.77 in	

544--Cathro muck

Cathro

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: 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) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 14 in	muck	moderately rapid	6.38 to 7.80 in	
Oa2 -- 14 to 40 in	muck	moderately rapid	9.09 to 11.69 in	
2Cg -- 40 to 60 in	loam	moderate	2.17 to 3.74 in	

Map Unit Description (MN)

Stearns County, Minnesota

565--Eckvoll loamy sand

Eckvoll

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 3 percent

Parent material: outwash over 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

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	loamy sand	rapid	0.91 to 1.09 in	6.1 to 7.3
E -- 9 to 22 in	fine sand	rapid	0.78 to 1.04 in	6.1 to 7.3
2Bt -- 22 to 40 in	sandy clay loam	moderate	2.90 to 3.26 in	6.6 to 7.8
2C -- 40 to 60 in	loam	moderate	3.35 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

566--Regal loam

Regal

Extent: 90 percent of the unit

Landform(s): swales on outwash plains, swales on stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 15 in	loam	moderate	2.54 to 3.14 in	6.6 to 8.4
Bg --	15 to 18 in	sandy loam	moderate	0.47 to 0.63 in	7.4 to 8.4
2Cg --	18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

571--Coriff loam

Coriff

Extent: 90 percent of the unit

Landform(s): swales on moraines

Slope gradient: 0 to 2 percent

Parent material: water-worked sediments over 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 18 in	loam	moderate	3.62 to 3.98 in	7.4 to 8.4
Bg1 -- 18 to 24 in	sandy loam	moderately rapid	0.71 to 0.89 in	7.4 to 8.4
Bg2 -- 24 to 34 in	loamy sand	rapid	0.89 to 1.38 in	7.4 to 8.4
2Cg -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

572--Lowlein sandy loam

Lowlein

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 3 percent

Parent material: water-worked sediments over 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 13 in	sandy loam	moderately rapid	1.69 to 1.95 in	6.1 to 7.3
Bw -- 13 to 21 in	sandy loam	moderately rapid	0.94 to 1.10 in	6.1 to 7.3
2Bw -- 21 to 30 in	loamy sand	rapid	0.54 to 1.00 in	6.1 to 7.3
3C -- 30 to 60 in	loam	moderate	5.09 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

582--Roliss loam

Roliss

Extent: 90 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 14 in	loam	moderate	2.41 to 3.40 in	6.6 to 8.4
Bg -- 14 to 22 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
Ckg -- 22 to 32 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4
Cg -- 32 to 60 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4

591B--Doland silt loam, 1 to 6 percent slopes

Doland

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 6 percent

Parent material: silty material over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silt loam	moderate	2.17 to 2.54 in	6.1 to 7.3
Bw -- 9 to 24 in	silt loam	moderate	2.54 to 3.29 in	6.1 to 7.3
2C -- 24 to 60 in	loam	moderate	5.02 to 6.81 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

597--Tara silt loam

Tara

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 1 to 3 percent

Parent material: silty material over 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 1

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>
Ap,AB -- 0 to 23 in	silt loam	moderate	4.57 to 5.48 in	6.1 to 7.3
Bw -- 23 to 35 in	silt loam	moderate	2.07 to 2.69 in	6.6 to 7.8
2C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

611C--Hawick loamy sand, 6 to 12 percent slopes

Hawick

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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>
Ap -- 0 to 10 in	loamy sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 19 in	loamy coarse sand	rapid	0.27 to 0.91 in	6.1 to 7.8
C -- 19 to 60 in	coarse sand	very rapid	0.82 to 2.46 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

611D--Hawick loamy sand, 12 to 40 percent slopes

Hawick

Extent: 95 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 12 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loamy sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 18 in	loamy coarse sand	rapid	0.25 to 0.83 in	6.1 to 7.8
C -- 18 to 60 in	coarse sand	very rapid	0.83 to 2.50 in	7.4 to 8.4

639A--Ridgeport sandy loam, 0 to 2 percent slopes

Ridgeport

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 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>
Ap,A -- 0 to 13 in	sandy loam	moderately rapid	1.56 to 1.82 in	5.6 to 7.3
Bw -- 13 to 34 in	sandy loam	moderately rapid	2.30 to 2.71 in	5.6 to 7.3
2BC,2C -- 34 to 60 in	sand	very rapid	0.52 to 1.82 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

639B--Ridgeport sandy loam, 2 to 6 percent slopes

Ridgeport

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	sandy loam	moderately rapid	1.18 to 1.38 in	5.6 to 7.3
Bw -- 10 to 28 in	sandy loam	moderately rapid	1.99 to 2.35 in	5.6 to 7.3
2BC,2C -- 28 to 60 in	sand	very rapid	0.64 to 2.23 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

804D--Koronis-Estherville complex, 12 to 25 percent slopes

Koronis

Extent: 70 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

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>
Ap -- 0 to 7 in	loam	moderately rapid	1.42 to 1.56 in	5.6 to 7.3
Bt -- 7 to 22 in	loam	moderately rapid	2.24 to 2.84 in	5.6 to 7.3
C -- 22 to 60 in	loam	moderately rapid	4.16 to 6.05 in	7.4 to 8.4

Estherville

Extent: 20 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bw -- 7 to 15 in	sandy loam	moderately rapid	0.87 to 1.26 in	5.6 to 7.3
2C -- 15 to 60 in	gravelly coarse sand	rapid	0.90 to 1.80 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

848--Urban land-Osakis complex

Urban land

Extent: 80 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 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:

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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Osakis

Extent: 20 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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>
Ap -- 0 to 9 in	loam	moderate	1.63 to 1.99 in	6.1 to 7.3
AB,Bw -- 9 to 19 in	sandy loam	moderately rapid	1.38 to 1.87 in	6.1 to 7.3
2Bw -- 19 to 24 in	loamy coarse sand	rapid	0.20 to 0.31 in	6.1 to 7.3
2C -- 24 to 60 in	gravelly coarse sand	rapid	0.72 to 1.43 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

850--Urban land-Dassel complex

Urban land

Extent: 80 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 0 to 2 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:

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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Dassel

Extent: 20 percent of the unit

Landform(s): depressions on outwash plains, depressions on stream terraces

Slope gradient: 0 to 1 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

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>
Ap,AB -- 0 to 11 in	sandy loam	moderately rapid	1.76 to 2.20 in	5.6 to 7.3
Bg -- 11 to 28 in	sandy loam	moderately rapid	2.03 to 2.88 in	5.6 to 7.3
C -- 28 to 60 in	loamy sand	rapid	2.55 to 3.19 in	6.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

865B--Urban land-Hubbard complex, 1 to 8 percent slopes

Urban land

Extent: 90 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 1 to 8 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:

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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Hubbard

Extent: 10 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 1 to 8 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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>
Ap,AB -- 0 to 14 in	loamy sand	rapid	1.13 to 1.70 in	5.1 to 7.3
Bw,BC -- 14 to 48 in	sand	rapid	1.02 to 2.37 in	5.1 to 7.3
C -- 48 to 60 in	sand	rapid	0.35 to 0.83 in	6.1 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

873--Prebish-Nokay complex

Prebish

Extent: 45 percent of the unit

Landform(s): depressions on moraines, depressions on interdrumlins

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 4w

Hydric soil: yes

Hydrologic group: 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 18 in	loam	moderate	3.26 to 3.98 in	5.6 to 7.3
Bg -- 18 to 47 in	sandy loam	moderate	4.02 to 4.60 in	5.6 to 7.3
2Cd -- 47 to 60 in	sandy loam	moderately slow	1.17 to 1.69 in	5.6 to 8.4

Nokay

Extent: 35 percent of the unit

Landform(s): moraines, drumlins

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): densic material at 30 to 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

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	fine sandy loam	moderately rapid	0.51 to 0.71 in	4.5 to 5.5
E -- 4 to 12 in	sandy loam	moderately rapid	0.94 to 1.50 in	4.5 to 5.5
Btg -- 12 to 24 in	sandy loam	moderate	1.46 to 2.32 in	5.1 to 6.5
Bt -- 24 to 40 in	sandy loam	moderately slow	1.29 to 2.10 in	5.6 to 7.3
Cd -- 40 to 60 in	sandy loam	moderately slow	1.57 to 2.56 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

875B--Estherville-Hawick complex, 2 to 6 percent slopes

Estherville

Extent: 55 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bw -- 7 to 16 in	sandy loam	moderately rapid	1.00 to 1.45 in	5.6 to 7.3
2C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 1.75 in	6.6 to 8.4

Hawick

Extent: 35 percent of the unit

Landform(s): outwash plains, stream terraces

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively 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>
Ap -- 0 to 8 in	loamy sand	rapid	0.79 to 0.94 in	6.1 to 7.8
Bw -- 8 to 19 in	loamy coarse sand	rapid	0.33 to 1.10 in	6.1 to 7.8
C -- 19 to 60 in	coarse sand	very rapid	0.82 to 2.46 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

954C--Ves-Storden loams, 6 to 12 percent slopes

Ves

Extent: 70 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	6.1 to 7.8
Bw -- 9 to 24 in	loam	moderate	2.24 to 2.84 in	6.6 to 7.8
Bk -- 24 to 34 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Storden

Extent: 25 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
C -- 7 to 60 in	loam	moderate	7.91 to 10.02 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

954D--Ves-Storden loams, 12 to 18 percent slopes

Ves

Extent: 60 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.8
Bw -- 8 to 22 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Bk -- 22 to 34 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Storden

Extent: 40 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	7.4 to 8.4
C -- 6 to 60 in	loam	moderate	8.09 to 10.25 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

999B--Ves-Estherville complex, 2 to 6 percent slopes

Ves

Extent: 65 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 9 in	loam	moderate	1.54 to 1.99 in	6.1 to 7.8
Bw -- 9 to 24 in	loam	moderate	2.24 to 2.84 in	6.6 to 7.8
Bk -- 24 to 34 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Estherville

Extent: 20 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.77 in	5.6 to 7.3
Bw -- 10 to 16 in	sandy loam	moderately rapid	0.69 to 1.01 in	5.6 to 7.3
2C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 1.75 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

999C--Ves-Estherville complex, 6 to 12 percent slopes

Ves

Extent: 65 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.8
Bw -- 8 to 22 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Bk -- 22 to 34 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Estherville

Extent: 25 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bw -- 8 to 16 in	sandy loam	moderately rapid	0.91 to 1.32 in	5.6 to 7.3
2C -- 16 to 60 in	gravelly coarse sand	rapid	0.87 to 1.75 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

999D--Ves-Estherville complex, 12 to 25 percent slopes

Ves

Extent: 65 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 7 in	loam	moderate	1.20 to 1.56 in	6.1 to 7.8
Bw -- 7 to 25 in	loam	moderate	2.72 to 3.44 in	6.6 to 7.8
Bk -- 25 to 34 in	loam	moderate	1.30 to 1.65 in	7.4 to 8.4
C -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	7.4 to 8.4

Estherville

Extent: 25 percent of the unit

Landform(s): moraines

Slope gradient: 12 to 25 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bw -- 7 to 15 in	sandy loam	moderately rapid	0.87 to 1.26 in	5.6 to 7.3
2C -- 15 to 60 in	gravelly coarse sand	rapid	0.90 to 1.80 in	6.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

1013--Pits, quarry

Pits, quarry

Extent: 100 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 50 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:

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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1015--Psamments, sloping

Psamments, sloping

Extent: 100 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 2 percent

Parent material: variable sandy material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group: A

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)

Stearns County, Minnesota

1016--Udorthents, loamy

Udorthents, loamy

Extent: 100 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 6 percent

Parent material: variable loamy material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group: B

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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1018--Udifluvents, frequently flooded

Udifluvents, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: no

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>
Ap -- 0 to 10 in	fine sandy loam	moderately rapid	1.57 to 1.97 in	5.1 to 7.3
A1 -- 10 to 26 in	fine sandy loam	moderately rapid	2.42 to 3.23 in	5.1 to 7.3
Bw -- 26 to 32 in	fine sandy loam	moderately rapid	0.89 to 1.12 in	5.6 to 7.8
2C -- 32 to 60 in	stratified fine sandy loam to coarse sand	rapid	1.12 to 3.91 in	5.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

1029--Pits, gravel

Pits, gravel

Extent: 100 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 50 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:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Stearns County, Minnesota

1055--Histosols and Haplaquolls, ponded

Histosols, ponded

Extent: 50 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa2 -- 10 to 60 in	muck	moderately rapid	17.50 to 22.50 in	

Haplaquolls, ponded

Extent: 50 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: mineral 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) .24

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: none

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1 -- 0 to 16 in	loam	moderate	2.91 to 3.55 in	6.1 to 7.8
A2 -- 16 to 41 in	loam	moderate	4.46 to 5.46 in	6.1 to 7.8
Bg -- 41 to 55 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Cg -- 55 to 60 in	loam	moderate	0.71 to 0.90 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

1064--Rock outcrop-Lithic Eutrochrepts complex

Rock outcrop

Extent: 55 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 25 percent

Parent material:

Restrictive feature(s): lithic bedrock at 0 to 4 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: 8s

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>
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Lithic Eutrochrepts

Extent: 45 percent of the unit

Landform(s): stream terraces, outwash plains

Slope gradient: 0 to 25 percent

Parent material: loamy sediments over bedrock

Restrictive feature(s): lithic bedrock at 4 to 20 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer)

Land capability, nonirrigated: 8s

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>
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Map Unit Description (MN)

Stearns County, Minnesota

1163--Cohoctah loam, 0 to 2 percent slopes, frequently flooded

Cohoctah, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 5w

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>
A -- 0 to 17 in	loam	moderately rapid	3.05 to 4.06 in	6.1 to 7.8
Cg1 -- 17 to 22 in	loam	moderately rapid	0.61 to 1.02 in	6.1 to 8.4
Cg2 -- 22 to 60 in	stratified sand to loamy fine sand to fine sandy loam	very rapid	2.27 to 3.40 in	6.1 to 8.4

Havelock

Extent: 10 percent of the unit

Landform(s): flood plains

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: yes

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)

Stearns County, Minnesota

1805--Blue Earth variant, mucky silt loam

Blue Earth, variant

<p><i>Extent:</i> 100 percent of the unit</p> <p><i>Landform(s):</i> depressions on outwash plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> coprogenous earth over outwash</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> 3</p> <p><i>Wind erodibility group (WEG):</i> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .37</p> <p><i>Land capability, nonirrigated:</i> 4w</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,C -- 0 to 28 in	mucky silt loam	moderately rapid	9.78 to 13.42 in	7.4 to 8.4
2C -- 28 to 34 in	loam	moderate	1.00 to 1.18 in	7.4 to 8.4
3C -- 34 to 60 in	gravelly loamy coarse sand	rapid	0.52 to 1.04 in	6.1 to 8.4

1825C--Seelyeville muck, sloping

Seelyeville, sloping

<p><i>Extent:</i> 100 percent of the unit</p> <p><i>Landform(s):</i> toes on hillslopes</p> <p><i>Slope gradient:</i> 1 to 6 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated:</i> 6w</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>
Oa -- 0 to 60 in	muck	moderately rapid	20.94 to 26.93 in	

Map Unit Description (MN)

Stearns County, Minnesota

1828--Glencoe muck

Glencoe

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: 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) .02

Land capability, nonirrigated: 3w

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>
Oap -- 0 to 12 in	muck	moderately rapid	4.13 to 5.67 in	6.1 to 7.8
2A -- 12 to 28 in	loam	moderate	2.74 to 3.71 in	6.1 to 7.8
2Bg -- 28 to 33 in	loam	moderate	0.77 to 0.97 in	6.6 to 7.8
2Cg -- 33 to 60 in	loam	moderate	4.02 to 5.09 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

1842F--Cushing and Flak sandy loams, steep

Cushing, steep

Extent: 50 percent of the unit

Landform(s): moraines, drumlins

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<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	moderate	0.39 to 0.87 in	5.1 to 7.8
E -- 4 to 10 in	sandy loam	moderate	0.59 to 1.30 in	5.1 to 7.8
B/E -- 10 to 16 in	sandy loam	moderate	0.63 to 1.39 in	5.1 to 7.8
Bt -- 16 to 27 in	sandy clay loam	moderate	1.10 to 2.09 in	5.1 to 7.8
C -- 27 to 60 in	sandy loam	moderately slow	2.94 to 6.21 in	5.1 to 8.4

Flak, steep

Extent: 40 percent of the unit

Landform(s): moraines, drumlins

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 3 in	fine sandy loam	moderately rapid	0.41 to 0.57 in	5.1 to 6.5
E, BE -- 3 to 14 in	sandy loam	moderately rapid	1.32 to 1.76 in	5.1 to 6.5
Bt1 -- 14 to 27 in	sandy loam	moderate	1.56 to 2.08 in	5.1 to 6.5
Bt2 -- 27 to 42 in	sandy loam	moderately slow	1.20 to 1.94 in	5.1 to 7.3
Cd -- 42 to 60 in	sandy loam	slow	0.53 to 1.77 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

1843C--Cushing-DeMontreville complex, 8 to 15 percent slopes

Cushing

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	sandy loam	moderate	0.59 to 1.30 in	5.1 to 7.8
E -- 6 to 15 in	sandy loam	moderate	0.91 to 1.99 in	5.1 to 7.8
B/E -- 15 to 19 in	sandy loam	moderate	0.39 to 0.87 in	5.1 to 7.8
Bt -- 19 to 30 in	sandy clay loam	moderate	1.10 to 2.09 in	5.1 to 7.8
C -- 30 to 60 in	sandy loam	moderately slow	2.69 to 5.69 in	5.1 to 8.4

DeMontreville

Extent: 35 percent of the unit

Landform(s): moraines

Slope gradient: 8 to 15 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	5.1 to 7.3
E -- 2 to 18 in	coarse sand	rapid	0.97 to 1.45 in	5.1 to 7.3
2Bt -- 18 to 34 in	sandy loam	moderately slow	1.26 to 2.20 in	5.6 to 6.5
2C -- 34 to 60 in	sandy loam	moderately slow	1.56 to 2.60 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

1843E--Cushing-DeMontreville complex, 15 to 25 percent slopes

Cushing

Extent: 45 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<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	moderate	0.39 to 0.87 in	5.1 to 7.8
E -- 4 to 11 in	sandy loam	moderate	0.71 to 1.56 in	5.1 to 7.8
B/E -- 11 to 16 in	sandy loam	moderate	0.51 to 1.13 in	5.1 to 7.8
Bt -- 16 to 25 in	sandy clay loam	moderate	0.91 to 1.72 in	5.1 to 7.8
C -- 25 to 60 in	sandy loam	moderately slow	3.12 to 6.58 in	5.1 to 8.4

DeMontreville

Extent: 40 percent of the unit

Landform(s): moraines

Slope gradient: 15 to 25 percent

Parent material: outwash over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 2 in	loamy sand	rapid	0.20 to 0.24 in	5.1 to 7.3
E -- 2 to 17 in	coarse sand	rapid	0.90 to 1.35 in	5.1 to 7.3
2Bt -- 17 to 32 in	sandy loam	moderately slow	1.20 to 2.09 in	5.6 to 6.5
2C -- 32 to 60 in	sandy loam	moderately slow	1.68 to 2.80 in	5.6 to 7.3

Map Unit Description (MN)

Stearns County, Minnesota

1879--Seelyeville muck, calcareous

Seelyeville, calcareous

Extent: 100 percent of the unit

Landform(s): depressions

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) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 60 in muck	moderately rapid	20.94 to 26.93 in	

1880--Martisco mucky silt loam

Martisco

Extent: 90 percent of the unit

Landform(s): depressions

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth over marl

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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .43

Land capability, nonirrigated: 5w

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>
A --	0 to 9 in mucky silt loam	moderately rapid	1.81 to 4.07 in	
2C --	9 to 70 in marl	moderately rapid	12.20 to 13.43 in	

Map Unit Description (MN)

Stearns County, Minnesota

1892--Prebish fine sandy loam

Prebish

Extent: 95 percent of the unit

Landform(s): flats on moraines, flats on interdrumlins

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): densic material at 40 to 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

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 13 in	fine sandy loam	moderately rapid	2.08 to 2.34 in	5.6 to 7.3
Bg -- 13 to 43 in	sandy loam	moderate	4.19 to 4.79 in	5.6 to 7.3
2Cd -- 43 to 60 in	sandy loam	moderately slow	1.52 to 2.20 in	5.6 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

1902B--Jewett silt loam, 2 to 8 percent slopes

Jewett

Extent: 90 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 8 percent

Parent material: silty material over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

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	silt loam	moderate	0.87 to 0.94 in	5.1 to 7.3
E -- 4 to 13 in	silt loam	moderate	1.81 to 1.99 in	5.1 to 7.3
Bt -- 13 to 21 in	silt loam	moderate	1.42 to 1.73 in	5.1 to 6.0
2Bt -- 21 to 36 in	loam	moderate	1.80 to 2.84 in	5.1 to 6.0
2BC,2C -- 36 to 60 in	loam	moderately slow	2.40 to 4.56 in	5.1 to 6.0

Map Unit Description (MN)

Stearns County, Minnesota

L307B--Koronis loam, 2 to 6 percent slopes

Koronis

Extent: 70 to 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 8 in	loam	moderately rapid	1.57 to 1.73 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L307C2--Koronis loam, 6 to 12 percent slopes, moderately eroded

Koronis, moderately eroded

Extent: 65 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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>
Ap -- 0 to 8 in	loam	moderately rapid	1.57 to 1.73 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

L307E--Koronis loam, 18 to 40 percent slopes

Koronis

Extent: 60 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

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 7 in	loam	moderately rapid	1.42 to 1.56 in	5.6 to 7.3
Bt -- 7 to 28 in	sandy clay loam	moderately rapid	3.13 to 3.96 in	5.6 to 7.3
Bk -- 28 to 80 in	fine sandy loam	moderately rapid	5.72 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L316B--Haplosaprists, calcareous-Aquolls complex, 1 to 6 percent slopes

Haplosaprists, calcareous

Extent: 0 to 100 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 6 percent

Parent material: muck 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 30 in	muck	moderately rapid	10.47 to 13.46 in	
2Cg -- 30 to 80 in	sandy loam	moderately rapid	5.00 to 7.50 in	7.4 to 7.8

Aquolls

Extent: 0 to 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

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: 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: none

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 20 in	clay loam	moderate	3.61 to 4.42 in	6.1 to 7.8
Cg -- 20 to 80 in	sandy loam	moderately rapid	5.98 to 8.98 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L317A--Barry loam, 0 to 2 percent slopes

Barry

Extent: 75 to 90 percent of the unit

Landform(s): swales 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) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 11 in	loam	moderately rapid	1.87 to 2.09 in	6.1 to 7.3
Btg -- 11 to 33 in	sandy clay loam	moderate	3.31 to 3.97 in	6.1 to 7.3
Bkg -- 33 to 60 in	sandy loam	moderately rapid	2.94 to 3.75 in	7.4 to 7.8
Cg -- 60 to 80 in	sandy loam	moderately rapid	2.21 to 3.21 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L318A--Lundlake silty clay loam, 0 to 1 percent slopes

Lundlake

<i>Extent:</i> 80 to 100 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> colluvium over till	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated:</i> 3w
<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>
Ap,A1,A2 -- 0 to 28 in	silty clay loam	moderate	4.75 to 6.15 in	5.6 to 7.3
AB -- 28 to 36 in	loam	moderate	1.34 to 1.73 in	6.6 to 7.3
2Bg1,2Bg2 -- 36 to 72 in	sandy loam	moderately rapid	3.62 to 5.43 in	6.6 to 7.8
2Cg -- 72 to 80 in	sandy loam	moderately rapid	0.79 to 1.18 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L319A--Swedegrove-Lundlake complex, 0 to 2 percent slopes

Swedegrove

Extent: 50 to 80 percent of the unit

Landform(s): rims 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

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>
Ap,Ak -- 0 to 14 in	loam	moderately rapid	2.27 to 2.83 in	7.4 to 8.4
Bkg1,Bkg2 -- 14 to 60 in	loam	moderately rapid	6.39 to 8.22 in	7.4 to 8.4
Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 8.4

Lundlake

Extent: 15 to 25 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: colluvium over 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

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,A1,A2 -- 0 to 28 in	silty clay loam	moderate	4.75 to 6.15 in	5.6 to 7.3
AB -- 28 to 36 in	loam	moderate	1.34 to 1.73 in	6.6 to 7.3
2Bg1,2Bg2 -- 36 to 72 in	sandy loam	moderately rapid	3.62 to 5.43 in	6.6 to 7.8
2Cg -- 72 to 80 in	sandy loam	moderately rapid	0.79 to 1.18 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L320A--Muskego and Klossner soils, lundlake catena, 0 to 1 percent slopes, frequently flooded

Muskego, frequently flooded

Extent: 30 to 100 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: organic material over coprogenous earth

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: 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>
Oa1 -- 0 to 9 in	muck	moderately rapid	3.17 to 4.07 in	
Oa2 -- 9 to 36 in	muck	moderately rapid	9.37 to 12.05 in	
Lco -- 36 to 60 in	coprogenous earth	slow	4.32 to 5.76 in	7.4 to 8.4

Klossner, frequently flooded

Extent: 30 to 100 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: organic material over loamy glaciofluvial deposits

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 -- 26 to 33 in	silt loam	moderate	1.56 to 1.84 in	6.1 to 7.4
2A2 -- 33 to 40 in	loam	moderate	1.28 to 1.56 in	6.1 to 7.4
2Cg -- 40 to 80 in	sandy loam	moderately rapid	3.98 to 5.96 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L321A--Swedegrove loam, 0 to 2 percent slopes

Swedegrove

Extent: 75 to 95 percent of the unit

Landform(s): rims 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

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>
Ap,Ak -- 0 to 14 in	loam	moderately rapid	2.27 to 2.83 in	7.4 to 8.4
Bkg1,Bkg2 -- 14 to 60 in	loam	moderately rapid	6.39 to 8.22 in	7.4 to 8.4
Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 8.4

L322A--Uniongrove loam, 0 to 2 percent slopes

Uniongrove

Extent: 70 to 90 percent of the unit

Landform(s): swales 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

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>
Ap,A -- 0 to 16 in	loam	moderately rapid	3.23 to 3.55 in	6.1 to 7.3
Bg1,Bg2 -- 16 to 30 in	loam	moderately rapid	2.07 to 2.62 in	6.1 to 7.3
Bkg1,Bkg2 -- 30 to 60 in	sandy loam	moderately rapid	2.99 to 4.49 in	7.4 to 7.8
Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L323A--Crowriver loam, 0 to 2 percent slopes

Crowriver

Extent: 85 to 100 percent of the unit

Landform(s): rims 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2w

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>
Apk,Ak -- 0 to 15 in	loam	moderately rapid	2.09 to 2.99 in	7.4 to 8.4
Bkg1 -- 15 to 22 in	loam	moderately rapid	0.85 to 1.28 in	7.4 to 8.4
Bkg2 -- 22 to 60 in	sandy loam	moderately rapid	3.78 to 5.67 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L324A--Forestcity, overwash-Forestcity complex, 1 to 4 percent slopes

Forestcity, overwash

<p><i>Extent:</i> 35 to 55 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines</p> <p><i>Slope gradient:</i> 2 to 4 percent</p> <p><i>Parent material:</i> colluvium 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> somewhat poorly 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> .20</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> no</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>
Ap,A1 -- 0 to 36 in	fine sandy loam	moderately rapid	5.02 to 5.73 in	6.1 to 7.3
A2,AB -- 36 to 43 in	loam	moderate	0.99 to 1.20 in	6.1 to 7.3
2Btg -- 43 to 60 in	loam	moderately rapid	1.86 to 2.88 in	5.6 to 7.3
2BCg -- 60 to 80 in	fine sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Forestcity

<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> 1 to 3 percent</p> <p><i>Parent material:</i> colluvium 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> poorly 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> .20</p> <p><i>Land capability, nonirrigated:</i> 2w</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>
Ap,A1 -- 0 to 36 in	fine sandy loam	moderately rapid	5.02 to 5.73 in	6.1 to 7.3
A2,AB -- 36 to 43 in	loam	moderate	0.99 to 1.20 in	6.1 to 7.3
2Btg -- 43 to 60 in	loam	moderately rapid	1.86 to 2.88 in	5.6 to 7.3
2BCg -- 60 to 80 in	fine sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L325A--Crowriver-Lundlake complex, 0 to 2 percent slopes

Crowriver

Extent: 30 to 55 percent of the unit

Landform(s): rims 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2w

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>
Apk,Ak -- 0 to 13 in	fine sandy loam	moderately rapid	1.82 to 2.60 in	7.4 to 8.4
ABk -- 13 to 17 in	fine sandy loam	moderately rapid	0.47 to 0.71 in	7.4 to 8.4
Bkg1,Bg2,Bg3 -- 17 to 60 in	sandy loam	moderately rapid	4.29 to 6.44 in	7.4 to 7.8
Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Lundlake

Extent: 20 to 45 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: colluvium over 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

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,A1,A2 -- 0 to 28 in	silty clay loam	moderate	4.75 to 6.15 in	5.6 to 7.3
AB -- 28 to 36 in	loam	moderate	1.34 to 1.73 in	6.6 to 7.3
2Bg1,2Bg2 -- 36 to 72 in	sandy loam	moderately rapid	3.62 to 5.43 in	6.6 to 7.8
2Cg -- 72 to 80 in	sandy loam	moderately rapid	0.79 to 1.18 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L326B--Rohrbeck-Koronis complex, 1 to 6 percent slopes

Rohrbeck

Extent: 25 to 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 5 percent

Parent material: outwash over 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): 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>
Ap -- 0 to 6 in	loamy sand	rapid	0.47 to 0.71 in	6.1 to 7.3
E -- 6 to 25 in	loamy sand	rapid	1.35 to 2.12 in	5.6 to 6.5
2Bt -- 25 to 41 in	sandy loam	moderately rapid	2.36 to 2.83 in	5.6 to 7.3
2Bk -- 41 to 60 in	sandy loam	moderately rapid	2.83 to 3.40 in	7.4 to 7.8
2C -- 60 to 80 in	fine sandy loam	moderately rapid	2.21 to 3.21 in	7.4 to 8.4

Koronis

Extent: 15 to 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.63 in	5.6 to 7.3
Bt,BC -- 9 to 28 in	sandy clay loam	moderately rapid	2.83 to 3.59 in	5.6 to 7.3
C -- 28 to 80 in	fine sandy loam	moderately rapid	5.72 to 8.31 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L330A--Muskego, Blue Earth and Houghton soils, lundlake catena, 0 to 1 percent slopes, ponded

Muskego, ponded

<p><i>Extent:</i> 0 to 100 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over coprogenous earth</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> .02</p> <p><i>Land capability, nonirrigated:</i> 8w</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>
Oa1 -- 0 to 9 in	muck	moderately rapid	3.17 to 4.07 in	
Oa2 -- 9 to 36 in	muck	moderately rapid	9.37 to 12.05 in	
Lco -- 36 to 60 in	coprogenous earth	slow	4.32 to 5.76 in	7.4 to 8.4

Blue Earth, ponded

<p><i>Extent:</i> 0 to 100 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> coprogenous earth over till</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> .28</p> <p><i>Land capability, nonirrigated:</i> 8w</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 50 in	silt loam	moderate	9.00 to 12.00 in	7.4 to 8.4
Cg -- 50 to 60 in	silt loam	moderate	1.77 to 2.36 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L330A--Muskego, Blue Earth and Houghton soils, lundlake catena, 0 to 1 percent slopes, ponded

Houghton, ponded

<p><i>Extent:</i> 0 to 100 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material</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> .02</p> <p><i>Land capability, nonirrigated:</i> 8w</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>
Oa -- 0 to 80 in	muck	moderately rapid	27.97 to 35.96 in	

L331A--Klossner muck, lundlake catena, 0 to 1 percent slopes

Klossner, drained, lundlake catena

<p><i>Extent:</i> 65 to 85 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated:</i> 3w</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>
Op,Oa -- 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 -- 26 to 36 in	mucky silty clay loam	moderate	2.17 to 2.56 in	6.1 to 7.4
2A2 -- 36 to 48 in	silty clay loam	moderate	2.20 to 2.69 in	6.1 to 7.4
2Cg -- 48 to 80 in	sandy loam	moderately rapid	3.19 to 4.78 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L333A--Blue Earth soils, lundlake catena, 0 to 1 percent slopes

Blue Earth, lundlake catena, surface drained

<p><i>Extent:</i> 50 to 80 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> coprogenous earth over till</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> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated:</i> 6w</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>
Ap -- 0 to 8 in	mucky silt loam	moderate	1.42 to 1.89 in	7.4 to 8.4
C -- 8 to 60 in	mucky silt loam	moderate	9.35 to 12.47 in	7.4 to 8.4
2Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Blue Earth, lundlake catena, drained

<p><i>Extent:</i> 0 to 40 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> coprogenous earth over till</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> 4L</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .28</p> <p><i>Land capability, nonirrigated:</i> 3w</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>
Ap -- 0 to 8 in	mucky silt loam	moderate	1.42 to 1.89 in	7.4 to 8.4
C -- 8 to 60 in	mucky silt loam	moderate	9.35 to 12.47 in	7.4 to 8.4
2Cg -- 60 to 80 in	sandy loam	moderately rapid	2.01 to 3.01 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L334A--Houghton and Muskego soils, lundlake catena, 0 to 1 percent slopes

Houghton, surface drained

Extent: 20 to 60 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 80 in	muck	moderately rapid	27.97 to 35.96 in	

Muskego, surface drained

Extent: 20 to 60 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material over coprogenous earth

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: 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>
Oa1 -- 0 to 9 in	muck	moderately rapid	3.17 to 4.07 in	
Oa2 -- 9 to 36 in	muck	moderately rapid	9.37 to 12.05 in	
Lco -- 36 to 60 in	coprogenous earth	slow	4.32 to 5.76 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L335A--Klossner soils, lundlake catena, 0 to 1 percent slopes

Klossner, surface drained, lundlake catena

<p><i>Extent:</i> 50 to 100 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated:</i> 6w</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>
Oa -- 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 -- 26 to 33 in	silt loam	moderate	1.56 to 1.84 in	6.1 to 7.4
2A2 -- 33 to 40 in	loam	moderate	1.28 to 1.56 in	6.1 to 7.4
2Cg -- 40 to 80 in	sandy loam	moderately rapid	3.98 to 5.96 in	7.4 to 7.8

Klossner, drained, lundlake catena

<p><i>Extent:</i> 0 to 40 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy 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> 2</p> <p><i>Wind erodibility index (WEI):</i> 134</p> <p><i>Kw factor (surface layer)</i> .02</p> <p><i>Land capability, nonirrigated:</i> 3w</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>
Op -- 0 to 10 in	muck	moderately rapid	3.44 to 4.72 in	
Oa -- 10 to 26 in	muck	moderately rapid	5.65 to 7.75 in	
2A1 -- 26 to 36 in	mucky silty clay loam	moderate	2.17 to 2.56 in	6.1 to 7.4
2A2 -- 36 to 48 in	silty clay loam	moderate	2.20 to 2.69 in	6.1 to 7.4
2Cg -- 48 to 80 in	sandy loam	moderately rapid	3.19 to 4.78 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L337B--Wadenill-Sunburg complex, 2 to 6 percent slopes

Wadenill

Extent: 55 to 75 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 31 in	sandy loam	moderately rapid	2.55 to 4.04 in	5.6 to 7.3
C -- 31 to 60 in	fine sandy loam	moderately rapid	3.16 to 5.46 in	7.4 to 8.4

Sunburg

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L347A--Klossner and Lundlake soils, 0 to 1 percent slopes, ponded

Klossner, lundlake catena, ponded

<p><i>Extent:</i> 0 to 100 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 1 percent</p> <p><i>Parent material:</i> organic material over loamy 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> .02</p> <p><i>Land capability, nonirrigated:</i> 8w</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>
Oa -- 0 to 26 in	muck	moderately rapid	9.09 to 12.47 in	
2A1 -- 26 to 33 in	silt loam	moderate	1.56 to 1.84 in	6.1 to 7.4
2A2 -- 33 to 40 in	loam	moderate	1.28 to 1.56 in	6.1 to 7.4
2Cg -- 40 to 80 in	sandy loam	moderately rapid	3.98 to 5.96 in	7.4 to 7.8

Lundlake, ponded

<p><i>Extent:</i> 0 to 100 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> colluvium over till</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> .24</p> <p><i>Land capability, nonirrigated:</i> 8w</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 26 in	mucky loam	moderate	4.42 to 5.72 in	6.6 to 7.3
Bg -- 26 to 56 in	loam	moderate	5.09 to 6.58 in	6.6 to 7.3
Bk -- 56 to 60 in	sandy loam	moderately rapid	0.39 to 0.59 in	6.6 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L350A--Marcellon loam, 0 to 3 percent slopes

Marcellon

Extent: 75 to 95 percent of the unit

Landform(s): rises on moraines

Slope gradient: 0 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) .24

Land capability, nonirrigated: 1

Hydric soil: no

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,A -- 0 to 13 in	loam	moderate	2.21 to 3.12 in	5.6 to 7.3
Bt -- 13 to 32 in	loam	moderate	2.27 to 3.40 in	5.6 to 7.3
Bk -- 32 to 80 in	sandy loam	moderately rapid	3.36 to 6.72 in	7.4 to 8.4

L351A--Houghton muck, lundlake catena, 0 to 1 percent slopes

Houghton, drained

Extent: 65 to 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

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>
Oap -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa -- 10 to 80 in	muck	moderately rapid	24.53 to 31.54 in	

Map Unit Description (MN)

Stearns County, Minnesota

L352A--Muskego muck, lundlake catena, 0 to 1 percent slopes

Muskego, drained, lundlake catena

Extent: 70 to 95 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material over coprogenous earth

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

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>
Op -- 0 to 9 in	muck	moderately rapid	3.17 to 4.07 in	
Oa -- 9 to 16 in	muck	moderately rapid	2.48 to 3.19 in	
Lco -- 16 to 76 in	coprogenous earth	slow	10.77 to 14.36 in	6.6 to 8.4
2Cg -- 76 to 80 in	sandy loam	moderately rapid	0.39 to 0.59 in	7.4 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L355B--Koronis-Sunburg-Hawick complex, 2 to 6 percent slopes

Koronis

Extent: 40 to 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	sandy loam	moderate	1.97 to 2.17 in	6.6 to 8.4
C -- 10 to 60 in	fine sandy loam	moderately rapid	5.50 to 8.00 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355B--Koronis-Sunburg-Hawick complex, 2 to 6 percent slopes

Hawick

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

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>
Ap -- 0 to 7 in	sandy loam	rapid	0.21 to 0.92 in	6.1 to 7.8
Bw,C -- 7 to 80 in	gravelly coarse sand	very rapid	1.46 to 4.37 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355C2--Koronis-Sunburg-Hawick complex, 6 to 12 percent slopes, moderately eroded

Koronis, moderately eroded

Extent: 35 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg, moderately eroded

Extent: 20 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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>
Ap -- 0 to 10 in	sandy loam	moderate	1.97 to 2.17 in	6.6 to 8.4
C -- 10 to 60 in	fine sandy loam	moderately rapid	5.50 to 8.00 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355C2--Koronis-Sunburg-Hawick complex, 6 to 12 percent slopes, moderately eroded

Hawick

Extent: 10 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

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>
Ap --	0 to 7 in		gravelly sandy loam	rapid	0.21 to 0.92 in	6.1 to 7.8
Bw,C --	7 to 80 in		gravelly coarse sand	very rapid	1.46 to 4.37 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355D2--Koronis-Sunburg-Hawick complex, 12 to 18 percent slopes, moderately eroded

Koronis, moderately eroded

Extent: 30 to 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg, moderately eroded

Extent: 20 to 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 7 in	sandy loam	moderate	1.42 to 1.56 in	6.6 to 8.4
C -- 7 to 60 in	fine sandy loam	moderately rapid	5.80 to 8.44 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355D2--Koronis-Sunburg-Hawick complex, 12 to 18 percent slopes, moderately eroded

Hawick

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

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>
Ap --	0 to 7 in	gravelly sandy loam	rapid	0.21 to 0.92 in	6.1 to 7.8
Bw --	7 to 20 in	gravelly loamy coarse sand	rapid	0.39 to 1.30 in	6.1 to 7.8
Bk --	20 to 60 in	gravelly coarse sand	very rapid	0.80 to 2.39 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355E--Koronis-Sunburg-Hawick complex, 18 to 40 percent slopes

Koronis

Extent: 30 to 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: 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 5 in	fine sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
Bt -- 5 to 21 in	fine sandy loam	moderately rapid	2.36 to 2.99 in	5.6 to 7.3
Bk -- 21 to 60 in	fine sandy loam	moderately rapid	4.29 to 6.24 in	7.4 to 8.4

Sunburg

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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 7 in	fine sandy loam	moderate	1.42 to 1.56 in	6.6 to 8.4
C -- 7 to 60 in	fine sandy loam	moderately rapid	5.80 to 8.44 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L355E--Koronis-Sunburg-Hawick complex, 18 to 40 percent slopes

Hawick

Extent: 10 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 14 in	gravelly loamy sand	rapid	0.43 to 1.84 in	6.1 to 7.8
Bk -- 14 to 60 in	gravelly coarse sand	rapid	1.37 to 4.57 in	6.1 to 7.8

Map Unit Description (MN)

Stearns County, Minnesota

L356C2--Sunburg-Wadenill complex, 6 to 12 percent slopes, moderately eroded

Sunburg, moderately eroded

Extent: 50 to 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Wadenill, moderately eroded

Extent: 20 to 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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>
Ap -- 0 to 10 in	fine sandy loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 31 in	fine sandy loam	moderately rapid	2.55 to 4.04 in	5.6 to 7.3
C -- 31 to 80 in	fine sandy loam	moderately rapid	5.37 to 9.28 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L356D2--Sunburg-Wadenill complex, 12 to 18 percent slopes, moderately eroded

Sunburg, moderately eroded

Extent: 60 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Wadenill, moderately eroded

Extent: 15 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 10 in	fine sandy loam	moderately rapid	1.57 to 1.77 in	5.6 to 7.3
Bw -- 10 to 31 in	fine sandy loam	moderately rapid	2.55 to 4.04 in	5.6 to 7.3
C -- 31 to 80 in	fine sandy loam	moderately rapid	5.37 to 9.28 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L357B--Koronis-Sunburg complex, 2 to 6 percent slopes

Koronis

Extent: 50 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L357C2--Koronis-Sunburg complex, 6 to 12 percent slopes, moderately eroded

Koronis, moderately eroded

Extent: 50 to 75 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg, moderately eroded

Extent: 15 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 8 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

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>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

L357D2--Koronis-Sunburg complex, 12 to 18 percent slopes, moderately eroded

Koronis, moderately eroded

Extent: 55 to 75 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
Bt -- 8 to 31 in	sandy clay loam	moderately rapid	3.48 to 4.41 in	5.6 to 7.3
Bk -- 31 to 43 in	fine sandy loam	moderately rapid	1.30 to 2.24 in	7.4 to 8.4
C -- 43 to 80 in	fine sandy loam	moderately rapid	4.07 to 5.92 in	7.4 to 8.4

Sunburg, moderately eroded

Extent: 15 to 35 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

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>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
Bk -- 8 to 20 in	fine sandy loam	moderately rapid	1.34 to 2.32 in	7.4 to 8.4
C -- 20 to 80 in	fine sandy loam	moderately rapid	6.58 to 9.57 in	7.4 to 8.4

Map Unit Description (MN)

Stearns County, Minnesota

M-W--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

<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

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Drainage class:

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Kw factor (surface layer)

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Hydric soil:

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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.