Map Unit Description (MN)

Wadena 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]

82B--Redeye loamy sand, 1 to 6 percent slopes

Redeye

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 1 to 6 percent
Parent material: sandy outwash over dense basal till
Restrictive feature(s): dense material at 35 to 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	loamy sand	rapid	0.3 to 0.4 in	5.1 to 7.3
E -- 3 to 18 in	sand	rapid	1.0 to 1.5 in	5.1 to 6.5
Bw -- 18 to 26 in	loamy sand	rapid	0.6 to 0.8 in	5.6 to 6.5
2Bt -- 26 to 52 in	sandy loam	moderately slow	2.9 to 3.4 in	5.1 to 7.3
2Cd -- 52 to 60 in	sandy loam	slow	0.0 to 0.3 in	6.6 to 8.4

82C--Redeye loamy sand, 6 to 12 percent slopes

Map Unit Description (MN)

Wadena 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]

82C--Redeye loamy sand, 6 to 12 percent slopes

Redeye

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 6 to 12 percent
Parent material: sandy outwash over dense basal till
Restrictive feature(s): dense material at 35 to 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	loamy sand	rapid	0.3 to 0.4 in	5.1 to 7.3
E -- 3 to 18 in	sand	rapid	1.0 to 1.5 in	5.1 to 6.5
Bw -- 18 to 26 in	loamy sand	rapid	0.6 to 0.8 in	5.6 to 6.5
2Bt -- 26 to 52 in	sandy loam	moderately slow	2.9 to 3.4 in	5.1 to 7.3
2Cd -- 52 to 60 in	sandy loam	slow	0.0 to 0.3 in	6.6 to 8.4

126--Graycalm loamy sand

Graycalm

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	loamy sand	rapid	0.5 to 1.1 in	4.5 to 6.5
Bt,BC -- 9 to 44 in	sand	rapid	1.4 to 3.2 in	4.5 to 7.3
C -- 44 to 60 in	sand	rapid	0.6 to 0.9 in	5.0 to 8.4

Map Unit Description (MN)

Wadena 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]

126--Graycalm loamy sand

139B--Huntersville loamy fine sand, 1 to 6 percent slopes

Huntersville

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 1 to 6 percent
Parent material: sandy outwash over dense basal till
Restrictive feature(s): dense material at 53 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 (surface layer): .17
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: C
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,E -- 0 to 12 in	loamy fine sand	rapid	1.2 to 1.4 in	6.1 to 7.3
Bw -- 12 to 24 in	cobbly loamy sand	rapid	0.5 to 1.2 in	6.1 to 7.3
2Bt -- 24 to 40 in	sandy loam	moderately slow	1.8 to 2.1 in	6.1 to 7.3
2Cd -- 40 to 60 in	sandy loam	slow	0.0 to 0.8 in	6.6 to 7.8

187--Haug muck

Map Unit Description (MN)

Wadena 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]

187--Haug muck

Haug

Extent: 85 percent of the unit
Landform(s): depressions on interdrumlins
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material over mineral material
Restrictive feature(s):
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 12 in	muck	moderately rapid	4.1 to 5.7 in	
A -- 12 to 17 in	loam	moderately rapid	0.6 to 1.2 in	6.6 to 8.4
Cg -- 17 to 60 in	sandy loam	moderate	4.7 to 8.2 in	7.4 to 8.4

207A--Nymore loamy sand, 1 to 3 percent slopes

Nymore

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 1 to 3 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.8 to 0.9 in	5.1 to 6.5
BA,Bw -- 8 to 33 in	sand	rapid	0.5 to 2.0 in	5.1 to 7.3
C -- 33 to 60 in	sand	rapid	0.5 to 2.1 in	5.1 to 7.8

Map Unit Description (MN)

Wadena 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]

207B--Nymore loamy sand, 3 to 6 percent slopes

Nymore

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 3 to 6 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.8 to 0.9 in	5.1 to 6.5
BA,Bw -- 8 to 33 in	sand	rapid	0.5 to 2.0 in	5.1 to 7.3
C -- 33 to 60 in	sand	rapid	0.5 to 2.1 in	5.1 to 7.8

207C--Nymore loamy sand, 6 to 12 percent slopes

Nymore

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 12 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.8 to 0.9 in	5.1 to 6.5
BA,Bw -- 8 to 33 in	sand	rapid	0.5 to 2.0 in	5.1 to 7.3
C -- 33 to 60 in	sand	rapid	0.5 to 2.1 in	5.1 to 7.8

260--Duelm loamy sand

Map Unit Description (MN)

Wadena 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]

260--Duelm loamy sand

Duelm

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 2 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 12 in	loamy sand	rapid	0.9 to 1.4 in	5.6 to 7.3
Bw -- 12 to 36 in	sand	rapid	1.4 to 2.6 in	5.1 to 7.3
C -- 36 to 60 in	sand	rapid	0.5 to 1.7 in	5.6 to 7.8

261--Isan loamy sand

Isan

Extent: 90 percent of the unit
Landform(s): drainageways on outwash plains, flats on outwash plains
Slope gradient: 0 to 1 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 13 in	loamy sand	rapid	1.0 to 1.6 in	5.6 to 7.3
Bg -- 13 to 30 in	sand	rapid	1.0 to 1.7 in	5.1 to 6.5
Cg -- 30 to 60 in	sand	rapid	1.2 to 1.8 in	5.6 to 7.3

Map Unit Description (MN)

Wadena 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]

374B--Rockwood sandy loam, 2 to 6 percent slopes

Rockwood

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 2 to 6 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 46 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 (surface layer): .24
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AE -- 0 to 9 in	sandy loam	moderate	1.2 to 1.6 in	5.1 to 6.5
E -- 9 to 19 in	sandy loam	moderate	1.2 to 1.5 in	5.1 to 6.5
BE,Bt -- 19 to 37 in	sandy loam	moderate	2.2 to 2.7 in	5.6 to 7.3
BC -- 37 to 55 in	sandy loam	moderately slow	2.2 to 2.7 in	5.6 to 7.3
Cd -- 55 to 60 in	sandy loam	impermeable	0.0 to 0.2 in	6.1 to 8.4

374C--Rockwood sandy loam, 6 to 12 percent slopes

Map Unit Description (MN)

Wadena 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]

374C--Rockwood sandy loam, 6 to 12 percent slopes

Rockwood

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 6 to 12 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 46 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 (surface layer): .24
Land capability class, nonirrigated: 3e
Hydric soil: no
Hydrologic group: C
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AE -- 0 to 9 in	sandy loam	moderate	1.2 to 1.6 in	5.1 to 6.5
E -- 9 to 19 in	sandy loam	moderate	1.2 to 1.5 in	5.1 to 6.5
BE,Bt -- 19 to 37 in	sandy loam	moderate	2.2 to 2.7 in	5.6 to 7.3
BC -- 37 to 55 in	sandy loam	moderately slow	2.2 to 2.7 in	5.6 to 7.3
Cd -- 55 to 60 in	sandy loam	impermeable	0.0 to 0.2 in	6.1 to 8.4

374D--Rockwood sandy loam, 12 to 18 percent slopes

Map Unit Description (MN)

Wadena 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]

374D--Rockwood sandy loam, 12 to 18 percent slopes

Rockwood

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 12 to 18 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 46 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 (surface layer): .24
Land capability class, nonirrigated: 4e
Hydric soil: no
Hydrologic group: C
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AE -- 0 to 9 in	sandy loam	moderate	1.2 to 1.6 in	5.1 to 6.5
E -- 9 to 19 in	sandy loam	moderate	1.2 to 1.5 in	5.1 to 6.5
BE,Bt -- 19 to 37 in	sandy loam	moderate	2.2 to 2.7 in	5.6 to 7.3
BC -- 37 to 55 in	sandy loam	moderately slow	2.2 to 2.7 in	5.6 to 7.3
Cd -- 55 to 60 in	sandy loam	impermeable	0.0 to 0.2 in	6.1 to 8.4

375--Forada loam

Map Unit Description (MN)

Wadena 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]

375--Forada loam

Forada

Extent: 90 percent of the unit
Landform(s): drainageways on outwash plains, flats on outwash plains
Slope gradient: 0 to 1 percent
Parent material: loamy outwash sediments over sandy and gravelly outwash
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .24
Land capability class, nonirrigated: 2w
Hydric soil: yes
Hydrologic group: B/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 11 in	loam	moderate	2.2 to 2.4 in	6.1 to 7.8
Bg,2BCg -- 11 to 25 in	loam	moderately rapid	1.7 to 2.7 in	6.1 to 7.8
2Cg -- 25 to 60 in	sand	rapid	0.7 to 3.5 in	6.6 to 8.4

406A--Dorset sandy loam, 1 to 3 percent slopes

Map Unit Description (MN)

Wadena 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]

406A--Dorset sandy loam, 1 to 3 percent slopes

Dorset

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 1 to 3 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s):
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 (surface layer): .20
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.4 in	5.6 to 7.3
Bt1 -- 9 to 16 in	sandy loam	moderately rapid	0.9 to 1.3 in	5.6 to 7.3
2Bt2 -- 16 to 21 in	gravelly loamy sand	rapid	0.3 to 0.5 in	7.4 to 8.4
2BC,2C -- 21 to 60 in	gravelly coarse sand	rapid	0.8 to 1.6 in	7.4 to 8.4

406B--Dorset sandy loam, 2 to 6 percent slopes

Map Unit Description (MN)

Wadena 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]

406B--Dorset sandy loam, 2 to 6 percent slopes

Dorset

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 2 to 6 percent
Parent material: loamy mantle over sandy and gravelly outwash
Restrictive feature(s):
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 (surface layer): .20
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.4 in	5.6 to 7.3
Bt1 -- 9 to 16 in	sandy loam	moderately rapid	0.9 to 1.3 in	5.6 to 7.3
2Bt2 -- 16 to 21 in	gravelly loamy sand	rapid	0.3 to 0.5 in	7.4 to 8.4
2BC,2C -- 21 to 60 in	gravelly coarse sand	rapid	0.8 to 1.6 in	7.4 to 8.4

454B--Mahtomedi loamy sand, 1 to 8 percent slopes

Mahtomedi

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: sandy and gravelly outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.8 to 0.9 in	5.1 to 6.5
Bw1,Bw2 -- 8 to 31 in	sand	rapid	1.4 to 1.9 in	5.1 to 6.5
BC -- 31 to 35 in	gravelly sand	rapid	0.2 to 0.3 in	5.1 to 6.5
C -- 35 to 60 in	gravelly sand	rapid	1.0 to 2.2 in	5.1 to 7.8

[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]

454B--Mahtomedi loamy sand, 1 to 8 percent slopes

458A--Menahga loamy sand, 0 to 2 percent slopes

Menahga

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 2 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 4 in	loamy sand	rapid	0.4 to 0.5 in	4.5 to 6.5
Bw,BC -- 4 to 24 in	coarse sand	rapid	1.0 to 1.4 in	4.5 to 6.5
C -- 24 to 60 in	coarse sand	rapid	1.8 to 2.5 in	5.6 to 7.8

458B--Menahga loamy coarse sand, 2 to 6 percent slopes

Menahga

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 2 to 6 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 4 in	loamy coarse sand	rapid	0.4 to 0.5 in	4.5 to 6.5
Bw,BC -- 4 to 24 in	coarse sand	rapid	1.0 to 1.4 in	4.5 to 6.5
C -- 24 to 60 in	coarse sand	rapid	1.8 to 2.5 in	5.6 to 7.8

[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]

458B--Menahga loamy coarse sand, 2 to 6 percent slopes

458C--Menahga loamy sand, 6 to 15 percent slopes

Menahga

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 6 to 15 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 4 in	loamy sand	rapid	0.4 to 0.5 in	4.5 to 6.5
Bw,BC -- 4 to 24 in	coarse sand	rapid	1.0 to 1.4 in	4.5 to 6.5
C -- 24 to 60 in	coarse sand	rapid	1.8 to 2.5 in	5.6 to 7.8

458E--Menahga loamy sand, 15 to 45 percent slopes

Menahga

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 15 to 45 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 7s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 4 in	loamy sand	rapid	0.4 to 0.5 in	4.5 to 6.5
Bw,BC -- 4 to 24 in	coarse sand	rapid	1.0 to 1.4 in	4.5 to 6.5
C -- 24 to 60 in	coarse sand	rapid	1.8 to 2.5 in	5.6 to 7.8

Map Unit Description (MN)

Wadena 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]

458E--Menahga loamy sand, 15 to 45 percent slopes

540--Seelyeville muck

Seelyeville

Extent: 85 percent of the unit
Landform(s): depressions on interdrumlins, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material
Restrictive feature(s):
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa1 -- 0 to 22 in	muck	moderately rapid	7.7 to 9.9 in	
Oa2,Oa3 -- 22 to 60 in	muck	rapid	13.2 to 17.0 in	

541--Rifle mucky peat

Map Unit Description (MN)

Wadena 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]

541--Rifle mucky peat

Rifle

Extent: 85 percent of the unit
Landform(s): depressions on interdrumlins, depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material
Restrictive feature(s):
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oe1 -- 0 to 16 in	mucky peat	rapid	7.7 to 9.4 in	
Oe2 -- 16 to 60 in	mucky peat	rapid	21.0 to 25.3 in	

543--Markey muck

Markey

Extent: 85 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material over outwash
Restrictive feature(s):
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 (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 26 in	muck	moderately rapid	9.1 to 11.7 in	
Cg1,Cg2 -- 26 to 60 in	sand	rapid	1.0 to 2.7 in	5.6 to 8.4

Map Unit Description (MN)

Wadena 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]

544--Cathro muck

Cathro

Extent: 85 percent of the unit
Landform(s): depressions on interdrumlins
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material over loamy glacial deposits
Restrictive feature(s):
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 (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 26 in	muck	moderately rapid	11.7 to 14.3 in	
Ab,Cg1,Cg2 -- 26 to 60 in	sandy loam	moderate	3.7 to 6.4 in	6.6 to 8.4

545--Rondeau muck

Rondeau

Extent: 85 percent of the unit
Landform(s): bogs, depressions on interdrumlins
Slope gradient: 0 to 1 percent
Parent material: herbaceaous organic material over coprogenous earth or marl
Restrictive feature(s):
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 (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 38 in	muck	moderately rapid	13.2 to 18.1 in	
Cg -- 38 to 60 in	marl	moderate	3.1 to 4.9 in	

567A--Verndale sandy loam, 0 to 2 percent slopes

Map Unit Description (MN)

Wadena 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]

567A--Verndale sandy loam, 0 to 2 percent slopes

Verndale

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 2 percent
Parent material: loamy mantle over sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .20
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.5 in	5.6 to 7.3
Bt1,Bt2 -- 9 to 19 in	sandy loam	moderate	1.4 to 1.8 in	5.6 to 7.3
2Bw -- 19 to 49 in	coarse sand	rapid	1.8 to 2.4 in	5.6 to 7.3
2C -- 49 to 60 in	sand	rapid	0.2 to 0.7 in	6.1 to 8.4

567B--Verndale sandy loam, 2 to 6 percent slopes

Verndale

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 2 to 6 percent
Parent material: loamy mantle over sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .20
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.5 in	5.6 to 7.3
Bt1,Bt2 -- 9 to 19 in	sandy loam	moderate	1.4 to 1.8 in	5.6 to 7.3
2Bw -- 19 to 49 in	coarse sand	rapid	1.8 to 2.4 in	5.6 to 7.3
2C -- 49 to 60 in	sand	rapid	0.2 to 0.7 in	6.1 to 8.4

Map Unit Description (MN)

Wadena 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]

567B--Verndale sandy loam, 2 to 6 percent slopes

701--Runeberg mucky loam

Runeberg

Extent: 85 percent of the unit
Landform(s): depressions on interdrumlins
Slope gradient: 0 to 2 percent
Parent material: loamy glacial till
Restrictive feature(s):
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 (surface layer): .24
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: C/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A1 -- 0 to 3 in	mucky loam	moderate	0.6 to 0.8 in	6.1 to 7.3
A2,A3,Bg -- 3 to 26 in	sandy loam	moderately slow	2.7 to 4.1 in	6.1 to 7.3
Cg -- 26 to 60 in	sandy loam	moderately slow	2.0 to 4.4 in	7.4 to 8.4

720B--Blowers sandy loam, 1 to 5 percent slopes

Map Unit Description (MN)

Wadena 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]

720B--Blowers sandy loam, 1 to 5 percent slopes

Blowers

Extent: 90 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 1 to 5 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 40 to 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw (surface layer): .24
Land capability class, nonirrigated: 2e
Hydric soil: no
Hydrologic group: C
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 9 in	sandy loam	moderate	1.2 to 1.6 in	5.1 to 7.3
E,E/B -- 9 to 25 in	sandy loam	moderate	1.9 to 2.4 in	5.1 to 6.5
Bt1 -- 25 to 32 in	sandy loam	moderate	0.8 to 1.0 in	5.6 to 7.3
Bt2 -- 32 to 49 in	sandy loam	moderately slow	2.0 to 2.5 in	5.6 to 7.3
Cd -- 49 to 60 in	sandy loam	moderately slow	1.3 to 1.7 in	5.6 to 7.3

793--Paddock complex

Paddock, very stony

Extent: 55 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 0 to 2 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 50 to 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 0
Kw (surface layer): .24
Land capability class, nonirrigated: 6s
Hydric soil: no
Hydrologic group: C/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 7 in	loam	moderate	1.4 to 1.6 in	5.6 to 7.3
E,B/E -- 7 to 17 in	sandy loam	moderate	1.2 to 1.5 in	5.6 to 6.5
Bt,BC -- 17 to 40 in	sandy loam	moderately slow	2.8 to 3.5 in	5.6 to 7.3
Cd -- 40 to 60 in	sandy loam	impermeable	0.0 to 0.8 in	7.4 to 8.4

Map Unit Description (MN)

Wadena 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]

793--Paddock complex

Paddock

Extent: 35 percent of the unit
Landform(s): hillslopes on drumlins
Slope gradient: 0 to 2 percent
Parent material: loamy dense basal till
Restrictive feature(s): dense material at 54 to 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .24
Land capability class, nonirrigated: 2w
Hydric soil: no
Hydrologic group: C/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 5 in	loam	moderate	1.0 to 1.1 in	5.6 to 7.3
E,E/B -- 5 to 19 in	sandy loam	moderate	1.7 to 2.2 in	5.6 to 6.5
Bt,BC -- 19 to 50 in	sandy loam	moderately slow	3.7 to 5.0 in	6.6 to 7.3
Cd -- 50 to 60 in	sandy loam	impermeable	0.0 to 0.4 in	6.6 to 8.4

834--Friendship-Meehan loamy sands

Friendship

Extent: 50 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: A
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	rapid	0.6 to 0.9 in	4.5 to 7.3
Bw1,Bw2 -- 8 to 46 in	sand	rapid	1.9 to 3.1 in	4.5 to 7.3
C1,C2 -- 46 to 60 in	sand	rapid	0.6 to 1.0 in	5.1 to 7.8

Map Unit Description (MN)

Wadena 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]

834--Friendship-Meehan loamy sands

Meehan

Extent: 40 percent of the unit
Landform(s): flats on outwash plains, rises on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 4w
Hydric soil: no
Hydrologic group: B
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 8 in	loamy sand	moderately rapid	0.8 to 0.9 in	4.5 to 7.3
Bw -- 8 to 40 in	sand	rapid	1.9 to 3.6 in	4.5 to 6.5
C -- 40 to 60 in	sand	rapid	0.4 to 1.4 in	5.1 to 7.3

1010--Riverwash

Riverwash

Extent: 100 percent of the unit
Landform(s): flood plains
Slope gradient: 0 to 2 percent
Parent material: sandy alluvium
Restrictive feature(s):
Flooding:
Ponding:
Drainage class:

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

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

1015--Psamments, nearly level

Map Unit Description (MN)

Wadena 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]

1015--Psamments, nearly level

Psamments, nearly level

Extent: 100 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 3 percent
Parent material: sandy deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 1
Wind erodibility index (WEI): 134
Kw (surface layer):
Land capability class, nonirrigated:
Hydric soil: no
Hydrologic group: A
Potential frost action: none

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

1030--Udorthents-Pits, complex

Udorthents

Extent: 50 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 0 to 3 percent
Parent material: gravelly outwash deposits
Restrictive feature(s):
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 (surface layer):
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: B
Potential frost action: moderate

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

Map Unit Description (MN)

Wadena 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]

1030--Udorthents-Pits, complex

Pits

Extent: 50 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 0 to 25 percent
Parent material: gravelly outwash deposits
Restrictive feature(s):
Flooding:
Ponding:
Drainage class:

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

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

1356--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s):
Flooding:
Ponding:
Drainage class:

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

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

1941--Evart loam, frequently flooded

Map Unit Description (MN)

Wadena 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]

1941--Evart loam, frequently flooded

Evart, frequently flooded

Extent: 90 percent of the unit
Landform(s): depressions on flood plains, flats on flood plains
Slope gradient: 0 to 1 percent
Parent material: sandy alluvium
Restrictive feature(s):
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .28
Land capability class, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 10 in	loam	moderate	1.9 to 2.2 in	6.1 to 7.8
Cg -- 10 to 60 in	coarse sand	rapid	2.5 to 5.0 in	6.1 to 8.4

1942--Forada mucky loam, depressional

Forada, depressional

Extent: 90 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: loamy outwash sediments over sandy and gravelly outwash
Restrictive feature(s):
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .24
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: B/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 16 in	mucky loam	moderate	3.2 to 3.6 in	6.6 to 7.8
Bg -- 16 to 18 in	sandy loam	moderately rapid	0.2 to 0.4 in	6.6 to 7.8
2BCg,2Cg -- 18 to 60 in	gravelly coarse sand	rapid	0.8 to 1.7 in	7.4 to 8.4

1943--Roscommon loamy sand

Map Unit Description (MN)

Wadena 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]

1943--Roscommon loamy sand

Roscommon

Extent: 90 percent of the unit
Landform(s): drainageways on outwash plains, flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 7 in	loamy sand	rapid	0.5 to 1.4 in	5.6 to 7.8
Cg -- 7 to 60 in	sand	rapid	2.6 to 3.7 in	5.6 to 8.4

1956--Staples loamy sand

Staples

Extent: 90 percent of the unit
Landform(s): drainageways on interdrumlins, flats on interdrumlins
Slope gradient: 0 to 2 percent
Parent material: sandy outwash over dense basal till
Restrictive feature(s): dense material at 44 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 (surface layer): .17
Land capability class, nonirrigated: 3w
Hydric soil: yes
Hydrologic group: C/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 7 in	loamy sand	rapid	0.7 to 0.9 in	5.1 to 7.3
Eg -- 7 to 36 in	sand	rapid	2.0 to 2.9 in	5.1 to 7.3
2Btg -- 36 to 44 in	sandy loam	moderately slow	0.5 to 1.1 in	5.1 to 7.3
2Cd1,2Cd2 -- 44 to 60 in	sandy loam	slow	0.0 to 0.6 in	6.6 to 7.8

Map Unit Description (MN)

Wadena 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]

1957B--Friendship loamy sand, till substratum, 1 to 6 percent slopes

Friendship, till substratum

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 6 percent
Parent material: sandy outwash deposits over loamy glacial till
Restrictive feature(s):
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 (surface layer): .17
Land capability class, nonirrigated: 3s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 3 in	loamy sand	rapid	0.3 to 0.4 in	5.1 to 7.3
Bw -- 3 to 44 in	sand	rapid	2.0 to 4.5 in	5.1 to 6.5
2C -- 44 to 60 in	sandy loam	moderate	1.1 to 2.0 in	4.5 to 7.3

1968--Evart loam, occasionally flooded

Evart, occasionally flooded

Extent: 90 percent of the unit
Landform(s): depressions on flood plains, flats on flood plains
Slope gradient: 0 to 1 percent
Parent material: sandy alluvium
Restrictive feature(s):
Flooding: occasional
Ponding: none
Drainage class: very poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .32
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap,A -- 0 to 11 in	loam	moderate	2.1 to 2.4 in	6.1 to 7.8
Cg -- 11 to 60 in	coarse sand	rapid	2.4 to 4.9 in	6.1 to 8.4

1969--Evart-Isan complex, channeled

Map Unit Description (MN)

Wadena 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]

1969--Evart-Isan complex, channeled

Evart, channeled, frequently flooded

Extent: 60 percent of the unit
Landform(s): oxbows on flood plains
Slope gradient: 0 to 1 percent
Parent material: sandy alluvium
Restrictive feature(s):
Flooding: frequent
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw (surface layer): .32
Land capability class, nonirrigated: 7w
Hydric soil: yes
Hydrologic group: D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 13 in	loam	moderate	2.5 to 2.9 in	6.1 to 7.8
Cg -- 13 to 60 in	sand	rapid	2.3 to 4.7 in	6.1 to 8.4

Isan

Extent: 25 percent of the unit
Landform(s): terraces on flood plains
Slope gradient: 0 to 1 percent
Parent material: sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw (surface layer): .17
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: moderate

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A,AB -- 0 to 13 in	sandy loam	moderately rapid	1.3 to 1.9 in	5.6 to 7.3
Bg -- 13 to 27 in	sand	rapid	0.8 to 1.4 in	5.1 to 6.5
Cg -- 27 to 60 in	sand	rapid	1.3 to 2.0 in	5.6 to 7.3

1970B--Menahga loamy sand, till substratum, 1 to 8 percent slo pes

Map Unit Description (MN)

Wadena 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]

1970B--Menahga loamy sand, till substratum, 1 to 8 percent slo pes

Menahga, till substratum

Extent: 90 percent of the unit
Landform(s): hillslopes on outwash plains
Slope gradient: 1 to 8 percent
Parent material: sandy outwash deposits over loamy glacial till
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .17
Land capability class, nonirrigated: 4s
Hydric soil: no
Hydrologic group: B
Potential frost action: low

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 4 in	loamy sand	rapid	0.4 to 0.5 in	5.1 to 7.3
AB,Bw1 -- 4 to 8 in	sand	rapid	0.4 to 0.5 in	5.1 to 6.5
Bw2,BC -- 8 to 55 in	sand	rapid	3.3 to 4.7 in	5.1 to 6.5
2C -- 55 to 60 in	sandy loam	impermeable	0.0 to 0.2 in	5.1 to 7.8

1975--Oylen sandy loam

Oylen

Extent: 90 percent of the unit
Landform(s): flats on outwash plains, swales on outwash plains
Slope gradient: 0 to 3 percent
Parent material: loamy mantle over sandy outwash deposits
Restrictive feature(s):
Flooding: none
Ponding: none
Drainage class: moderately well drained

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

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Ap -- 0 to 10 in	sandy loam	moderately rapid	1.2 to 1.6 in	6.1 to 7.3
Bt -- 10 to 18 in	sandy loam	moderate	1.0 to 1.5 in	6.1 to 7.3
2Bw -- 18 to 38 in	coarse sand	rapid	0.6 to 1.6 in	6.1 to 7.3
2C -- 38 to 60 in	gravelly coarse sand	rapid	0.7 to 1.5 in	6.6 to 8.4

Map Unit Description (MN)

Wadena 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]

1975--Oylen sandy loam

1984--Leafriver muck

Leafriver

Extent: 85 percent of the unit
Landform(s): depressions on outwash plains
Slope gradient: 0 to 1 percent
Parent material: highly decomposed herbaceous organic material over outwash
Restrictive feature(s):
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw (surface layer): .02
Land capability class, nonirrigated: 6w
Hydric soil: yes
Hydrologic group: A/D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
Oa -- 0 to 9 in	muck	moderately rapid	3.2 to 4.5 in	4.5 to 7.3
A -- 9 to 14 in	sandy loam	rapid	0.4 to 0.7 in	4.5 to 7.3
Cg1,Cg2 -- 14 to 60 in	loamy sand	rapid	1.4 to 3.7 in	4.5 to 7.3

1985--Fordum silt loam, occasionally flooded

Map Unit Description (MN)

Wadena 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]

1985--Fordum silt loam, occasionally flooded

Fordum, occasionally flooded

Extent: 85 percent of the unit
Landform(s): depressions on flood plains, flats on flood plains
Slope gradient: 0 to 1 percent
Parent material: alluvium
Restrictive feature(s):
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 4
Wind erodibility group (WEG): 8
Wind erodibility index (WEI): 56
Kw (surface layer): .28
Land capability class, nonirrigated: 4w
Hydric soil: yes
Hydrologic group: D
Potential frost action: high

Representative soil profile:	*Texture*	*Permeability*	*Available water capacity*	*pH*
A -- 0 to 8 in	silt loam	moderate	1.3 to 1.9 in	4.5 to 8.4
Cg1 -- 8 to 35 in	silt loam	moderate	2.7 to 6.0 in	4.5 to 8.4
2Cg2 -- 35 to 60 in	stratified sand to silt loam	rapid	1.0 to 4.0 in	5.6 to 8.4

W--Water

Water

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s):
Flooding:
Ponding:
Drainage class:

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

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

This report provides a semi tabular listing of some soil and site properties and interpretations valuable in communicating the concept of a map unit. It also includes commonly used conservation planning information in one place for easy access. Major soil components are always displayed and minor components are also displayed if they are included in the database and they are selected at the time the report is generated.