

Map Unit Description (MN)

Kandiyohi 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]

27B--Dickinson fine sandy loam, 1 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 6 percent

Parent material: coarse-loamy outwash over sandy 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): 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,A -- 0 to 16 in	fine sandy loam	moderately rapid	1.94 to 2.42 in	5.6 to 7.3
Bw -- 16 to 29 in	fine sandy loam	moderately rapid	1.56 to 1.95 in	5.1 to 6.5
C -- 29 to 60 in	fine sand	rapid	0.61 to 1.23 in	5.6 to 7.3

Lowlein

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

27B--Dickinson fine sandy loam, 1 to 6 percent slopes

Hanska

Extent: 5 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

35--Blue Earth mucky silt loam

Blue Earth

Extent: 85 percent of the unit

Landform(s): relict lakebeds on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-silty coprogenic material

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) .37

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 -- 0 to 10 in	mucky silt loam	moderate	1.77 to 2.36 in	7.4 to 8.4
C -- 10 to 60 in	mucky silt loam	moderate	9.00 to 12.00 in	7.4 to 8.4

Regal

Extent: 10 percent of the unit

Landform(s): rims

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)

Kandiyohi County, Minnesota

35--Blue Earth mucky silt loam

Hawick

Extent: 5 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

39--Wadena loam

Wadena

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy outwash over sandy 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: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	loam	moderate	4.02 to 4.42 in	6.1 to 7.3
Bw -- 20 to 27 in	loam	moderate	0.94 to 1.27 in	5.6 to 7.3
2C -- 27 to 60 in	coarse sand	rapid	0.66 to 1.32 in	6.6 to 8.4

Biscay

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

41A--Estherville coarse sandy loam, 0 to 3 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 3 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 5

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	coarse sandy loam	moderately rapid	1.69 to 2.34 in	5.6 to 7.3
Bw -- 13 to 19 in	loam	moderately rapid	0.77 to 1.06 in	5.6 to 7.3
2C -- 19 to 60 in	gravelly coarse sand	rapid	0.82 to 1.64 in	6.6 to 8.4

Biscay

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

41A--Estherville coarse sandy loam, 0 to 3 percent slopes

Linder

Extent: 5 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

84--Brownton silty clay loam

Brownton

Extent: 90 percent of the unit

Landform(s): rims on moraines

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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 18 in	silty clay loam	slow	3.26 to 3.98 in	7.4 to 8.4
Bg -- 18 to 34 in	silty clay	slow	2.05 to 2.52 in	7.4 to 8.4
2Cg -- 34 to 60 in	clay loam	moderate	3.64 to 4.16 in	7.4 to 8.4

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

84--Brownton silty clay loam

Nicollet

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

94--Terril loam

Terril

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy colluvium

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) .20

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>
Ap,A -- 0 to 37 in	loam	moderate	7.40 to 8.14 in	6.1 to 7.3
Bw -- 37 to 45 in	loam	moderate	1.34 to 1.50 in	6.1 to 7.3
C -- 45 to 60 in	loam	moderate	2.39 to 2.69 in	6.1 to 7.8

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

106B--Lester loam, 2 to 8 percent slopes

Lester

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 8 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bt -- 8 to 28 in	clay loam	moderate	3.01 to 3.81 in	5.6 to 7.3
C -- 28 to 60 in	loam	moderate	4.46 to 5.74 in	7.4 to 7.8

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

106B--Lester loam, 2 to 8 percent slopes

Swanlake

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

110--Marna silty clay

Marna

Extent: 90 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

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 20 in	silty clay	slow	3.61 to 4.42 in	6.1 to 7.3
Bg -- 20 to 36 in	clay	slow	2.05 to 2.52 in	6.1 to 7.3
2Cg -- 36 to 60 in	clay loam	moderate	3.36 to 4.56 in	6.6 to 8.4

Okoboji

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

112--Harps clay loam

Harps

Extent: 90 percent of the unit

Landform(s): rims on depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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,Ak -- 0 to 16 in	clay loam	moderate	3.07 to 3.39 in	7.9 to 8.4
Bkg -- 16 to 32 in	loam	moderate	2.68 to 2.99 in	7.9 to 8.4
Cg -- 32 to 60 in	loam	moderate	3.91 to 5.31 in	7.4 to 8.4

Glencoe

Extent: 4 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

112--Harps clay loam

Okoboji

Extent: 3 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Seaforth

Extent: 3 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

113--Webster silty clay loam

Webster

Extent: 90 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 20 in	silty clay loam	moderate	3.81 to 4.22 in	6.6 to 7.3
Bg -- 20 to 28 in	clay loam	moderate	1.26 to 1.42 in	6.6 to 7.8
Cg -- 28 to 60 in	clay loam	moderate	4.46 to 6.06 in	7.4 to 8.4

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

113--Webster silty clay loam

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

114--Glencoe clay loam

Glencoe

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-loamy alluvium

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,A -- 0 to 39 in	clay loam	moderate	7.02 to 8.57 in	6.1 to 7.8
Bg -- 39 to 44 in	loam	moderate	0.92 to 1.13 in	6.1 to 7.8
Cg -- 44 to 60 in	loam	moderate	2.36 to 2.99 in	6.6 to 7.8

Palms

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

114--Glencoe clay loam

Canisteo

Extent: 5 percent of the unit

Landform(s): rims

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>

Harps

Extent: 5 percent of the unit

Landform(s): rims

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

130A--Nicollet silty clay loam, 0 to 2 percent slopes

Nicollet

Extent: 85 percent of the unit

Landform(s): rises on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

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 18 in	silty clay loam	moderate	3.08 to 3.98 in	5.6 to 7.3
Bw -- 18 to 29 in	clay loam	moderate	1.65 to 2.09 in	5.6 to 7.8
C -- 29 to 60 in	loam	moderate	4.30 to 5.83 in	7.4 to 8.4

Webster

Extent: 10 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

130A--Nicollet silty clay loam, 0 to 2 percent slopes

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

130B--Nicollet clay loam, 2 to 5 percent slopes

Nicollet

Extent: 85 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 5 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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: 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	clay loam	moderate	1.67 to 1.87 in	5.6 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	5.6 to 7.8
C -- 21 to 60 in	loam	moderate	6.63 to 7.41 in	7.4 to 8.4

Webster

Extent: 10 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

130B--Nicollet clay loam, 2 to 5 percent slopes

Swanlake

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

134--Okoboji silty clay loam

Okoboji

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

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): 4

Wind erodibility index (WEI): 86

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>
Ap -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	6.1 to 7.8
A -- 10 to 32 in	silty clay loam	moderately slow	3.97 to 4.41 in	6.6 to 7.8
Bg,Cg -- 32 to 60 in	silt loam	moderately slow	5.03 to 5.59 in	6.6 to 8.4

Palms

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

134--Okoboji silty clay loam

Canisteo

Extent: 5 percent of the unit

Landform(s): rims

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>

Harps

Extent: 5 percent of the unit

Landform(s): rims

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

140--Spicer silty clay loam

Spicer

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 22 in	silty clay loam	moderate	3.97 to 5.29 in	7.4 to 8.4
Bg -- 22 to 32 in	silt loam	moderate	1.57 to 2.17 in	7.4 to 8.4
Cg -- 32 to 60 in	silt loam	moderate	4.47 to 6.15 in	7.4 to 8.4

Okoboji

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

230A--Guckeen clay loam, 0 to 2 percent slopes

Guckeen

Extent: 90 percent of the unit

Landform(s): rises on moraines

Slope gradient: 0 to 2 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
Ap,A -- 0 to 14 in	clay loam	moderately slow	2.27 to 2.69 in	5.6 to 7.3
Bw -- 14 to 28 in	clay	moderately slow	1.79 to 2.20 in	5.6 to 7.3
2C -- 28 to 60 in	clay loam	moderately slow	4.78 to 5.42 in	6.6 to 8.4

Okoboji

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

230B--Guckeen clay loam, 2 to 6 percent slopes

Guckeen

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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 14 in	clay loam	moderately slow	2.27 to 2.69 in	5.6 to 7.3
Bw -- 14 to 28 in	clay	moderately slow	1.79 to 2.20 in	5.6 to 7.3
2C -- 28 to 60 in	clay loam	moderately slow	4.78 to 5.42 in	6.6 to 8.4

Okoboji

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

238B--Kilkenny clay loam, 2 to 6 percent slopes

Kilkenny

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine deposits and/or fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C/D

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 9 in	clay loam	moderately slow	1.54 to 1.72 in	5.6 to 6.5
Bt -- 9 to 36 in	clay loam	moderately slow	4.02 to 5.09 in	4.5 to 6.5
2C -- 36 to 60 in	loam	moderate	3.36 to 3.84 in	5.6 to 7.8

Marna

Extent: 5 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

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

Kandiyohi County, Minnesota

238B--Kilkenny clay loam, 2 to 6 percent slopes

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

238C--Kilkenny clay loam, 6 to 12 percent slopes

Kilkenny

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: clayey glaciolacustrine deposits and/or fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay loam	moderately slow	1.54 to 1.72 in	5.6 to 6.5
Bt -- 9 to 36 in	clay loam	moderately slow	4.02 to 5.09 in	4.5 to 6.5
2C -- 36 to 60 in	loam	moderate	3.36 to 3.84 in	5.6 to 7.8

Marna

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

238C--Kilkenny clay loam, 6 to 12 percent slopes

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

336--Delft loam

Delft

Extent: 90 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy colluvium

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: 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 21 in	loam	moderate	3.76 to 4.17 in	5.6 to 7.8
A2 -- 21 to 30 in	loam	moderate	1.72 to 1.99 in	5.6 to 7.8
Bg -- 30 to 36 in	loam	moderate	1.12 to 1.30 in	6.6 to 7.8
Cg -- 36 to 60 in	sandy loam	moderate	3.60 to 4.56 in	7.4 to 8.4

Glencoe

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

392--Biscay loam

Biscay

Extent: 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy outwash over sandy 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,A -- 0 to 18 in	loam	moderate	3.62 to 3.98 in	6.1 to 7.8
Bg -- 18 to 28 in	loam	moderate	1.67 to 1.87 in	6.6 to 7.8
2Cg -- 28 to 60 in	gravelly coarse sand	rapid	0.64 to 1.28 in	7.4 to 8.4

Biscay

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

392--Biscay loam

Osakis

Extent: 5 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

399--Biscay loam, depressional

Biscay, depressional

Extent: 90 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy 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,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.8
Bg -- 21 to 30 in	loam	moderate	1.54 to 1.72 in	6.6 to 7.8
2Cg -- 30 to 60 in	gravelly coarse sand	rapid	0.60 to 1.20 in	7.4 to 8.4

Palms

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

413--Osakis sandy loam

Osakis

Extent: 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.65 to 2.13 in	6.1 to 7.3
Bw -- 12 to 18 in	sandy loam	moderately rapid	0.88 to 1.20 in	6.1 to 7.3
2Bw -- 18 to 40 in	gravelly coarse sand	rapid	0.88 to 1.32 in	6.1 to 7.3
2C -- 40 to 60 in	coarse sand	rapid	0.39 to 0.79 in	7.4 to 8.4

Biscay

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

423--Seaforth loam

Seaforth

Extent: 85 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

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 10 in	loam	moderate	1.67 to 2.36 in	7.4 to 8.4
Bk -- 10 to 19 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 19 to 60 in	loam	moderate	6.96 to 7.78 in	7.4 to 8.4

Canisteo

Extent: 10 percent of the unit

Landform(s): rims

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)

Kandiyohi County, Minnesota

423--Seaforth loam

Ves

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

444--Canisteo silty clay loam

Canisteo

Extent: 90 percent of the unit

Landform(s): rims on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 17 in	silty clay loam	moderate	3.05 to 3.72 in	7.4 to 8.4
Bg -- 17 to 27 in	silty clay loam	moderate	1.48 to 1.87 in	7.4 to 8.4
Cg -- 27 to 60 in	loam	moderate	4.63 to 5.29 in	7.4 to 8.4

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

444--Canisteo silty clay loam

Seaforth

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

446A--Normania loam, 0 to 2 percent slopes

Normania

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

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 15 in	loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 25 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
C -- 25 to 60 in	loam	moderate	5.20 to 6.58 in	7.4 to 8.4

Webster

Extent: 4 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

446A--Normania loam, 0 to 2 percent slopes

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

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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Marna

Extent: 3 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

446B--Normania loam, 2 to 5 percent slopes

Normania

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 5 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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: 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	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 25 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
C -- 25 to 60 in	loam	moderate	5.20 to 6.58 in	7.4 to 8.4

Webster

Extent: 4 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

446B--Normania loam, 2 to 5 percent slopes

Okoboji

Extent: 3 percent of the unit

Landform(s): depressions

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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Swanlake

Extent: 3 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

447--Harpster silty clay loam

Harpster

Extent: 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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>
Apk,Ak -- 0 to 17 in	silty clay loam	moderate	3.56 to 4.06 in	7.4 to 8.4
Bg -- 17 to 26 in	silty clay loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Cg -- 26 to 60 in	silt loam	moderate	5.76 to 7.45 in	7.4 to 8.4

Okoboji

Extent: 10 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

462E--Sunburg fine sandy loam, 18 to 25 percent slopes

Sunburg

<p><i>Extent:</i> 85 percent of the unit</p> <p><i>Landform(s):</i> hills on moraines</p> <p><i>Slope gradient:</i> 18 to 25 percent</p> <p><i>Parent material:</i> coarse-loamy 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> well 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> .24</p> <p><i>Land capability, nonirrigated:</i> 6e</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>
Ap -- 0 to 7 in	fine sandy loam	moderately rapid	1.13 to 1.28 in	6.6 to 8.4
C -- 7 to 60 in	fine sandy loam	moderately rapid	5.80 to 10.02 in	7.4 to 8.4

Terril

<p><i>Extent:</i> 10 percent of the unit</p> <p><i>Landform(s):</i> moraines</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated:</i></p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Kandiyohi County, Minnesota

462E--Sunburg fine sandy loam, 18 to 25 percent slopes

Hawick

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

523--Houghton muck

Houghton

<p><i>Extent:</i> 85 percent of the unit</p> <p><i>Landform(s):</i> depressions on moraines</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> muck herbaceous organic material</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> frequent</p> <p><i>Drainage class:</i> very poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 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> 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	

Palms

<p><i>Extent:</i> 15 percent of the unit</p> <p><i>Landform(s):</i> depressions</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Kandiyohi County, Minnesota

525--Muskego muck

Muskego

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over coprogenic material

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>
Oa -- 0 to 19 in	muck	moderately rapid	6.61 to 8.50 in	
Lco -- 19 to 60 in	coprogenous earth	slow	7.37 to 9.83 in	

Palms

Extent: 15 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

539--Palms muck

Palms

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 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>
Oa -- 0 to 27 in	muck	moderately rapid	9.37 to 12.85 in	
A -- 27 to 42 in	silty clay loam	moderate	2.76 to 3.38 in	
Cg -- 42 to 60 in	loam	moderate	2.66 to 3.37 in	

Glencoe

Extent: 10 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

539--Palms muck

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

548--Palms muck, sandy substratum

Palms, sandy substratum

Extent: 85 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 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: 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 27 in	muck	moderately rapid	9.37 to 12.05 in	
A -- 27 to 39 in	sandy clay loam	moderately rapid	1.59 to 2.44 in	
2C -- 39 to 60 in	gravelly loamy coarse sand	rapid	0.63 to 2.09 in	

Dassel

Extent: 15 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

559--Lena muck

Lena

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 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>
Oa --	0 to 60 in muck	moderately rapid	20.94 to 26.93 in	

Regal

Extent: 10 percent of the unit

Landform(s): rims

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

559--Lena muck

Hawick

Extent: 5 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

566--Regal loam

Regal

<p><i>Extent:</i> 90 percent of the unit</p> <p><i>Landform(s):</i> flats on outwash plains</p> <p><i>Slope gradient:</i> 0 to 2 percent</p> <p><i>Parent material:</i> fine-loamy outwash over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> poorly drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</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> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.41 to 2.98 in	6.6 to 8.4
Bg -- 14 to 18 in	sandy loam	moderate	0.59 to 0.79 in	7.4 to 8.4
2C -- 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	7.4 to 8.4

Biscay

<p><i>Extent:</i> 5 percent of the unit</p> <p><i>Landform(s):</i> depressions</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Kandiyohi County, Minnesota

566--Regal loam

Osakis

Extent: 5 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

611D--Hawick gravelly loamy coarse sand, 12 to 20 percent slopes

Hawick

Extent: 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<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	loamy coarse sand	rapid	1.10 to 1.32 in	6.1 to 7.8
Bw -- 11 to 16 in	gravelly loamy coarse sand	rapid	0.15 to 0.51 in	6.1 to 7.8
C -- 16 to 60 in	gravelly coarse sand	very rapid	0.87 to 2.62 in	7.4 to 8.4

Wadena

Extent: 5 percent of the unit

Landform(s): outwash 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: 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)

Kandiyohi County, Minnesota

611D--Hawick gravelly loamy coarse sand, 12 to 20 percent slopes

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

611F--Hawick gravelly loamy coarse sand, 20 to 35 percent slopes

Hawick

Extent: 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 20 to 35 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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 11 in	loamy coarse sand	rapid	1.10 to 1.32 in	6.1 to 7.8
Bw -- 11 to 16 in	gravelly loamy coarse sand	rapid	0.15 to 0.51 in	6.1 to 7.8
C -- 16 to 60 in	gravelly coarse sand	very rapid	0.87 to 2.62 in	7.4 to 8.4

Wadena

Extent: 5 percent of the unit

Landform(s): outwash 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: 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)

Kandiyohi County, Minnesota

611F--Hawick gravelly loamy coarse sand, 20 to 35 percent slopes

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

613--Grovecity loam

Grovecity

Extent: 90 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	loam	moderately rapid	3.23 to 3.55 in	6.1 to 7.3
Bw -- 16 to 27 in	fine sandy loam	moderately rapid	1.28 to 2.02 in	6.1 to 7.8
C -- 27 to 60 in	fine sandy loam	moderately rapid	3.64 to 6.28 in	7.4 to 8.4

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

613--Grovecity loam

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

804B--Koronis-Hawick complex, 2 to 6 percent slopes

Koronis

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bt -- 7 to 29 in	sandy clay loam	moderately rapid	3.31 to 4.19 in	5.6 to 7.3
C -- 29 to 60 in	fine sandy loam	moderately rapid	3.38 to 4.91 in	7.4 to 8.4

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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 coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 22 in	gravelly loamy coarse sand	rapid	0.37 to 1.22 in	6.1 to 7.8
C -- 22 to 60 in	gravelly coarse sand	very rapid	0.76 to 2.27 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

804B--Koronis-Hawick complex, 2 to 6 percent slopes

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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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Terril

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

804C--Koronis-Hawick complex, 6 to 12 percent slopes

Koronis

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bt -- 7 to 29 in	sandy clay loam	moderately rapid	3.31 to 4.19 in	5.6 to 7.3
C -- 29 to 60 in	fine sandy loam	moderately rapid	3.38 to 4.91 in	7.4 to 8.4

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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 coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 22 in	gravelly loamy coarse sand	rapid	0.37 to 1.22 in	6.1 to 7.8
C -- 22 to 60 in	gravelly coarse sand	very rapid	0.76 to 2.27 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

804C--Koronis-Hawick complex, 6 to 12 percent slopes

Terril

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

804C--Koronis-Hawick complex, 6 to 12 percent slopes

Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

804D--Koronis-Hawick complex, 12 to 20 percent slopes

Koronis

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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 7 in	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bt -- 7 to 29 in	sandy clay loam	moderately rapid	3.31 to 4.19 in	5.6 to 7.3
C -- 29 to 60 in	fine sandy loam	moderately rapid	3.38 to 4.91 in	7.4 to 8.4

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

Land capability, nonirrigated: 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<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 coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 22 in	gravelly loamy coarse sand	rapid	0.37 to 1.22 in	6.1 to 7.8
C -- 22 to 60 in	gravelly coarse sand	very rapid	0.76 to 2.27 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

804D--Koronis-Hawick complex, 12 to 20 percent slopes

Sunburg

Extent: 10 percent of the unit

Landform(s): moraines

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: 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>

Terril

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Kandiyohi County, Minnesota

804E--Koronis-Hawick complex, 20 to 30 percent slopes

Koronis

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 20 to 30 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: 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	sandy loam	moderately rapid	0.92 to 1.28 in	5.6 to 7.3
Bt -- 7 to 29 in	sandy clay loam	moderately rapid	3.31 to 4.19 in	5.6 to 7.3
C -- 29 to 60 in	fine sandy loam	moderately rapid	3.38 to 4.91 in	7.4 to 8.4

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 20 to 30 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 22 in	gravelly loamy coarse sand	rapid	0.37 to 1.22 in	6.1 to 7.8
C -- 22 to 60 in	gravelly coarse sand	very rapid	0.76 to 2.27 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

804E--Koronis-Hawick complex, 20 to 30 percent slopes

Sunburg

Extent: 10 percent of the unit

Landform(s): moraines

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: 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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Terril

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

805B--Wadenill-Sunburg loams, 2 to 6 percent slopes

Wadenill

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

805B--Wadenill-Sunburg loams, 2 to 6 percent slopes

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

805C--Sunburg-Wadenill complex, 6 to 12 percent slopes

Sunburg

Extent: 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Wadenill

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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 60 in	fine sandy loam	moderately rapid	3.16 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

805C--Sunburg-Wadenill complex, 6 to 12 percent slopes

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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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Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

805D--Sunburg-Wadenill complex, 12 to 18 percent slopes

Sunburg

<p><i>Extent:</i> 70 percent of the unit</p> <p><i>Landform(s):</i> hills on moraines</p> <p><i>Slope gradient:</i> 12 to 18 percent</p> <p><i>Parent material:</i> coarse-loamy 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> well 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> .32</p> <p><i>Land capability, nonirrigated:</i> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> B</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Wadenill

<p><i>Extent:</i> 20 percent of the unit</p> <p><i>Landform(s):</i> hills on moraines</p> <p><i>Slope gradient:</i> 12 to 18 percent</p> <p><i>Parent material:</i> coarse-loamy 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> well 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> 4e</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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 60 in	fine sandy loam	moderately rapid	3.16 to 5.46 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

805D--Sunburg-Wadenill complex, 12 to 18 percent slopes

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

806C--Guckeen-Arkton complex, 4 to 12 percent slopes

Guckeen

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 12 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	silty clay loam	moderately slow	1.89 to 2.24 in	5.6 to 7.3
Bw -- 12 to 26 in	clay	moderately slow	1.84 to 2.27 in	5.6 to 7.3
2C -- 26 to 60 in	clay loam	moderately slow	5.08 to 5.76 in	6.6 to 8.4

Arkton

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 12 percent

Parent material: clayey till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay	moderately slow	1.18 to 1.72 in	6.6 to 8.4
Bk -- 9 to 27 in	clay	moderately slow	1.77 to 3.37 in	7.4 to 8.4
C -- 27 to 60 in	clay loam	moderately slow	4.30 to 6.28 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

806C--Guckeen-Arkton complex, 4 to 12 percent slopes

Marna

Extent: 10 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Swanlake

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

807B--Koronis-Sunburg complex, 2 to 6 percent slopes

Koronis

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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 26 in	sandy clay loam	moderately rapid	2.72 to 3.44 in	5.6 to 7.3
C -- 26 to 60 in	fine sandy loam	moderately rapid	3.72 to 5.42 in	7.4 to 8.4

Sunburg

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

807B--Koronis-Sunburg complex, 2 to 6 percent slopes

Delft

Extent: 10 percent of the unit

Landform(s): drainageways

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>

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

807C--Koronis-Sunburg complex, 6 to 12 percent slopes

Koronis

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: 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 26 in	sandy clay loam	moderately rapid	2.72 to 3.44 in	5.6 to 7.3
C -- 26 to 60 in	fine sandy loam	moderately rapid	3.72 to 5.42 in	7.4 to 8.4

Sunburg

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

807C--Koronis-Sunburg complex, 6 to 12 percent slopes

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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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Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

807D--Koronis-Sunburg complex, 12 to 20 percent slopes

Koronis

Extent: 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 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 26 in	sandy clay loam	moderately rapid	2.72 to 3.44 in	5.6 to 7.3
C -- 26 to 60 in	fine sandy loam	moderately rapid	3.72 to 5.42 in	7.4 to 8.4

Sunburg

Extent: 35 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 8 in	loam	moderate	1.57 to 1.73 in	6.6 to 8.4
C -- 8 to 60 in	fine sandy loam	moderately rapid	5.72 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

807D--Koronis-Sunburg complex, 12 to 20 percent slopes

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

809--Lowlein-Estherville sandy loams

Lowlein

Extent: 65 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .10

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	6.1 to 7.3
Bw1 -- 14 to 24 in	sandy loam	moderately rapid	1.18 to 1.38 in	6.1 to 7.3
Bw2 -- 24 to 31 in	loamy sand	rapid	0.43 to 0.78 in	6.1 to 7.3
2C -- 31 to 60 in	loam	moderate	4.89 to 5.46 in	7.4 to 8.4

Estherville

Extent: 20 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 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 18 in	sandy loam	moderately rapid	1.07 to 1.49 in	5.6 to 7.3
2C -- 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	6.6 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

809--Lowlein-Estherville sandy loams

Coriff

Extent: 10 percent of the unit

Landform(s): drainageways

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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Sunburg

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

810--Coriff-Fieldon complex

Coriff

Extent: 45 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: sandy and silty glaciolacustrine deposits over loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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 -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
A -- 10 to 24 in	sandy loam	moderately rapid	1.70 to 2.13 in	7.4 to 8.4
Bg -- 24 to 33 in	loamy fine sand	rapid	0.81 to 1.27 in	7.4 to 8.4
2Cg -- 33 to 60 in	loam	moderate	4.55 to 5.09 in	7.4 to 8.4

Fieldon

Extent: 45 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

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 17 in	fine sandy loam	moderately rapid	2.54 to 2.88 in	7.4 to 8.4
Bg -- 17 to 27 in	fine sandy loam	moderate	1.48 to 1.67 in	7.4 to 8.4
Cg -- 27 to 60 in	fine sand	rapid	1.65 to 2.31 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

810--Coriff-Fieldon complex

Biscay

Extent: 5 percent of the unit

Landform(s): depressions

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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Osakis

Extent: 5 percent of the unit

Landform(s): outwash 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: 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)

Kandiyohi County, Minnesota

817--Canisteo-Seaforth complex

Canisteo

Extent: 55 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 22 in	silty clay loam	moderate	3.97 to 4.85 in	7.4 to 8.4
Bg -- 22 to 30 in	silty clay loam	moderate	1.18 to 1.50 in	7.4 to 8.4
Cg -- 30 to 60 in	loam	moderate	4.19 to 4.79 in	7.4 to 8.4

Seaforth

Extent: 30 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

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 10 in	loam	moderate	1.67 to 2.36 in	7.4 to 8.4
Bk -- 10 to 19 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 19 to 60 in	loam	moderate	6.96 to 7.78 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

817--Canisteo-Seaforth complex

Marna

Extent: 10 percent of the unit

Landform(s): drainageways

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>

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

819B--Regal-Hawick complex, 0 to 4 percent slopes

Regal

Extent: 55 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy outwash over sandy 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) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	loam	moderate	2.88 to 3.56 in	6.6 to 8.4
2Cg -- 17 to 60 in	gravelly coarse sand	rapid	0.86 to 1.72 in	7.4 to 8.4

Hawick

Extent: 35 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 4 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 -- 0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw,C -- 10 to 60 in	sand	very rapid	1.00 to 3.00 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

819B--Regal-Hawick complex, 0 to 4 percent slopes

Biscay

Extent: 4 percent of the unit

Landform(s): depressions

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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Palms

Extent: 3 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

819B--Regal-Hawick complex, 0 to 4 percent slopes

Osakis

Extent: 3 percent of the unit

Landform(s): outwash 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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

833B--Wadenill-Sunburg-Hawick complex, 2 to 6 percent slopes

Wadenill

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Sunburg

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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 1.56 in	6.6 to 8.4
C -- 7 to 60 in	fine sandy loam	moderately rapid	5.80 to 10.02 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

833B--Wadenill-Sunburg-Hawick complex, 2 to 6 percent slopes

Hawick

<p><i>Extent:</i> 20 percent of the unit</p> <p><i>Landform(s):</i> hills on moraines</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 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> 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>
Ap -- 0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C -- 14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Delft

<p><i>Extent:</i> 5 percent of the unit</p> <p><i>Landform(s):</i> drainageways</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Kandiyohi County, Minnesota

833B--Wadenill-Sunburg-Hawick complex, 2 to 6 percent slopes

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

833C--Sunburg-Wadenill-Hawick complex, 6 to 12 percent slopes

Sunburg

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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	6.6 to 8.4
C -- 7 to 60 in	loam	moderately rapid	5.80 to 10.02 in	7.4 to 8.4

Wadenill

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

833C--Sunburg-Wadenill-Hawick complex, 6 to 12 percent slopes

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 -- 0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C -- 14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

833C--Sunburg-Wadenill-Hawick complex, 6 to 12 percent slopes

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

833D--Sunburg-Wadenill-Hawick complex, 12 to 18 percent slopes

Sunburg

Extent: 45 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 7 in	loam	moderate	1.42 to 1.56 in	6.6 to 8.4
C -- 7 to 60 in	loam	moderately rapid	5.80 to 10.02 in	7.4 to 8.4

Wadenill

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

833D--Sunburg-Wadenill-Hawick complex, 12 to 18 percent slopes

Hawick

<p><i>Extent:</i> 20 percent of the unit</p> <p><i>Landform(s):</i> hills on moraines</p> <p><i>Slope gradient:</i> 12 to 18 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 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>
Ap -- 0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C -- 14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Delft

<p><i>Extent:</i> 4 percent of the unit</p> <p><i>Landform(s):</i> drainageways</p> <p><i>Slope gradient:</i></p> <p><i>Parent material:</i></p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i></p> <p><i>Ponding:</i></p> <p><i>Drainage class:</i></p>	<p><i>Soil loss tolerance (T factor):</i></p> <p><i>Wind erodibility group (WEG):</i></p> <p><i>Wind erodibility index (WEI):</i></p> <p><i>Kw factor (surface layer)</i></p> <p><i>Land capability, nonirrigated:</i></p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i></p> <p><i>Potential for frost action:</i></p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Kandiyohi County, Minnesota

833D--Sunburg-Wadenill-Hawick complex, 12 to 18 percent slopes

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

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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Terril

Extent: 3 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

833E--Sunburg-Wadenill-Hawick complex, 18 to 35 percent slopes

Sunburg

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 35 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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	loam	moderate	1.42 to 1.56 in	6.6 to 8.4
C -- 7 to 60 in	loam	moderately rapid	5.80 to 10.02 in	7.4 to 8.4

Wadenill

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 25 percent

Parent material: coarse-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

833E--Sunburg-Wadenill-Hawick complex, 18 to 35 percent slopes

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 35 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C -- 14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Terril

Extent: 10 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

842--Urban land-Udorthents complex

Urban land

Extent: 50 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

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

Extent: 40 percent of the unit

Landform(s): moraines, outwash plains

Slope gradient: 0 to 10 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 6s

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>
AC -- 0 to 60 in	loam	moderately rapid	4.79 to 8.38 in	6.6 to 9.0

Map Unit Description (MN)

Kandiyohi County, Minnesota

842--Urban land-Udorthents complex

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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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Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

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

Estherville

<p><i>Extent:</i> 60 percent of the unit</p> <p><i>Landform(s):</i> hills on outwash plains</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> coarse-loamy outwash over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated:</i> 3s</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> A</p> <p><i>Potential for frost action:</i> low</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 2.13 in	5.6 to 7.3
Bw -- 12 to 18 in	sandy loam	moderately rapid	0.82 to 1.13 in	5.6 to 7.3
2C -- 18 to 60 in	coarse sand	rapid	0.83 to 1.67 in	6.6 to 8.4

Hawick

<p><i>Extent:</i> 25 percent of the unit</p> <p><i>Landform(s):</i> hills on outwash plains</p> <p><i>Slope gradient:</i> 2 to 6 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 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> 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>
Ap -- 0 to 12 in	loamy coarse sand	rapid	1.18 to 1.42 in	6.1 to 7.8
C -- 12 to 60 in	gravelly coarse sand	very rapid	0.96 to 2.88 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

Biscay

Extent: 5 percent of the unit

Landform(s): drainageways

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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Wadena

Extent: 5 percent of the unit

Landform(s): outwash 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: 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)

Kandiyohi County, Minnesota

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

Regal

Extent: 5 percent of the unit

Landform(s): flats

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

875C--Hawick-Estherville complex, 6 to 12 percent slopes

Hawick

<p><i>Extent:</i> 65 percent of the unit</p> <p><i>Landform(s):</i> hills on outwash plains</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 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> 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>
Ap -- 0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
C -- 10 to 60 in	gravelly coarse sand	very rapid	1.00 to 3.00 in	7.4 to 8.4

Estherville

<p><i>Extent:</i> 20 percent of the unit</p> <p><i>Landform(s):</i> hills on outwash plains</p> <p><i>Slope gradient:</i> 6 to 12 percent</p> <p><i>Parent material:</i> coarse-loamy outwash over sandy and gravelly outwash</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> somewhat excessively drained</p>	<p><i>Soil loss tolerance (T factor):</i> 2</p> <p><i>Wind erodibility group (WEG):</i> 3</p> <p><i>Wind erodibility index (WEI):</i> 86</p> <p><i>Kw factor (surface layer)</i> .24</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>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 2.13 in	5.6 to 7.3
Bw -- 12 to 18 in	sandy loam	moderately rapid	0.82 to 1.13 in	5.6 to 7.3
C -- 18 to 60 in	gravelly coarse sand	rapid	0.83 to 1.67 in	6.6 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

875C--Hawick-Estherville complex, 6 to 12 percent slopes

Wadena

Extent: 10 percent of the unit

Landform(s): outwash 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: 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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Biscay

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

897B--Seaforth-Swanlake loams, 2 to 6 percent slopes

Seaforth

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 4 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

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 15 in	loam	moderate	2.54 to 3.59 in	7.4 to 8.4
Bk -- 15 to 21 in	loam	moderate	0.89 to 1.12 in	7.4 to 8.4
C -- 21 to 60 in	loam	moderate	6.63 to 7.41 in	7.4 to 8.4

Swanlake

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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 -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	7.4 to 8.4
C -- 9 to 60 in	loam	moderate	8.63 to 9.65 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

897B--Seaforth-Swanlake loams, 2 to 6 percent slopes

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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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Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

899--Harps-Okoboji complex

Harps

Extent: 60 percent of the unit

Landform(s): rims on depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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,Ak -- 0 to 17 in	loam	moderate	3.22 to 3.56 in	7.9 to 8.4
Bkg -- 17 to 27 in	loam	moderate	1.67 to 1.87 in	7.9 to 8.4
Cg -- 27 to 60 in	loam	moderate	4.63 to 6.28 in	7.4 to 8.4

Okoboji

Extent: 35 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

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): 4

Wind erodibility index (WEI): 86

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>
Ap -- 0 to 10 in	silty clay loam	moderately slow	2.07 to 2.26 in	6.1 to 7.8
A -- 10 to 36 in	silty clay loam	moderately slow	4.68 to 5.20 in	6.6 to 7.8
Bg -- 36 to 60 in	silt loam	moderately slow	4.32 to 4.80 in	6.6 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

899--Harps-Okoboji complex

Seaforth

Extent: 5 percent of the unit

Landform(s): moraines

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: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

927--Harps-Seaforth-Okobojo complex

Harps

Extent: 35 percent of the unit

Landform(s): rims on depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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,Ak -- 0 to 10 in	clay loam	moderate	1.87 to 2.07 in	7.9 to 8.4
Bkg -- 10 to 31 in	loam	moderate	3.61 to 4.04 in	7.9 to 8.4
Cg -- 31 to 60 in	loam	moderate	4.02 to 5.46 in	7.4 to 8.4

Seaforth

Extent: 25 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2s

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 10 in	loam	moderate	1.67 to 2.36 in	7.4 to 8.4
Bk -- 10 to 22 in	loam	moderate	1.83 to 2.32 in	7.4 to 8.4
C -- 22 to 60 in	loam	moderate	6.43 to 7.18 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

927--Harps-Seaforth-Okoboji complex

Okoboji

Extent: 25 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

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): 4

Wind erodibility index (WEI): 86

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>
Ap,A -- 0 to 26 in	silty clay loam	moderately slow	5.46 to 5.98 in	6.1 to 7.8
Bg,Cg -- 26 to 60 in	silty clay loam	moderately slow	6.09 to 6.77 in	6.6 to 8.4

Ves

Extent: 15 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

954B--Ves-Swanlake loams, 2 to 6 percent slopes

Ves

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 5 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 10 in	loam	moderate	1.67 to 2.17 in	6.1 to 7.3
Bw -- 10 to 20 in	clay loam	moderate	1.54 to 1.94 in	6.1 to 7.3
C -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Swanlake

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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 -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	7.4 to 8.4
C -- 9 to 60 in	loam	moderate	8.63 to 9.65 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

954B--Ves-Swanlake loams, 2 to 6 percent slopes

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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>

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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>

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

Swanlake

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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	1.81 to 2.17 in	7.4 to 8.4
C -- 9 to 60 in	loam	moderate	8.63 to 9.65 in	7.4 to 8.4

Ves

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 20 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
C -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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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Hawick

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

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

Swanlake

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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 9 in	loam	moderate	1.81 to 2.17 in	7.4 to 8.4
C -- 9 to 60 in	loam	moderate	8.63 to 9.65 in	7.4 to 8.4

Ves

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 10 in	loam	moderate	1.67 to 2.17 in	6.1 to 7.8
Bw -- 10 to 20 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
C -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

Delft

Extent: 5 percent of the unit

Landform(s): drainageways

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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Hawick

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

981--Canisteo-Harps loams

Canisteo

Extent: 45 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

	<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	7.4 to 8.4
A -- 10 to 21 in	loam	moderate	1.65 to 2.09 in	7.4 to 8.4
Bkg -- 21 to 29 in	loam	moderate	0.99 to 1.49 in	7.4 to 8.4
Cg -- 29 to 60 in	loam	moderate	4.30 to 4.91 in	7.4 to 8.4

Harps

Extent: 40 percent of the unit

Landform(s): rims on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,Ak -- 0 to 15 in	loam	moderate	2.84 to 3.14 in	7.9 to 8.4
Bkg -- 15 to 28 in	loam	moderate	2.21 to 2.47 in	7.9 to 8.4
Cg -- 28 to 60 in	loam	moderate	4.46 to 6.06 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

981--Canisteo-Harps loams

Glencoe

Extent: 10 percent of the unit

Landform(s): depressions

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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Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

999B--Ves-Swanlake-Hawick complex, 2 to 6 percent slopes

Ves

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 5 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 14 in	loam	moderate	2.41 to 3.12 in	6.1 to 7.3
Bw -- 14 to 23 in	loam	moderate	1.30 to 1.65 in	6.1 to 7.3
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

Swanlake

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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 -- 0 to 10 in	loam	moderate	1.97 to 2.36 in	7.4 to 8.4
C -- 10 to 60 in	loam	moderate	8.50 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

999B--Ves-Swanlake-Hawick complex, 2 to 6 percent slopes

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .05

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 coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 21 in	loamy coarse sand	rapid	0.33 to 1.10 in	6.1 to 7.8
C -- 21 to 60 in	gravelly coarse sand	very rapid	0.78 to 2.34 in	7.4 to 8.4

Glencoe

Extent: 4 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

999B--Ves-Swanlake-Hawick complex, 2 to 6 percent slopes

Webster

Extent: 3 percent of the unit

Landform(s): drainageways

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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Terril

Extent: 3 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

999C--Swanlake-Ves-Hawick complex, 6 to 12 percent slopes

Swanlake

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

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	1.97 to 2.36 in	7.4 to 8.4
C -- 10 to 60 in	loam	moderate	8.50 to 9.50 in	7.4 to 8.4

Ves

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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,A -- 0 to 14 in	loam	moderate	2.41 to 3.12 in	6.1 to 7.8
Bw -- 14 to 23 in	clay loam	moderate	1.30 to 1.65 in	6.6 to 7.8
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

999C--Swanlake-Ves-Hawick complex, 6 to 12 percent slopes

Hawick

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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 -- 0 to 10 in	loamy sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 21 in	loamy sand	rapid	0.33 to 1.10 in	6.1 to 7.8
C -- 21 to 60 in	sand	very rapid	0.78 to 2.34 in	7.4 to 8.4

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

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)

Kandiyohi County, Minnesota

999C--Swanlake-Ves-Hawick complex, 6 to 12 percent slopes

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

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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Terril

Extent: 5 percent of the unit

Landform(s): moraines

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: 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)

Kandiyohi County, Minnesota

1016--Udorthents, loamy

Udorthents, loamy

Extent: 100 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 10 percent

Parent material: loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .43

Land capability, nonirrigated: 6s

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>
C --	0 to 60 in loam	moderately rapid	4.79 to 8.38 in	6.6 to 9.0

1029--Pits, gravel

Pits, gravel

Extent: 100 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 45 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Kandiyohi County, Minnesota

1055--Aquolls and Histosols, ponded

Aquolls, ponded

Extent: 60 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .20

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>
A -- 0 to 30 in	loam	moderate	5.39 to 6.58 in	6.1 to 7.8
Cg -- 30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Histosols, ponded

Extent: 40 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 20 in	muck	moderately rapid	7.03 to 9.04 in	
2A -- 20 to 50 in	coprogenous earth	slow	5.39 to 7.18 in	
2Cg -- 50 to 60 in	loam	moderate	1.38 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

1065B--Aquolls and Histosols, sloping

Aquolls, sloping

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 4 percent

Parent material: loamy 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) .20

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>
A -- 0 to 20 in	loam	moderate	3.61 to 4.42 in	6.1 to 7.8
Cg -- 20 to 60 in	loam	moderate	5.57 to 7.56 in	7.4 to 8.4

Histosols, sloping

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 4 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: 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 30 in	muck	moderately rapid	10.47 to 13.46 in	
2Cg -- 30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

1356--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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Map Unit Description (MN)

Kandiyohi County, Minnesota

1900--Okoboji-Canisteo silty clay loams, depressional

Okoboji, depressional

Extent: 55 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

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): 4

Wind erodibility index (WEI): 86

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>
Ap,A -- 0 to 32 in	silty clay loam	moderately slow	6.70 to 7.33 in	6.1 to 7.8
Bg -- 32 to 43 in	silty clay loam	moderately slow	1.98 to 2.20 in	6.6 to 7.8
Cg -- 43 to 60 in	silt loam	moderately slow	3.05 to 3.39 in	6.6 to 8.4

Canisteo, depressional

Extent: 30 percent of the unit

Landform(s): depressions, moraines

Slope gradient: 0 to 1 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 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>
Ap,A -- 0 to 17 in	silty clay loam	moderate	3.05 to 3.72 in	7.4 to 8.4
Bkg -- 17 to 30 in	silt loam	moderate	1.95 to 2.47 in	7.4 to 8.4
Cg -- 30 to 60 in	loam	moderate	3.59 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

1900--Okoboji-Canisteo silty clay loams, depressional

Palms

Extent: 5 percent of the unit

Landform(s): depressions

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Harps

Extent: 5 percent of the unit

Landform(s): rims

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

1900--Okoboji-Canisteo silty clay loams, depressional

Harpster

Extent: 5 percent of the unit

Landform(s): rims

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Kandiyohi County, Minnesota

1908--Biscay-Palms complex

Biscay

Extent: 50 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .28

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>
Ap,A -- 0 to 20 in	loam	moderate	4.02 to 4.42 in	6.1 to 7.8
Bg -- 20 to 26 in	sandy clay loam	moderate	1.00 to 1.12 in	6.6 to 7.8
2Cg -- 26 to 60 in	gravelly coarse sand	rapid	0.68 to 1.35 in	7.4 to 8.4

Palms

Extent: 40 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over sandy outwash

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): 8

Wind erodibility index (WEI): 0

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 21 in	muck	moderately rapid	7.30 to 9.39 in	
2A -- 21 to 29 in	loam	moderately rapid	1.07 to 1.65 in	
2Cg -- 29 to 60 in	sand	rapid	0.92 to 3.07 in	

Map Unit Description (MN)

Kandiyohi County, Minnesota

1908--Biscay-Palms complex

Regal

Extent: 4 percent of the unit

Landform(s): rims

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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Houghton

Extent: 3 percent of the unit

Landform(s): depressions

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)

Kandiyohi County, Minnesota

1908--Biscay-Palms complex

Osakis

Extent: 3 percent of the unit

Landform(s): outwash 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: 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>

L13A--Klossner muck, depressional, 0 to 1 percent slopes

Klossner, drained

Extent: 65 to 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over loamy glaciofluvial deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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>
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	
2A2 -- 36 to 48 in	silty clay loam	moderate	2.20 to 2.69 in	
2Cg -- 48 to 80 in	loam	moderate	4.78 to 6.06 in	

Map Unit Description (MN)

Kandiyohi County, Minnesota

L33A--Kandiyohi clay, 0 to 2 percent slopes

Kandiyohi

Extent: 70 to 90 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: fine textured mantle over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
Ap -- 0 to 10 in	clay	moderately slow	1.57 to 2.17 in	6.1 to 7.3
Bw -- 10 to 23 in	clay	moderately slow	1.82 to 2.47 in	6.1 to 7.3
Bkg -- 23 to 29 in	clay	moderately slow	0.82 to 1.20 in	7.4 to 8.4
2Bkg -- 29 to 80 in	clay loam	moderately slow	5.08 to 7.62 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L33B--Kandiyohi clay, 2 to 5 percent slopes

Kandiyohi

Extent: 70 to 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 5 percent

Parent material: fine textured mantle over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

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>
Ap -- 0 to 10 in	clay	moderately slow	1.57 to 2.17 in	6.1 to 7.3
Bw -- 10 to 23 in	clay	moderately slow	1.82 to 2.47 in	6.1 to 7.3
Bkg -- 23 to 29 in	clay	moderately slow	0.82 to 1.20 in	7.4 to 8.4
2Bkg -- 29 to 80 in	clay loam	moderately slow	5.08 to 7.62 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L34A--Cosmos silty clay, 0 to 2 percent slopes

Cosmos

Extent: 75 to 95 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: fine textured mantle over firm 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): 4

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,A,ABg -- 0 to 15 in	silty clay	slow	2.39 to 3.29 in	6.1 to 7.3
Btg -- 15 to 30 in	silty clay	slow	2.09 to 2.84 in	6.1 to 7.3
Btkg -- 30 to 36 in	silty clay	moderately slow	0.65 to 1.12 in	7.4 to 8.4
2Bkg -- 36 to 80 in	clay loam	moderately slow	4.41 to 6.61 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L163A--Okoboji silty clay loam, depressional, 0 to 1 percent slopes

Okoboji, depressional

Extent: 70 to 95 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: lacustrine sediments 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 26 in	silty clay loam	moderately slow	5.46 to 5.98 in	6.1 to 7.8
Bg --	26 to 42 in	silty clay	moderately slow	2.91 to 3.23 in	6.6 to 7.8
Cg --	42 to 60 in	silty clay loam	moderately slow	3.19 to 3.54 in	6.6 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L164A--Lura silty clay, depressional, firm substratum, 0 to 1 percent slopes

Lura, firm substratum, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine sediments over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

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>
Ap,A -- 0 to 24 in	silty clay	slow	3.36 to 4.08 in	6.1 to 7.3
Bg -- 24 to 31 in	silty clay	slow	0.99 to 1.20 in	6.1 to 7.3
Bkg -- 31 to 60 in	silty clay	moderately slow	3.16 to 5.46 in	7.4 to 8.4
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L166C2--Newlondon-Strout complex, 6 to 12 percent slopes, moderately eroded

Newlondon, moderately eroded

Extent: 35 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.13 to 1.28 in	6.6 to 7.8
Bk -- 7 to 38 in	clay loam	moderately slow	3.11 to 4.67 in	7.4 to 8.4
BC -- 38 to 80 in	clay loam	moderately slow	5.43 to 7.93 in	7.4 to 8.4

Strout, moderately eroded

Extent: 35 to 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
Ap -- 0 to 9 in	clay loam	moderately slow	1.27 to 1.72 in	6.1 to 7.3
Bw -- 9 to 23 in	clay loam	moderately slow	1.65 to 2.48 in	5.6 to 7.3
BC -- 23 to 80 in	clay loam	moderately slow	7.42 to 10.85 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L166D2--Newlondon-Strout complex, 12 to 18 percent slopes, moderately eroded

Newlondon, moderately eroded

Extent: 50 to 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 4e

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	clay loam	moderately slow	1.13 to 1.28 in	6.6 to 7.8
Bk -- 7 to 38 in	clay loam	moderately slow	3.11 to 4.67 in	7.4 to 8.4
BC -- 38 to 80 in	clay loam	moderately slow	5.43 to 7.93 in	7.4 to 8.4

Strout, moderately eroded

Extent: 20 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 4e

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	clay loam	moderately slow	1.27 to 1.72 in	6.1 to 7.3
Bw -- 9 to 19 in	clay loam	moderately slow	1.18 to 1.77 in	5.6 to 7.3
BC -- 19 to 80 in	clay loam	moderately slow	7.93 to 11.59 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L184A--Corvuso silty clay loam, 0 to 2 percent slopes

Corvuso

Extent: 75 to 95 percent of the unit

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

Slope gradient: 0 to 2 percent

Parent material: fine textured mantle over firm 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: C/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	clay loam	moderately slow	1.54 to 2.43 in	7.4 to 8.4
Bkg -- 11 to 28 in	clay	moderately slow	2.20 to 3.22 in	7.4 to 8.4
2BCg -- 28 to 80 in	clay loam	moderately slow	6.76 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L185B--Strout-Arkton complex, 2 to 6 percent slopes

Strout

Extent: 60 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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>
Ap,AB -- 0 to 10 in	clay	moderately slow	1.38 to 1.87 in	6.1 to 7.3
Bw -- 10 to 24 in	clay loam	moderately slow	1.70 to 2.55 in	5.6 to 7.3
Bk -- 24 to 80 in	clay loam	moderately slow	5.59 to 8.39 in	7.4 to 8.4

Arkton

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 to 6 percent

Parent material: thin discontinuous fine textured mantle over firm 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): 4L

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 9 in	clay loam	moderately slow	1.36 to 1.72 in	6.6 to 8.4
Bk1 -- 9 to 25 in	clay	moderately slow	1.61 to 3.07 in	7.4 to 8.4
Bk2 -- 25 to 80 in	clay loam	moderately slow	5.47 to 8.21 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L186A--Danielson-Danielson, overwash complex, 1 to 4 percent slopes

Danielson

Extent: 60 to 80 percent of the unit
Landform(s): drainageways on moraines, swales on moraines
Slope gradient: 0 to 4 percent
Parent material: colluvium and fine textured mantle over firm 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): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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 9 in	clay loam	moderately slow	1.36 to 1.99 in	6.1 to 7.3
A1,A2,AB -- 9 to 36 in	silty clay	moderately slow	3.75 to 5.09 in	6.1 to 7.3
Bg1 -- 36 to 51 in	silty clay	moderately slow	1.07 to 2.92 in	6.1 to 7.3
2Bg2 -- 51 to 80 in	silty clay loam	slow	2.01 to 5.17 in	6.6 to 8.4

Danielson, overwash

Extent: 15 to 25 percent of the unit
Landform(s): drainageways on moraines, swales on moraines
Slope gradient: 2 to 4 percent
Parent material: colluvium and fine textured mantle over firm 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): 4
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
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>
Ap -- 0 to 9 in	clay loam	moderately slow	1.36 to 1.99 in	6.1 to 7.3
A1 -- 9 to 13 in	clay loam	moderately slow	0.53 to 0.78 in	6.1 to 7.3
A2,A3,AB -- 13 to 36 in	silty clay	moderately slow	3.25 to 4.41 in	6.1 to 7.3
Bg -- 36 to 51 in	silty clay	moderately slow	1.07 to 2.92 in	6.1 to 7.3
2Bg -- 51 to 80 in	silty clay loam	slow	2.01 to 5.17 in	6.6 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L187A--Klossner and Lura soils, ponded, firm substratum, 0 to 1 percent slopes

Klossner, firm substratum, 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> muck herbaceous organic material/loamy sediments over firm 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> 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 25 in	muck	moderately rapid	8.82 to 11.34 in	
2A,AC -- 25 to 60 in	silty clay loam	moderate	4.85 to 7.62 in	
3BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Lura, firm substratum, 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> clayey lacustrine sediments over firm 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> C/D</p> <p><i>Potential for frost action:</i> high</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 28 in	silty clay loam	slow	3.91 to 4.75 in	6.1 to 7.3
Bg -- 28 to 60 in	silty clay	slow	4.46 to 5.42 in	6.1 to 7.3
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L191A--Blue Earth, Houghton, and Klossner soils, ponded, firm substratum, 0 to 1 percent slopes

Blue Earth, firm substratum, ponded

Extent: 0 to 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty coprogenic material over firm 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): 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: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 50 in	mucky silt loam	moderate	9.00 to 12.00 in	7.4 to 8.4
AC -- 50 to 60 in	mucky silt loam	moderate	1.77 to 2.36 in	7.4 to 8.4
2Cg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Houghton, firm substratum, ponded

Extent: 0 to 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over firm till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<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	
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L191A--Blue Earth, Houghton, and Klossner soils, ponded, firm substratum, 0 to 1 percent slopes

Klossner, firm substratum, ponded

Extent: 0 to 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material/loamy sediments over firm till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

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 25 in	muck	moderately rapid	8.82 to 11.34 in	
2A,AC -- 25 to 60 in	silty clay loam	moderate	4.85 to 7.62 in	
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L192A--Okoboji mucky silty clay loam, depressional, firm substratum, 0 to 1 percent slopes

Okoboji, depressional, firm substratum

Extent: 65 to 95 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: alluvium over firm 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): 4L

Wind erodibility index (WEI): 86

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>
Ap -- 0 to 8 in	mucky silty clay loam	moderate	1.73 to 1.97 in	6.1 to 7.8
A -- 8 to 28 in	silty clay loam	moderately slow	4.22 to 4.62 in	6.1 to 7.8
ABg -- 28 to 36 in	silty clay	moderately slow	1.42 to 1.57 in	6.6 to 7.8
Bkg -- 36 to 59 in	silty clay loam	moderately slow	4.25 to 4.72 in	6.6 to 8.4
2BCg -- 59 to 80 in	clay loam	moderately slow	2.66 to 3.89 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L195A--Houghton-Klossner complex, depressional, firm substratum, complex, 0 to 1 percent slopes

Houghton, drained, firm substratum

Extent: 55 to 75 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over firm till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 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>
Op -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa -- 10 to 60 in	muck	moderately rapid	17.50 to 22.50 in	
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Klossner, drained, firm substratum

Extent: 15 to 45 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material/loamy sediments over firm 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>
Oa -- 0 to 28 in	muck	moderately rapid	9.78 to 13.42 in	
2A -- 28 to 33 in	silt loam	moderate	1.13 to 1.33 in	
2BCg1 -- 33 to 60 in	loam	moderate	4.02 to 5.09 in	
2BCg2 -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L199A--Muskego-Klossner, depressional, firm substratum complex, 0 to 1 percent slopes

Muskego, drained, firm substratum

Extent: 25 to 60 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over coprogenic material over firm 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: 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>
Op -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa -- 10 to 40 in	muck	moderately rapid	10.61 to 13.64 in	
Lco -- 40 to 60 in	mucky silt loam	slow	3.54 to 4.72 in	
2BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Klossner, drained, firm substratum

Extent: 20 to 50 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material/loamy sediments over firm 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>
Oa -- 0 to 28 in	muck	moderately rapid	9.78 to 13.42 in	
2A -- 28 to 33 in	silt loam	moderate	1.13 to 1.33 in	
2BCg1 -- 33 to 60 in	loam	moderate	4.02 to 5.09 in	
2BCg2 -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L200A--Klossner muck, depressional, firm substratum, 0 to 1 percent slopes

Klossner, drained, firm substratum

Extent: 65 to 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material/loamy sediments over firm 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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 28 in	muck	moderately rapid	9.78 to 13.42 in	
2A --	28 to 33 in	silt loam	moderate	1.13 to 1.33 in	
2BCg1 --	33 to 60 in	loam	moderate	4.02 to 5.09 in	
3BCg2 --	60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L201A--Normania loam, 0 to 3 percent slopes

Normania

Extent: 75 to 90 percent of the unit

Landform(s): flats on moraines, 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

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,AB -- 0 to 17 in	loam	moderate	3.39 to 3.72 in	6.1 to 7.3
Bw -- 17 to 26 in	loam	moderate	1.36 to 1.72 in	6.6 to 7.3
Bk -- 26 to 50 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4
Cg -- 50 to 60 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi County, Minnesota

L315C2--Sunburg-Wadenill-Hawick complex, 6 to 12 percent slopes, moderately eroded

Sunburg, moderately eroded

Extent: 30 to 50 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): 5

Wind erodibility index (WEI): 56

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	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L315C2--Sunburg-Wadenill-Hawick complex, 6 to 12 percent slopes, moderately eroded

Hawick

Extent: 15 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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	gravelly loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw --	10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C --	14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L315D2--Sunburg-Wadenill-Hawick complex, 12 to 18 percent slopes, moderately eroded

Sunburg, 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: 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

Wadenill, 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): 5

Wind erodibility index (WEI): 56

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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L315D2--Sunburg-Wadenill-Hawick complex, 12 to 18 percent slopes, moderately eroded

Hawick

Extent: 15 to 25 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): 2

Wind erodibility index (WEI): 134

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 10 in	loamy sand		rapid	0.98 to 1.18 in	6.1 to 7.8
Bw --	10 to 14 in	loamy coarse sand		rapid	0.13 to 0.43 in	6.1 to 7.8
C --	14 to 60 in	coarse sand		very rapid	0.91 to 2.74 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L315E--Sunburg-Wadenill-Hawick complex, 18 to 35 percent slopes

Sunburg

Extent: 45 to 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 35 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	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

Wadenill

Extent: 15 to 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 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) .24

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 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 24 in	loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi County, Minnesota

L315E--Sunburg-Wadenill-Hawick complex, 18 to 35 percent slopes

Hawick

Extent: 15 to 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 35 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 10 in	gravelly loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw -- 10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C -- 14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi County, Minnesota

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

Lundlake

Extent: 80 to 100 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

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

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

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)

Kandiyohi County, Minnesota

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

Forestcity, overwash

Extent: 35 to 55 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 2 to 4 percent

Parent material: colluvium over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 2w

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,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

Extent: 30 to 50 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 1 to 3 percent

Parent material: colluvium 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

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,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)

Kandiyohi 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)

Kandiyohi County, Minnesota

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

Muskego, ponded

Extent: 0 to 100 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<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

Extent: 0 to 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .28

Land capability, nonirrigated: 8w

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 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)

Kandiyohi County, Minnesota

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

Houghton, ponded

Extent: 0 to 100 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: 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	

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

Klossner, drained, lundlake catena

Extent: 65 to 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: organic material over loamy deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .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>
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)

Kandiyohi County, Minnesota

L332A--Blue Earth mucky silt loam, lundlake catena, 0 to 1 percent slopes

Blue Earth, lundlake catena

Extent: 80 to 95 percent of the unit

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

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth 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): 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>
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)

Kandiyohi County, Minnesota

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

Blue Earth, lundlake catena, surface drained

Extent: 50 to 80 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

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>
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

Extent: 0 to 40 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: coprogenous earth 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): 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>
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)

Kandiyohi County, Minnesota

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

Houghton, surface drained

<p><i>Extent:</i> 20 to 60 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> 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 80 in	muck	moderately rapid	27.97 to 35.96 in	

Muskego, surface drained

<p><i>Extent:</i> 20 to 60 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> 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> 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

Map Unit Description (MN)

Kandiyohi County, Minnesota

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

Klossner, surface drained, lundlake catena

Extent: 50 to 100 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material over loamy deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .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

Klossner, drained, lundlake catena

Extent: 0 to 40 percent of the unit
Landform(s): depressions on moraines
Slope gradient: 0 to 1 percent
Parent material: organic material over loamy deposits
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: frequent
Drainage class: very poorly drained

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 2
Wind erodibility index (WEI): 134
Kw factor (surface layer) .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>
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)

Kandiyohi County, Minnesota

L336A--Arctander, overwash-Arctander complex, 1 to 4 percent slopes

Arctander, overwash

<p><i>Extent:</i> 40 to 60 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines, swales on moraines</p> <p><i>Slope gradient:</i> 1 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> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1 -- 0 to 18 in	loam	moderately slow	3.26 to 3.62 in	5.6 to 7.8
A2 -- 18 to 40 in	loam	moderately slow	3.97 to 4.41 in	5.6 to 7.8
Bg -- 40 to 43 in	clay loam	moderate	0.52 to 0.61 in	6.6 to 7.8
2Bkg -- 43 to 56 in	sandy loam	moderately rapid	1.43 to 1.82 in	7.4 to 7.8
2Cg -- 56 to 80 in	fine sandy loam	moderately rapid	2.64 to 4.56 in	7.4 to 8.4

Arctander

<p><i>Extent:</i> 30 to 55 percent of the unit</p> <p><i>Landform(s):</i> drainageways on moraines, swales 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> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated:</i> 2w</p> <p><i>Hydric soil:</i> yes</p> <p><i>Hydrologic group:</i> C/D</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 33 in	loam	moderately slow	6.02 to 6.69 in	5.6 to 7.8
Bg -- 33 to 43 in	clay loam	moderate	1.80 to 2.08 in	6.6 to 7.8
2Bkg -- 43 to 56 in	sandy loam	moderately rapid	1.43 to 1.82 in	7.4 to 7.8
2Cg -- 56 to 80 in	sandy loam	moderately rapid	2.64 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi 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)

Kandiyohi County, Minnesota

L340B--Wadenill-Sunburg-Hawick complex, 2 to 6 percent slopes

Wadenill

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): 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 24 in	sandy loam	moderately rapid	1.70 to 2.69 in	5.6 to 7.3
C -- 24 to 60 in	fine sandy loam	moderately rapid	3.94 to 6.81 in	7.4 to 8.4

Sunburg

Extent: 20 to 40 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)

Kandiyohi County, Minnesota

L340B--Wadenill-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): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 10 in	loamy coarse sand	rapid	0.98 to 1.18 in	6.1 to 7.8
Bw --	10 to 14 in	loamy coarse sand	rapid	0.13 to 0.43 in	6.1 to 7.8
C --	14 to 60 in	coarse sand	very rapid	0.91 to 2.74 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi 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)

Kandiyohi County, Minnesota

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	

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)

Kandiyohi County, Minnesota

L354A--Grovecity loam, 1 to 3 percent slopes

Grovecity

Extent: 70 to 85 percent of the unit

Landform(s): rises on 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) .20

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderately rapid	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 30 in	sandy loam	moderately rapid	1.80 to 2.84 in	6.1 to 7.8
C -- 30 to 80 in	fine sandy loam	moderately rapid	5.50 to 9.50 in	7.4 to 8.4

Map Unit Description (MN)

Kandiyohi 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)

Kandiyohi 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

Representative soil profile:

		<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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi 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)

Kandiyohi County, Minnesota

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.