

Map Unit Description (MN)

Renville 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]

27A--Dickinson loam, 0 to 2 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): outwash plains, terraces

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: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	loam	moderately rapid	2.03 to 2.54 in	5.6 to 7.3
Bw -- 17 to 32 in	fine sandy loam	moderately rapid	1.80 to 2.24 in	5.1 to 6.5
2Bw -- 32 to 38 in	loamy fine sand	rapid	0.50 to 0.63 in	5.1 to 6.5
2C -- 38 to 60 in	fine sand	rapid	0.43 to 0.87 in	5.6 to 7.3

Lemond

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:

<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)

Renville County, Minnesota

27A--Dickinson loam, 0 to 2 percent slopes

Hanska

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)

Renville County, Minnesota

27B--Dickinson loam, 2 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 2 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

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 15 in	loam	moderately rapid	1.80 to 2.24 in	5.6 to 7.3
Bw -- 15 to 29 in	fine sandy loam	moderately rapid	1.70 to 2.13 in	5.1 to 6.5
2C -- 29 to 60 in	sand	rapid	0.61 to 1.23 in	5.6 to 7.3

Lemond

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:

<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)

Renville County, Minnesota

27B--Dickinson loam, 2 to 6 percent slopes

Hanska

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:

<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)

Renville County, Minnesota

35--Blue Earth mucky silt loam, 0 to 1 percent slopes

Blue Earth

Extent: 95 percent of the unit

Landform(s): depressions on relict lakebeds

Slope gradient: 0 to 1 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 22 in	mucky silt loam	moderate	3.97 to 5.29 in	7.4 to 8.4
Cg -- 22 to 60 in	mucky silty clay loam	moderate	6.80 to 9.07 in	7.4 to 8.4

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>
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Map Unit Description (MN)

Renville County, Minnesota

39A--Wadena loam, 0 to 2 percent slopes

Wadena

Extent: 90 percent of the unit

Landform(s): outwash plains, terraces

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 18 in	loam	moderate	3.62 to 3.98 in	6.1 to 7.3
Bw -- 18 to 37 in	loam	moderate	2.65 to 3.59 in	5.6 to 7.3
2C -- 37 to 60 in	stratified gravelly coarse sand to sand	very rapid	0.46 to 0.91 in	6.6 to 8.4

Biscay

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)

Renville County, Minnesota

39B--Wadena loam, 2 to 6 percent slopes

Wadena

Extent: 90 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 2 to 6 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 2e

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 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bw -- 14 to 30 in	loam	moderate	2.20 to 2.99 in	5.6 to 7.3
2C -- 30 to 60 in	stratified gravelly coarse sand to sand	very rapid	0.60 to 1.20 in	6.6 to 8.4

Biscay

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)

Renville County, Minnesota

85--Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded

Calco, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

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 14 in	silty clay loam	moderate	2.98 to 3.26 in	7.4 to 8.4
AB -- 14 to 40 in	silty clay loam	moderate	5.46 to 5.98 in	7.4 to 8.4
Cg -- 40 to 60 in	silty clay loam	moderate	3.54 to 3.94 in	7.4 to 8.4

Nishna

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

85--Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

86--Canisteo clay loam, moderately fine substratum, 0 to 2 percent slopes

Canisteo

Extent: 85 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) .15

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	clay loam	moderate	3.61 to 4.42 in	7.4 to 8.4
Bkg -- 20 to 23 in	clay loam	moderate	0.41 to 0.52 in	7.4 to 8.4
Bg -- 23 to 38 in	loam	moderate	1.84 to 2.76 in	7.4 to 8.4
Cg -- 38 to 60 in	loam	moderate	3.03 to 3.46 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)

Renville County, Minnesota

86--Canisteo clay loam, moderately fine substratum, 0 to 2 percent slopes

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)

Renville County, Minnesota

94C--Terril loam, 6 to 12 percent slopes

Terril

Extent: 85 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 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) .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 23 in	loam	moderate	4.57 to 5.02 in	6.1 to 7.3
Bw -- 23 to 50 in	loam	moderate	4.62 to 5.16 in	6.1 to 7.3
BC -- 50 to 60 in	loam	moderate	1.57 to 1.77 in	6.1 to 7.8

Delft

Extent: 15 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)

Renville County, Minnesota

102B--Clarion loam, moderately fine substratum, 2 to 5 percent slopes

Clarion

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: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loam	moderate	2.60 to 2.86 in	5.6 to 7.3
Bw -- 13 to 25 in	loam	moderate	2.07 to 2.32 in	5.6 to 7.8
C -- 25 to 60 in	loam	moderate	5.89 to 6.58 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)

Renville County, Minnesota

102B--Clarion loam, moderately fine substratum, 2 to 5 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)

Renville County, Minnesota

112--Harps clay loam, 0 to 2 percent slopes

Harps

Extent: 85 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 13 in	clay loam	moderate	2.47 to 2.73 in	7.9 to 8.4
Bkg -- 13 to 30 in	clay loam	moderate	2.88 to 3.22 in	7.9 to 8.4
Cg -- 30 to 60 in	loam	moderate	4.19 to 5.69 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)

Renville County, Minnesota

112--Harps clay loam, 0 to 2 percent slopes

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)

Renville County, Minnesota

113--Webster clay loam, 0 to 2 percent slopes

Webster

Extent: 85 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) .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 16 in	clay loam	moderate	3.07 to 3.39 in	6.6 to 7.3
Bg -- 16 to 32 in	clay loam	moderate	2.52 to 2.83 in	6.6 to 7.8
Cg -- 32 to 60 in	loam	moderate	3.91 to 5.31 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)

Renville County, Minnesota

113--Webster clay loam, 0 to 2 percent slopes

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:

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

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)

Renville County, Minnesota

118--Crippin loam, moderately fine substratum, 1 to 3 percent slopes

Crippin

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: somewhat 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 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 -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.6 to 8.4
Bw -- 10 to 26 in	loam	moderate	2.74 to 3.07 in	7.4 to 8.4
C -- 26 to 60 in	loam	moderate	5.76 to 6.43 in	7.9 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)

Renville County, Minnesota

118--Crippin loam, moderately fine substratum, 1 to 3 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)

Renville County, Minnesota

128C2--Grogan silt loam, 6 to 15 percent slopes, eroded

Grogan, eroded

Extent: 85 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 6 to 15 percent

Parent material: sandy and silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 13 in	silt loam	moderately rapid	2.86 to 3.12 in	5.6 to 7.3
Bw -- 13 to 35 in	silt loam	moderately rapid	3.75 to 4.19 in	6.1 to 7.8
C -- 35 to 60 in	stratified loamy very fine sand to silt loam	moderately rapid	4.22 to 4.71 in	7.4 to 8.4

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)

Renville County, Minnesota

128C2--Grogan silt loam, 6 to 15 percent slopes, eroded

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

Map Unit Description (MN)

Renville County, Minnesota

130--Nicollet clay loam, 1 to 3 percent slopes

Nicollet

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: somewhat 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 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 16 in	clay loam	moderate	2.74 to 3.55 in	5.6 to 7.3
Bw -- 16 to 35 in	clay loam	moderate	2.83 to 3.59 in	5.6 to 7.8
C -- 35 to 60 in	loam	moderate	3.47 to 4.71 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)

Renville County, Minnesota

130--Nicollet clay loam, 1 to 3 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)

Renville County, Minnesota

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

Okoboji, depressional

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): 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	silty clay loam	moderately slow	1.65 to 1.81 in	6.1 to 7.8
A,AB -- 8 to 28 in	silty clay loam	moderately slow	3.61 to 4.02 in	6.6 to 7.8
Cg -- 28 to 60 in	silty clay loam	moderately slow	5.74 to 6.38 in	6.6 to 8.4

Klossner

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)

Renville County, Minnesota

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

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>

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>

Map Unit Description (MN)

Renville County, Minnesota

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

Fairhaven

Extent: 85 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 0 to 2 percent

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

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	silt loam	moderate	3.98 to 4.35 in	5.6 to 7.3
Bw -- 18 to 33 in	silt loam	moderate	2.99 to 3.29 in	5.6 to 7.3
2C -- 33 to 60 in	stratified gravelly coarse sand to sand	rapid	0.54 to 1.07 in	6.1 to 8.4

Biscay

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)

Renville County, Minnesota

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

Hanska

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:

<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)

Renville County, Minnesota

227--Lemond loam, 0 to 2 percent slopes

Lemond

Extent: 85 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): 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,A -- 0 to 12 in	loam	moderately rapid	2.36 to 2.60 in	7.4 to 8.4
Bg -- 12 to 34 in	sandy loam	moderately rapid	2.20 to 2.87 in	7.4 to 8.4
2Cg -- 34 to 60 in	sand	rapid	1.30 to 1.82 in	7.4 to 8.4

Mayer

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:

<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)

Renville County, Minnesota

227--Lemond loam, 0 to 2 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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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:

<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)

Renville County, Minnesota

247--Linder loam, 0 to 2 percent slopes

Linder

Extent: 85 percent of the unit

Landform(s): outwash plains, terraces

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: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	loam	moderate	3.62 to 3.98 in	5.6 to 7.8
Bw -- 18 to 30 in	sandy loam	moderately rapid	1.77 to 2.01 in	6.1 to 7.8
2C -- 30 to 60 in	coarse sand	very rapid	0.60 to 1.20 in	7.4 to 8.4

Biscay

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)

Renville County, Minnesota

247--Linder loam, 0 to 2 percent slopes

Mayer

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)

Renville County, Minnesota

255--Mayer loam, 0 to 2 percent slopes

Mayer

Extent: 85 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): 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 21 in	loam	moderate	4.17 to 4.59 in	7.4 to 8.4
Bg -- 21 to 37 in	silt loam	moderate	2.58 to 3.07 in	7.4 to 8.4
2C -- 37 to 60 in	gravelly coarse sand	rapid	0.46 to 0.91 in	7.4 to 8.4

Biscay

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)

Renville County, Minnesota

255--Mayer loam, 0 to 2 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)

Renville County, Minnesota

282--Hanska loam, 0 to 2 percent slopes

Hanska

Extent: 85 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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
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 17 in	loam	moderately rapid	3.39 to 3.72 in	6.1 to 7.8
Bw -- 17 to 26 in	loam	moderately rapid	0.91 to 1.18 in	6.1 to 7.3
2Bw -- 26 to 31 in	loamy sand	rapid	0.41 to 0.51 in	6.1 to 7.8
2C -- 31 to 60 in	sand	rapid	0.86 to 1.44 in	6.6 to 7.8

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:

<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)

Renville County, Minnesota

282--Hanska loam, 0 to 2 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>

Mayer

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:

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

Map Unit Description (MN)

Renville County, Minnesota

318--Mayer clay loam, depressional, 0 to 1 percent slopes

Mayer, depressional

Extent: 85 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: fine-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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 23 in	clay loam	moderate	4.57 to 5.02 in	7.4 to 8.4
Bg -- 23 to 33 in	silt loam	moderate	1.64 to 1.94 in	7.4 to 8.4
2Cg -- 33 to 60 in	gravelly coarse sand	rapid	0.54 to 1.07 in	7.4 to 8.4

Estherville

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)

Renville County, Minnesota

318--Mayer clay loam, depressional, 0 to 1 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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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:

<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)

Renville County, Minnesota

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

Dickman

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

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.13 in	5.6 to 6.5
Bw -- 14 to 20 in	sandy loam	moderately rapid	0.71 to 0.83 in	5.6 to 7.3
2C -- 20 to 60 in	sand	rapid	0.80 to 2.78 in	5.6 to 7.8

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)

Renville County, Minnesota

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

Hanska

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)

Renville County, Minnesota

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

Dickman

Extent: 85 percent of the unit
Landform(s): outwash plains, terraces
Slope gradient: 2 to 6 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 11 in	sandy loam	moderately rapid	1.43 to 1.65 in	5.6 to 6.5
Bw -- 11 to 20 in	sandy loam	moderately rapid	1.09 to 1.27 in	5.6 to 7.3
2C -- 20 to 60 in	sand	rapid	0.80 to 2.78 in	5.6 to 7.8

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)

Renville County, Minnesota

327B--Dickman sandy loam, 2 to 6 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:

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

Hanska

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:

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

Map Unit Description (MN)

Renville County, Minnesota

327C--Dickman sandy loam, 6 to 12 percent slopes

Dickman

Extent: 85 percent of the unit
Landform(s): outwash plains, terraces
Slope gradient: 6 to 12 percent
Parent material: sandy outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	sandy loam	moderately rapid	1.02 to 1.18 in	5.6 to 6.5
Bw -- 8 to 16 in	sandy loam	moderately rapid	0.99 to 1.16 in	5.6 to 7.3
2C -- 16 to 60 in	sand	rapid	0.87 to 3.06 in	5.6 to 7.8

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)

Renville County, Minnesota

327C--Dickman sandy loam, 6 to 12 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:

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

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:

<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)

Renville County, Minnesota

336--Delft loam, 1 to 3 percent slopes

Delft

Extent: 85 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,A -- 0 to 19 in	loam	moderate	3.40 to 3.78 in	5.6 to 7.8
AB -- 19 to 30 in	clay loam	moderate	2.09 to 2.43 in	5.6 to 7.8
Bg -- 30 to 49 in	clay loam	moderate	3.59 to 4.16 in	6.6 to 7.8
Cg -- 49 to 60 in	loam	moderate	1.65 to 2.09 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)

Renville County, Minnesota

336--Delft loam, 1 to 3 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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Map Unit Description (MN)

Renville County, Minnesota

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

Okoboji, depressional

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): 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,A -- 0 to 13 in	mucky silty clay loam	moderate	2.86 to 3.25 in	6.1 to 7.8
A2 -- 13 to 35 in	silty clay loam	moderately slow	3.97 to 4.41 in	6.6 to 7.8
Bg -- 35 to 60 in	silty clay loam	moderately slow	4.46 to 4.96 in	6.6 to 8.4

Klossner

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)

Renville County, Minnesota

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

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>

Blue Earth

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)

Renville County, Minnesota

392--Biscay loam, 0 to 2 percent slopes

Biscay

Extent: 85 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): 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	loam	moderate	3.39 to 3.72 in	6.1 to 7.8
Bg -- 17 to 24 in	sandy clay loam	moderate	1.20 to 1.35 in	6.6 to 7.8
2Cg -- 24 to 60 in	stratified coarse sand to loamy sand	rapid	0.72 to 1.43 in	7.4 to 8.4

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:

<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)

Renville County, Minnesota

392--Biscay loam, 0 to 2 percent slopes

Mayer

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:

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

Estherville

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>

Map Unit Description (MN)

Renville County, Minnesota

423--Seaforth loam, 1 to 3 percent slopes

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 8 in	loam	moderate	1.34 to 1.89 in	7.4 to 8.4
Bk -- 8 to 23 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderate	6.29 to 7.03 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)

Renville County, Minnesota

423--Seaforth loam, 1 to 3 percent slopes

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)

Renville County, Minnesota

446--Normania loam, 1 to 3 percent slopes

Normania

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: 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 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bw -- 14 to 20 in	loam	moderate	0.89 to 1.12 in	6.6 to 7.8
Bk -- 20 to 29 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 29 to 60 in	loam	moderate	4.61 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)

Renville County, Minnesota

446--Normania loam, 1 to 3 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)

Renville County, Minnesota

463A--Minneiska silt loam, 0 to 2 percent slopes, occasionally flooded

Minneiska, occasionally flooded

Extent: 85 percent of the unit

Landform(s): 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): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

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 -- 0 to 9 in	loam	moderately rapid	1.81 to 1.99 in	7.4 to 8.4
C -- 9 to 60 in	stratified sand to loamy fine sand to loam	moderately rapid	6.60 to 9.14 in	7.4 to 8.4

Rushriver

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

463A--Minneiska silt loam, 0 to 2 percent slopes, occasionally flooded

Du Page

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

463B--Minneiska loam, 1 to 4 percent slopes, rarely flooded

Minneiska, rarely flooded

Extent: 85 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 4 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): 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: 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 -- 0 to 10 in	loam	moderately rapid	1.97 to 2.17 in	7.4 to 8.4
C -- 10 to 60 in	stratified sand to loamy fine sand to loam	moderately rapid	6.50 to 9.00 in	7.4 to 8.4

Du Page

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: 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)

Renville County, Minnesota

463B--Minneiska loam, 1 to 4 percent slopes, rarely flooded

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

519--Klossner muck, depressional, calcareous, 0 to 1 percent slopes

Klossner, depressional, calcareous

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 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 22 in	muck	moderately rapid	7.72 to 10.58 in	
2A -- 22 to 34 in	mucky silty clay loam	moderate	2.60 to 3.07 in	
2Bg -- 34 to 47 in	silty clay loam	moderate	2.34 to 2.86 in	
2Cg -- 47 to 60 in	clay loam	moderate	1.95 to 2.47 in	

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)

Renville County, Minnesota

519--Klossner muck, depressional, calcareous, 0 to 1 percent slopes

Muskego

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>

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)

Renville County, Minnesota

525--Muskego muck, depressional, 0 to 1 percent slopes

Muskego, depressional

Extent: 90 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>
Oap -- 0 to 10 in	muck	moderately rapid	3.44 to 4.43 in	
Oa -- 10 to 20 in	muck	moderately rapid	3.58 to 4.61 in	
Lco -- 20 to 60 in	mucky silt loam	slow	7.16 to 9.54 in	

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)

Renville County, Minnesota

525--Muskego muck, depressional, 0 to 1 percent slopes

Blue Earth

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)

Renville County, Minnesota

574--Du Page loam, 0 to 2 percent slopes, occasionally flooded

Du Page, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

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) .28

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.99 to 2.17 in	6.6 to 8.4
C -- 9 to 60 in	loam	moderate	5.08 to 10.16 in	7.4 to 8.4

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Renville County, Minnesota

574--Du Page loam, 0 to 2 percent slopes, occasionally flooded

Rushriver

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Nishna

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Renville County, Minnesota

575--Nishna silty clay, 0 to 2 percent slopes, occasionally flooded

Nishna, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: clayey alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

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 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay	slow	1.09 to 1.27 in	7.4 to 8.4
Bg -- 9 to 60 in	silty clay	slow	5.59 to 6.60 in	7.4 to 8.4

Du Page

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: 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)

Renville County, Minnesota

575--Nishna silty clay, 0 to 2 percent slopes, occasionally flooded

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

595F--Swanlake loam, 18 to 50 percent slopes

Swanlake

Extent: 85 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 50 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 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>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.70 in	7.4 to 8.4
Bk -- 7 to 43 in	loam	moderate	6.09 to 6.81 in	7.4 to 8.4
C -- 43 to 60 in	loam	moderate	2.88 to 3.22 in	7.4 to 8.4

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)

Renville County, Minnesota

595F--Swanlake loam, 18 to 50 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

Map Unit Description (MN)

Renville County, Minnesota

610--Calco silty clay loam, 0 to 1 percent slopes, frequently flooded

Calco, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 5w

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 7 in	silty clay loam	moderate	1.49 to 1.63 in	7.4 to 8.4
A -- 7 to 44 in	silty clay loam	moderate	7.77 to 8.51 in	7.4 to 8.4
Cg -- 44 to 60 in	silty clay loam	moderate	2.83 to 3.15 in	7.4 to 8.4

Rushriver

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

770C2--Ves-Terril complex, 6 to 15 percent slopes, eroded

Ves, eroded

Extent: 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 15 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 16 in	loam	moderate	2.74 to 3.55 in	6.1 to 7.8
Bw -- 16 to 20 in	loam	moderate	0.59 to 0.75 in	6.6 to 7.8
Bk -- 20 to 28 in	loam	moderate	1.18 to 1.50 in	7.4 to 8.4
C -- 28 to 60 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Terril

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 15 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) .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 36 in	loam	moderate	7.17 to 7.88 in	6.1 to 7.3
Bw -- 36 to 45 in	loam	moderate	1.54 to 1.72 in	6.1 to 7.3
C -- 45 to 60 in	loam	moderate	2.39 to 2.69 in	6.1 to 7.8

Map Unit Description (MN)

Renville County, Minnesota

770C2--Ves-Terril complex, 6 to 15 percent slopes, eroded

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)

Renville County, Minnesota

810--Coriff-Fieldon complex, 0 to 2 percent slopes

Coriff

Extent: 50 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash 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 -- 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) .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,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	1.54 to 1.74 in	7.4 to 8.4
Cg -- 27 to 60 in	stratified fine sand to fine sandy loam	rapid	1.63 to 2.29 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

810--Coriff-Fieldon complex, 0 to 2 percent slopes

Hanska

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)

Renville County, Minnesota

817--Canisteo-Seaforth complex, 0 to 3 percent slopes

Canisteo

Extent: 60 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

<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	3.61 to 4.42 in	7.4 to 8.4
Bg -- 20 to 31 in	clay loam	moderate	1.65 to 2.09 in	7.4 to 8.4
Bkg -- 31 to 38 in	clay loam	moderate	0.85 to 1.28 in	7.4 to 8.4
Cg -- 38 to 60 in	loam	moderate	3.03 to 3.46 in	7.4 to 8.4

Seaforth

Extent: 30 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 8 in	loam	moderate	1.34 to 1.89 in	7.4 to 8.4
Bk -- 8 to 14 in	loam	moderate	0.94 to 1.20 in	7.4 to 8.4
C -- 14 to 60 in	loam	moderate	7.76 to 8.68 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

817--Canisteo-Seaforth complex, 0 to 3 percent slopes

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

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

Hawick

Extent: 60 percent of the unit

Landform(s): outwash plains, terraces

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): 5

Wind erodibility index (WEI): 56

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 8 in	gravelly sandy loam	rapid	0.24 to 1.02 in	6.1 to 7.8
Bw -- 8 to 12 in	gravelly loamy coarse sand	rapid	0.12 to 0.39 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

Estherville

Extent: 25 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 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)

Renville County, Minnesota

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

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>

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>

Map Unit Description (MN)

Renville County, Minnesota

875C--Hawick-Estherville complex, 6 to 12 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)

Renville County, Minnesota

887B--Clarion-Swanlake complex, 2 to 6 percent slopes

Clarion

Extent: 70 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) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	loam	moderate	3.23 to 3.55 in	5.6 to 7.3
Bw -- 16 to 31 in	loam	moderate	2.54 to 2.84 in	5.6 to 7.8
C -- 31 to 60 in	loam	moderate	4.89 to 5.46 in	7.4 to 8.4

Swanlake

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 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 8 in	loam	moderate	1.57 to 1.89 in	7.4 to 8.4
Bk -- 8 to 14 in	loam	moderate	1.07 to 1.20 in	7.4 to 8.4
C -- 14 to 60 in	loam	moderate	7.76 to 8.68 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

887B--Clarion-Swanlake complex, 2 to 6 percent slopes

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)

Renville County, Minnesota

899--Harps-Okoboji, depressional, complex, 0 to 2 percent slopes

Harps

Extent: 60 percent of the unit

Landform(s): rims on depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: organic material 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,Ak -- 0 to 13 in	clay loam	moderate	2.47 to 2.73 in	7.9 to 8.4
Bkg -- 13 to 17 in	clay loam	moderate	0.67 to 0.75 in	7.9 to 8.4
Cg -- 17 to 60 in	loam	moderate	6.01 to 8.15 in	7.4 to 8.4

Okoboji, depressional

Extent: 30 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): 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,A -- 0 to 8 in	silty clay loam	moderately slow	1.65 to 1.81 in	6.1 to 7.8
Bg -- 8 to 28 in	silty clay loam	moderately slow	3.61 to 4.02 in	6.6 to 7.8
Cg -- 28 to 60 in	silty clay loam	moderately slow	5.74 to 6.38 in	6.6 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

899--Harps-Okoboji, depressional, complex, 0 to 2 percent slopes

Canisteo

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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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:

<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)

Renville County, Minnesota

920B--Clarion-Storden-Hawick complex, 2 to 6 percent slopes

Clarion

Extent: 50 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) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 26 in	loam	moderate	2.01 to 2.24 in	5.6 to 7.8
C -- 26 to 60 in	loam	moderate	5.76 to 6.43 in	7.4 to 8.4

Storden

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 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) .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 9 in	loam	moderate	1.81 to 1.99 in	7.4 to 8.4
Bk -- 9 to 36 in	loam	moderate	4.02 to 5.09 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

920B--Clarion-Storden-Hawick complex, 2 to 6 percent slopes

Hawick

Extent: 15 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): 5

Wind erodibility index (WEI): 56

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 sandy loam	rapid	0.30 to 1.28 in	6.1 to 7.8
Bw -- 10 to 15 in	gravelly loamy coarse sand	rapid	0.15 to 0.51 in	6.1 to 7.8
C -- 15 to 60 in	gravelly coarse sand	very rapid	0.90 to 2.69 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)

Renville County, Minnesota

920B--Clarion-Storden-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)

Renville County, Minnesota

927--Harps-Seaforth-Okoboji, depressional, complex, 0 to 3 percent slopes

Harps

Extent: 40 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 18 in	clay loam	moderate	3.44 to 3.80 in	7.9 to 8.4
Bk -- 18 to 33 in	clay loam	moderate	2.54 to 2.84 in	7.9 to 8.4
C -- 33 to 60 in	loam	moderate	3.75 to 5.09 in	7.4 to 8.4

Seaforth

Extent: 30 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,A -- 0 to 13 in	loam	moderate	2.21 to 3.12 in	7.4 to 8.4
Bk -- 13 to 24 in	loam	moderate	1.65 to 2.09 in	7.4 to 8.4
C -- 24 to 60 in	loam	moderate	6.09 to 6.81 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

927--Harps-Seaforth-Okoboji, depressional, complex, 0 to 3 percent slopes

Okoboji, depressional

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): 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 9 in	silty clay loam	moderately slow	1.90 to 2.08 in	6.1 to 7.8
A -- 9 to 41 in	silty clay loam	moderately slow	5.74 to 6.38 in	6.6 to 7.8
Bg -- 41 to 60 in	silty clay loam	moderately slow	3.40 to 3.78 in	6.6 to 8.4

Canisteo

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)

Renville County, Minnesota

954C2--Ves-Storden complex, 6 to 12 percent slopes, eroded

Ves, eroded

Extent: 65 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
A -- 10 to 22 in	loam	moderate	1.83 to 2.32 in	6.6 to 7.8
Bw -- 22 to 38 in	loam	moderate	2.42 to 3.07 in	7.4 to 8.4
C -- 38 to 60 in	loam	moderate	3.25 to 4.11 in	7.4 to 8.4

Storden, eroded

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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 20 in	loam	moderate	1.95 to 2.47 in	7.4 to 8.4
C -- 20 to 60 in	loam	moderate	5.96 to 7.56 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

954C2--Ves-Storden complex, 6 to 12 percent slopes, eroded

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)

Renville County, Minnesota

956--Canisteo-Glencoe, depressional, complex, 0 to 2 percent slopes

Canisteo

Extent: 65 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) .15

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 16 in	clay loam	moderate	2.91 to 3.55 in	7.4 to 8.4
AB -- 16 to 21 in	clay loam	moderate	0.71 to 0.90 in	7.4 to 8.4
Bkg -- 21 to 28 in	clay loam	moderate	0.85 to 1.28 in	7.4 to 8.4
Cg -- 28 to 60 in	loam	moderate	4.46 to 5.10 in	7.4 to 8.4

Glencoe, depressional

Extent: 25 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) .15

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	clay loam	moderate	1.77 to 2.17 in	6.1 to 7.8
A -- 10 to 32 in	clay loam	moderate	3.97 to 4.85 in	6.1 to 7.8
Bg -- 32 to 42 in	loam	moderate	1.54 to 1.94 in	6.6 to 7.8
C -- 42 to 60 in	loam	moderate	2.66 to 3.37 in	6.6 to 7.8

Map Unit Description (MN)

Renville County, Minnesota

956--Canisteo-Glencoe, depressional, complex, 0 to 2 percent slopes

Harps

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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Crippin

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)

Renville County, Minnesota

960D2--Storden-Omsrud complex, 12 to 18 percent slopes, eroded

Storden, eroded

Extent: 65 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) .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	7.4 to 8.4
Bk -- 7 to 18 in	loam	moderate	1.65 to 2.09 in	7.4 to 8.4
C -- 18 to 60 in	loam	moderate	6.26 to 7.93 in	7.4 to 8.4

Omsrud, eroded

Extent: 20 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 9 in	loam	moderate	1.81 to 1.99 in	5.6 to 7.3
Bw -- 9 to 36 in	loam	moderate	4.55 to 5.09 in	5.6 to 7.3
C -- 36 to 60 in	loam	moderate	4.08 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

960D2--Storden-Omsrud complex, 12 to 18 percent slopes, eroded

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>

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)

Renville County, Minnesota

960F--Storden-Omsrud complex, 18 to 50 percent slopes

Storden

Extent: 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 50 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) .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 6 in	loam	moderate	1.18 to 1.30 in	7.4 to 8.4
Bk -- 6 to 15 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 15 to 60 in	loam	moderate	6.73 to 8.53 in	7.4 to 8.4

Omsrud

Extent: 15 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 40 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

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 9 in	loam	moderate	1.81 to 1.99 in	5.6 to 7.3
Bw -- 9 to 16 in	loam	moderate	1.20 to 1.35 in	5.6 to 7.3
C -- 16 to 60 in	loam	moderate	7.43 to 8.30 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

960F--Storden-Omsrud complex, 18 to 50 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)

Renville County, Minnesota

978--Cordova-Rolfe, depressional, complex, 0 to 2 percent slopes

Cordova

Extent: 60 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: 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 22 in	clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 39 in	clay loam	moderately slow	2.54 to 3.22 in	5.1 to 6.5
Cg -- 39 to 60 in	loam	moderate	2.92 to 3.34 in	7.4 to 8.4

Rolfe, depressional

Extent: 30 percent of the unit

Landform(s): depressions on 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): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,E -- 0 to 21 in	silt loam	moderate	4.59 to 5.01 in	5.1 to 7.3
Btg -- 21 to 40 in	silty clay	slow	2.12 to 2.51 in	6.1 to 7.3
2Btg -- 40 to 60 in	clay loam	moderate	2.76 to 3.15 in	6.1 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

978--Cordova-Rolfe, depressional, complex, 0 to 2 percent slopes

Nicollet

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

999C2--Ves-Storden-Hawick complex, 6 to 12 percent slopes, eroded

Ves, eroded

Extent: 35 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 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.8
Bw -- 8 to 25 in	loam	moderate	2.60 to 3.29 in	6.6 to 7.8
Bk -- 25 to 40 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderate	2.95 to 3.74 in	7.4 to 8.4

Storden, eroded

Extent: 35 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) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 32 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4
C -- 32 to 60 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

999C2--Ves-Storden-Hawick complex, 6 to 12 percent slopes, eroded

Hawick

Extent: 15 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): 5

Wind erodibility index (WEI): 56

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 7 in	gravelly sandy loam	rapid	0.21 to 0.92 in	6.1 to 7.8
Bw -- 7 to 15 in	gravelly loamy coarse sand	rapid	0.24 to 0.79 in	6.1 to 7.8
C -- 15 to 60 in	gravelly coarse sand	very rapid	0.90 to 2.69 in	7.4 to 8.4

Delft

Extent: 15 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)

Renville County, Minnesota

1030--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 45 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 30 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:

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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Udipsamments

Extent: 45 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 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): 1

Wind erodibility index (WEI): 220

Kw factor (surface layer) .02

Land capability, nonirrigated 8s

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>
AC -- 0 to 14 in	sand	rapid	0.71 to 1.42 in	6.6 to 7.3
C1 -- 14 to 60 in	sand	rapid	2.28 to 3.65 in	6.6 to 7.3
C2 -- 60 to 80 in	coarse sand	very rapid	0.60 to 1.00 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1030--Pits, gravel-Udipsamments complex

Biscay

Extent: 10 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)

Renville County, Minnesota

1080--Klossner, okoboji, and glencoe soils, ponded, 0 to 1 percent slopes

Klossner, ponded

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer)

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 32 in	muck	moderately rapid	11.16 to 14.35 in	
2A -- 32 to 60 in	clay loam	moderate	3.91 to 6.15 in	

Okoboji, ponded

Extent: 30 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .28

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>
A1 -- 0 to 17 in	mucky silty clay loam	moderate	3.72 to 4.23 in	6.1 to 7.8
A2 -- 17 to 48 in	silty clay loam	moderately slow	5.60 to 6.22 in	6.6 to 7.8
Bg -- 48 to 60 in	silty clay loam	moderately slow	2.13 to 2.36 in	6.6 to 7.8

Map Unit Description (MN)

Renville County, Minnesota

1080--Klossner, okoboji, and glencoe soils, ponded, 0 to 1 percent slopes

Glencoe, ponded

Extent: 30 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .15

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 26 in	silty clay loam	moderate	4.68 to 5.72 in	6.1 to 7.8
Bg -- 26 to 30 in	clay loam	moderate	0.59 to 0.75 in	6.6 to 7.8
Cg -- 30 to 60 in	loam	moderate	4.49 to 5.69 in	7.4 to 7.8

Harps

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)

Renville County, Minnesota

1100--Nicollet silty clay loam, 1 to 3 percent slopes

Nicollet

Extent: 85 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits over 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) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silty clay loam	moderate	2.54 to 3.29 in	5.6 to 7.3
Bg -- 15 to 20 in	clay loam	moderate	0.77 to 0.97 in	5.6 to 7.8
Cg -- 20 to 60 in	loam	moderate	5.57 to 7.56 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)

Renville County, Minnesota

1100--Nicollet silty clay loam, 1 to 3 percent slopes

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)

Renville County, Minnesota

1101--Webster silty clay loam, moderately fine substratum, 0 to 2 percent slopes

Webster

Extent: 90 percent of the unit

Landform(s): flats 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): 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,A -- 0 to 17 in	silty clay loam	moderate	3.22 to 3.56 in	6.6 to 7.3
Bg -- 17 to 24 in	clay loam	moderate	1.13 to 1.28 in	6.6 to 7.8
Cg -- 24 to 60 in	loam	moderate	5.02 to 6.81 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)

Renville County, Minnesota

1101--Webster silty clay loam, moderately fine substratum, 0 to 2 percent slopes

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)

Renville County, Minnesota

1205--Leen-Okoboji, depressional, complex, 0 to 2 percent slopes

Leen

<i>Extent:</i> 60 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> rims on depressions, flats on lake plains	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> fine-silty lacustrine deposits over fine-loamy till	<i>Kw factor (surface layer)</i> .32
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> none	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	7.4 to 8.4
Ak -- 9 to 27 in	silt loam	moderate	3.26 to 4.35 in	7.9 to 8.4
Bkg -- 27 to 36 in	silt loam	moderate	1.73 to 2.08 in	7.4 to 8.4
Cg -- 36 to 60 in	loam	moderate	3.36 to 4.56 in	7.4 to 8.4

Okoboji, depressional

<i>Extent:</i> 30 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> fine-silty alluvium	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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 38 in	silty clay loam	moderately slow	1.13 to 1.26 in	6.6 to 7.8
Cg -- 38 to 60 in	silty clay loam	moderately slow	3.90 to 4.33 in	6.6 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1205--Leen-Okoboji, depressional, complex, 0 to 2 percent slopes

Louris

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)

Renville County, Minnesota

1242F--Swanlake-Terril complex, 18 to 50 percent slopes

Swanlake

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 50 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 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 9 in	loam	moderate	1.81 to 2.17 in	7.4 to 8.4
Bk -- 9 to 15 in	loam	moderate	1.00 to 1.12 in	7.4 to 8.4
C -- 15 to 60 in	loam	moderate	7.63 to 8.53 in	7.4 to 8.4

Terril

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 25 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) .28

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 32 in	loam	moderate	6.38 to 7.02 in	6.1 to 7.3
Bw -- 32 to 40 in	loam	moderate	1.41 to 1.57 in	6.1 to 7.3
C -- 40 to 60 in	loam	moderate	3.15 to 3.54 in	6.1 to 7.8

Map Unit Description (MN)

Renville County, Minnesota

1242F--Swanlake-Terril complex, 18 to 50 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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Map Unit Description (MN)

Renville County, Minnesota

1261B--Bechyn loam, 2 to 6 percent slopes

Bechyn

Extent: 85 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: loamy alluvium over granite bedrock

Restrictive feature(s): lithic bedrock at 8 to 20 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 15 in	loam	moderate	2.99 to 3.59 in	5.6 to 7.3
Bw -- 15 to 18 in	loam	moderate	0.44 to 0.69 in	5.6 to 7.8
2R -- 18 to 60 in	bedrock	moderate		

Cedarrock

Extent: 15 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Renville County, Minnesota

1262--Seaforth silt loam, 1 to 3 percent slopes

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) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 16 in	silt loam	moderate	2.74 to 3.87 in	7.4 to 8.4
Bk -- 16 to 44 in	loam	moderate	4.19 to 5.31 in	7.4 to 8.4
C -- 44 to 60 in	loam	moderate	2.68 to 2.99 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)

Renville County, Minnesota

1262--Seaforth silt loam, 1 to 3 percent slopes

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>

Chetomba

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>

Map Unit Description (MN)

Renville County, Minnesota

1267--Cedarrock silty clay loam, 0 to 2 percent slopes, frequently flooded

Cedarrock, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till over granite bedrock

Restrictive feature(s): lithic bedrock at 24 to 40 inches

Flooding: frequent

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 5w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 28 in	silty clay loam	moderately slow	5.03 to 5.87 in	7.4 to 8.4
Bg -- 28 to 34 in	loam	moderately slow	0.94 to 1.12 in	7.4 to 8.4
2R -- 34 to 60 in	bedrock	moderate		

Havelock

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Renville County, Minnesota

1267--Cedarrock silty clay loam, 0 to 2 percent slopes, frequently flooded

Nishna

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1268--Hanlon loam, 1 to 3 percent slopes, rarely flooded

Hanlon, rarely flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 1 to 3 percent

Parent material: coarse-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: 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 -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
A -- 14 to 48 in	fine sandy loam	moderately rapid	5.42 to 6.09 in	6.1 to 7.3
Bw -- 48 to 60 in	fine sandy loam	moderately rapid	1.30 to 1.54 in	5.6 to 7.3

Coland

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1268--Hanlon loam, 1 to 3 percent slopes, rarely flooded

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1269--Lowlein silt loam, 0 to 2 percent slopes

Lowlein

Extent: 85 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over 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): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .37

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silt loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 32 in	fine sandy loam	moderately rapid	2.03 to 2.37 in	6.1 to 7.3
2C -- 32 to 60 in	loam	moderate	4.75 to 5.31 in	7.4 to 8.4

Biscay

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)

Renville County, Minnesota

1269--Lowlein silt loam, 0 to 2 percent slopes

Hanska

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)

Renville County, Minnesota

1270D--Bechyn-Rock outcrop complex, 0 to 40 percent slopes

Bechyn

Extent: 65 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 40 percent

Parent material: loamy alluvium over granite bedrock

Restrictive feature(s): lithic bedrock at 8 to 20 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	5.6 to 7.3
Bw -- 9 to 15 in	loam	moderate	0.83 to 1.30 in	5.6 to 7.8
2R -- 15 to 60 in	bedrock	moderate		

Rock outcrop

Extent: 25 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 40 percent

Parent material:

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

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated 8s

Hydric soil:

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)

Renville County, Minnesota

1270D--Bechyn-Rock outcrop complex, 0 to 40 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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Cedarrock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1285--Chetomba silty clay loam, 0 to 2 percent slopes

Chetomba

Extent: 85 percent of the unit

Landform(s): flats on lake plains

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): 6

Wind erodibility index (WEI): 48

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 23 in	silty clay loam	moderate	4.11 to 5.48 in	6.1 to 7.3
Bg -- 23 to 31 in	silty clay loam	moderate	1.32 to 1.82 in	6.6 to 7.8
Cg -- 31 to 43 in	silt loam	moderate	1.89 to 2.60 in	7.4 to 8.4
2Cg -- 43 to 60 in	loam	moderate	2.54 to 3.22 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)

Renville County, Minnesota

1285--Chetomba silty clay loam, 0 to 2 percent slopes

Prinsburg

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>

Crooksford

Extent: 5 percent of the unit

Landform(s): lake 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>

Map Unit Description (MN)

Renville County, Minnesota

1286--Prinsburg silty clay loam, 0 to 2 percent slopes

Prinsburg

Extent: 85 percent of the unit

Landform(s): flats on lake plains

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

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	silty clay loam	moderate	3.40 to 4.54 in	7.4 to 8.4
Bkg --	19 to 36 in	silt loam	moderate	2.71 to 3.72 in	7.4 to 8.4
Cg --	36 to 46 in	silt loam	moderate	1.64 to 2.25 in	7.4 to 8.4
2Cg --	46 to 60 in	clay loam	moderate	2.07 to 2.62 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1287--Calco silty clay loam, ponded, 0 to 1 percent slopes, frequently flooded

Calco, ponded, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 5w

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>
A1 -- 0 to 7 in	silty clay loam	moderate	1.49 to 1.63 in	7.4 to 8.4
A2 -- 7 to 41 in	silty clay loam	moderate	7.11 to 7.79 in	7.4 to 8.4
Cg -- 41 to 60 in	silty clay loam	moderate	3.40 to 3.78 in	7.4 to 8.4

Nishna

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1287--Calco silty clay loam, ponded, 0 to 1 percent slopes, frequently flooded

Prinsburg

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1355B--Amiret-Swanlake complex, 2 to 6 percent slopes

Amiret

Extent: 70 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/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 10 in	loam	moderate	1.67 to 2.17 in	6.1 to 7.3
Bw -- 10 to 26 in	loam	moderate	2.42 to 3.07 in	6.1 to 7.3
Bk -- 26 to 35 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

Swanlake

Extent: 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 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 7 in	loam	moderate	1.42 to 1.70 in	7.4 to 8.4
Ak -- 7 to 32 in	loam	moderate	4.22 to 4.71 in	7.4 to 8.4
C -- 32 to 60 in	loam	moderate	4.75 to 5.31 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1355B--Amiret-Swanlake complex, 2 to 6 percent slopes

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>

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>

Map Unit Description (MN)

Renville County, Minnesota

1369A--Crooksford silt loam, 1 to 3 percent slopes

Crooksford

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits over 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) .37

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	silt loam	moderate	2.99 to 3.59 in	6.1 to 7.3
Bw,BA -- 15 to 27 in	silt loam	moderate	2.20 to 2.93 in	6.6 to 7.8
2Bk -- 27 to 43 in	loam	moderate	2.68 to 3.78 in	7.4 to 8.4
2C -- 43 to 60 in	loam	moderate	2.54 to 3.22 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)

Renville County, Minnesota

1369A--Crooksford silt loam, 1 to 3 percent slopes

Chetomba

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)

Renville County, Minnesota

1369B--Crooksford silt loam, 3 to 5 percent slopes

Crooksford

Extent: 85 percent of the unit
Landform(s): hills on moraines
Slope gradient: 3 to 5 percent
Parent material: fine-silty lacustrine deposits over 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) .37

Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silt loam	moderate	2.99 to 3.59 in	6.1 to 7.3
Bw -- 15 to 27 in	silt loam	moderate	2.20 to 2.93 in	6.6 to 7.8
2Bk -- 27 to 43 in	loam	moderate	2.68 to 3.78 in	7.4 to 8.4
2C -- 43 to 60 in	loam	moderate	2.54 to 3.22 in	7.4 to 8.4

Chetomba

Extent: 10 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:

<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)

Renville County, Minnesota

1369B--Crooksford silt loam, 3 to 5 percent slopes

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)

Renville County, Minnesota

1370B--Amiret loam, 2 to 5 percent slopes

Amiret

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: 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 12 in	loam	moderate	2.01 to 2.60 in	6.1 to 7.3
Bw -- 12 to 20 in	loam	moderate	1.24 to 1.57 in	6.1 to 7.3
Bk -- 20 to 30 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4
C -- 30 to 60 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4

Chetomba

Extent: 10 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:

<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)

Renville County, Minnesota

1370B--Amiret loam, 2 to 5 percent slopes

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)

Renville County, Minnesota

1371B--Crooksford-Swanlake complex, 3 to 6 percent slopes

Crooksford

<i>Extent:</i> 60 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hills on moraines	<i>Wind erodibility group (WEG):</i> 6
<i>Slope gradient:</i> 3 to 5 percent	<i>Wind erodibility index (WEI):</i> 48
<i>Parent material:</i> fine-silty lacustrine deposits over fine-loamy till	<i>Kw factor (surface layer)</i> .37
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> moderately well drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silt loam	moderate	1.97 to 2.36 in	6.1 to 7.3
Bw -- 10 to 25 in	silt loam	moderate	2.76 to 3.69 in	6.6 to 7.8
2Bk -- 25 to 35 in	loam	moderate	1.67 to 2.36 in	7.4 to 8.4
2C -- 35 to 60 in	loam	moderate	3.72 to 4.71 in	7.4 to 8.4

Swanlake

<i>Extent:</i> 30 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> hills on moraines	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 4 to 6 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> fine-loamy till	<i>Kw factor (surface layer)</i> .28
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2e
<i>Flooding:</i> none	<i>Hydric soil:</i> no
<i>Ponding:</i> none	<i>Hydrologic group:</i> B
<i>Drainage class:</i> well drained	<i>Potential for frost action:</i> moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.81 to 2.17 in	7.4 to 8.4
Bk -- 9 to 46 in	loam	moderate	6.29 to 7.03 in	7.4 to 8.4
C -- 46 to 60 in	loam	moderate	2.34 to 2.62 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1371B--Crooksford-Swanlake complex, 3 to 6 percent slopes

Chetomba

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:

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

Renville County, Minnesota

1373C--Omsrud-Storden-Hawick complex, 6 to 12 percent slopes, eroded

Omsrud, eroded

Extent: 45 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 7 in	loam	moderate	1.42 to 1.56 in	5.6 to 7.3
Bw -- 7 to 22 in	loam	moderate	2.54 to 2.84 in	5.6 to 7.3
C -- 22 to 60 in	loam	moderate	6.43 to 7.18 in	7.4 to 8.4

Storden, eroded

Extent: 30 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) .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	7.4 to 8.4
Bk -- 10 to 23 in	loam	moderate	1.95 to 2.47 in	7.4 to 8.4
C -- 23 to 60 in	loam	moderate	5.55 to 7.03 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1373C--Omsrud-Storden-Hawick complex, 6 to 12 percent slopes, eroded

Hawick, eroded

Extent: 15 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): 5

Wind erodibility index (WEI): 56

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,AB -- 0 to 9 in	gravelly sandy loam	rapid	0.27 to 1.18 in	6.1 to 7.8
Bw,BC -- 9 to 28 in	gravelly loamy coarse sand	rapid	0.57 to 1.89 in	6.1 to 7.8
C -- 28 to 60 in	gravelly coarse sand	very rapid	0.64 to 1.91 in	7.4 to 8.4

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)

Renville County, Minnesota

1374--Havelock clay loam, 0 to 2 percent slopes, occasionally flooded

Havelock, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

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,A -- 0 to 23 in	clay loam	moderate	4.57 to 5.02 in	7.4 to 8.4
Bg -- 23 to 35 in	clay loam	moderate	2.44 to 2.69 in	7.4 to 8.4
Cg -- 35 to 60 in	loam	moderately rapid	3.22 to 4.22 in	7.4 to 8.4

Calco

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1374--Havelock clay loam, 0 to 2 percent slopes, occasionally flooded

Rushriver

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1375D--Storden-Ves complex, 12 to 18 percent slopes, eroded

Storden, eroded

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) .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 9 in	loam	moderate	1.81 to 1.99 in	7.4 to 8.4
Bk -- 9 to 24 in	loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 24 to 60 in	loam	moderate	5.37 to 6.81 in	7.4 to 8.4

Ves, eroded

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 8 in	loam	moderate	1.34 to 1.73 in	6.1 to 7.8
Bw -- 8 to 22 in	loam	moderate	2.13 to 2.69 in	6.6 to 7.8
Bk -- 22 to 44 in	loam	moderate	3.31 to 4.19 in	7.4 to 8.4
C -- 44 to 60 in	loam	moderate	2.36 to 2.99 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1375D--Storden-Ves complex, 12 to 18 percent slopes, eroded

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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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)

Renville County, Minnesota

1376C--Omsrud-Storden complex, 6 to 12 percent slopes, eroded

Omsrud, eroded

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): 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	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 29 in	loam	moderate	3.28 to 3.67 in	5.6 to 7.3
C -- 29 to 60 in	loam	moderate	5.22 to 5.83 in	7.4 to 8.4

Storden, eroded

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) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	7.4 to 8.4
Bk -- 7 to 55 in	loam	moderate	7.20 to 9.13 in	7.4 to 8.4
C -- 55 to 60 in	loam	moderate	0.71 to 0.90 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1376C--Omsrud-Storden complex, 6 to 12 percent slopes, eroded

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)

Renville County, Minnesota

1382--Louris silt loam, 1 to 3 percent slopes

Louris

Extent: 85 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits over 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

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,Ak -- 0 to 13 in	silt loam	moderate	2.60 to 3.12 in	7.4 to 8.4
Bk -- 13 to 20 in	silt loam	moderate	1.28 to 1.56 in	7.9 to 8.4
C -- 20 to 31 in	silt loam	moderate	2.20 to 2.65 in	7.4 to 8.4
2C -- 31 to 60 in	loam	moderate	4.02 to 5.46 in	7.4 to 8.4

Leen

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)

Renville County, Minnesota

1382--Louris silt loam, 1 to 3 percent slopes

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)

Renville County, Minnesota

1386B--Amiret-Swanlake-Hawick complex, 2 to 6 percent slopes

Amiret

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 12 in	loam	moderate	2.01 to 2.60 in	6.1 to 7.3
Bw -- 12 to 20 in	loam	moderate	1.24 to 1.57 in	6.1 to 7.3
Bk -- 20 to 50 in	loam	moderate	4.49 to 5.69 in	7.4 to 8.4
C -- 50 to 60 in	loam	moderate	1.48 to 1.87 in	7.4 to 8.4

Swanlake

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 4 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 8 in	loam	moderate	1.57 to 1.89 in	7.4 to 8.4
Ak -- 8 to 15 in	loam	moderate	1.20 to 1.35 in	7.4 to 8.4
C -- 15 to 60 in	loam	moderate	7.63 to 8.53 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1386B--Amiret-Swanlake-Hawick complex, 2 to 6 percent slopes

Hawick

Extent: 15 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): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	coarse sandy loam	moderately rapid	1.02 to 1.18 in	6.1 to 7.8
Bw -- 8 to 13 in	gravelly loamy coarse sand	rapid	0.15 to 0.51 in	6.1 to 7.8
C -- 13 to 60 in	gravelly coarse sand	very rapid	0.94 to 2.81 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)

Renville County, Minnesota

1386B--Amiret-Swanlake-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)

Renville County, Minnesota

1388B--Terril loam, moderately wet, 2 to 6 percent slopes

Terril, moderately wet

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 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) .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 27 in	loam	moderate	5.43 to 5.98 in	6.1 to 7.3
Bw -- 27 to 40 in	loam	moderate	2.21 to 2.47 in	6.1 to 7.3
BC -- 40 to 60 in	loam	moderate	3.15 to 3.54 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)

Renville County, Minnesota

1389--Havelock silt loam, 0 to 2 percent slopes, frequently flooded

Havelock, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated 5w

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 30 in	silt loam	moderate	5.98 to 6.58 in	7.4 to 8.4
Bg -- 30 to 40 in	clay loam	moderate	2.05 to 2.25 in	7.4 to 8.4
Cg -- 40 to 60 in	loam	moderately rapid	2.56 to 3.35 in	7.4 to 8.4

Rushriver

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1389--Havelock silt loam, 0 to 2 percent slopes, frequently flooded

Nishna

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1390--Leen silty clay loam, 0 to 2 percent slopes

Leen

Extent: 85 percent of the unit
Landform(s): rims on depressions, flats on lake plains
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) .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,Ak -- 0 to 15 in	silty clay loam	moderate	2.69 to 3.29 in	7.4 to 8.4
Bkg -- 15 to 25 in	silt loam	moderate	1.84 to 2.46 in	7.9 to 8.4
Cg -- 25 to 38 in	silt loam	moderate	2.60 to 3.12 in	7.4 to 8.4
2Cg -- 38 to 60 in	loam	moderate	3.03 to 4.11 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)

Renville County, Minnesota

1390--Leen silty clay loam, 0 to 2 percent slopes

Louris

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)

Renville County, Minnesota

1392B--Grogan silt loam, moderately wet, 1 to 4 percent slopes

Grogan, moderately wet

Extent: 90 percent of the unit

Landform(s): outwash plains, terraces

Slope gradient: 1 to 4 percent

Parent material: sandy and silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silt loam	moderately rapid	3.29 to 3.59 in	5.6 to 7.3
Bw -- 15 to 38 in	silt loam	moderately rapid	3.95 to 4.41 in	6.1 to 7.8
C -- 38 to 60 in	stratified loamy very fine sand to silt loam	moderately rapid	3.68 to 4.11 in	7.4 to 8.4

Chetomba

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:

<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)

Renville County, Minnesota

1392B--Grogan silt loam, moderately wet, 1 to 4 percent slopes

Bechyn

Extent: 5 percent of the unit

Landform(s): terraces

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)

Renville County, Minnesota

1802--Calcousta-Okoboji complex, depressional, 0 to 1 percent slopes

Calcousta

Extent: 50 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-silty lacustrine deposits 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): 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,A -- 0 to 12 in	silty clay loam	moderate	2.48 to 2.72 in	7.4 to 8.4
Bg -- 12 to 24 in	silty clay loam	moderate	2.20 to 2.44 in	7.4 to 8.4
Cg -- 24 to 60 in	silty clay loam	moderate	7.17 to 7.88 in	7.4 to 8.4

Okoboji, depressional

Extent: 40 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

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 6 in	mucky silty clay loam	moderate	1.30 to 1.48 in	6.1 to 7.8
A -- 6 to 32 in	silty clay loam	moderately slow	4.68 to 5.20 in	6.6 to 7.8
Cg -- 32 to 60 in	silty clay loam	moderately slow	5.03 to 5.59 in	6.6 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1802--Calcousta-Okoboji complex, depressional, 0 to 1 percent slopes

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>
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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>
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Map Unit Description (MN)

Renville County, Minnesota

1833--Coland clay loam, 0 to 2 percent slopes, occasionally flooded

Coland, occasionally flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

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 18 in	clay loam	moderate	3.62 to 3.98 in	6.1 to 7.3
A2 -- 18 to 54 in	clay loam	moderate	7.17 to 7.88 in	6.1 to 7.3
Cg -- 54 to 60 in	loam	moderately rapid	0.77 to 1.00 in	6.1 to 7.8

Havelock

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1833--Coland clay loam, 0 to 2 percent slopes, occasionally flooded

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1834--Coland clay loam, 0 to 2 percent slopes, frequently flooded

Coland, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 5w

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>
A1 -- 0 to 12 in	clay loam	moderate	2.36 to 2.60 in	6.1 to 7.3
A2 -- 12 to 28 in	clay loam	moderate	3.23 to 3.55 in	6.1 to 7.3
Cg -- 28 to 60 in	loam	moderately rapid	4.15 to 5.42 in	6.1 to 7.8

Havelock

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville County, Minnesota

1834--Coland clay loam, 0 to 2 percent slopes, frequently flooded

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:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1845A--Estherville loam, 0 to 2 percent slopes

Estherville

Extent: 90 percent of the unit
Landform(s): outwash plains, terraces
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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32

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 12 in	loam	moderately rapid	2.24 to 2.60 in	5.6 to 7.3
Bw -- 12 to 17 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
2C -- 17 to 60 in	gravelly coarse sand	rapid	0.86 to 1.72 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)

Renville County, Minnesota

1845A--Estherville loam, 0 to 2 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)

Renville County, Minnesota

1845B--Estherville loam, 2 to 6 percent slopes

Estherville

Extent: 90 percent of the unit
Landform(s): outwash plains, terraces
Slope gradient: 2 to 6 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): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .32
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 8 in	loam	moderately rapid	1.50 to 1.73 in	5.6 to 7.3
Bw -- 8 to 13 in	sandy loam	moderately rapid	0.67 to 0.92 in	5.6 to 7.3
2C -- 13 to 60 in	gravelly coarse sand	rapid	0.94 to 1.87 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)

Renville County, Minnesota

1845B--Estherville loam, 2 to 6 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)

Renville County, Minnesota

1900--Okoboji-Canisteo complex, depressional, 0 to 1 percent slopes

Okoboji, depressional

Extent: 70 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): 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,A -- 0 to 12 in	mucky silty clay loam	moderate	2.60 to 2.95 in	6.1 to 7.8
A2 -- 12 to 30 in	silty clay loam	moderately slow	3.26 to 3.62 in	6.6 to 7.8
Cg -- 30 to 60 in	silty clay loam	moderately slow	5.39 to 5.98 in	6.6 to 8.4

Canisteo, depressional

Extent: 15 percent of the unit

Landform(s): depressions on 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) .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 19 in	silty clay loam	moderate	3.40 to 4.16 in	7.4 to 8.4
Bkg1 -- 19 to 23 in	clay loam	moderate	0.59 to 0.75 in	7.4 to 8.4
Bkg2 -- 23 to 39 in	clay loam	moderate	1.94 to 2.91 in	7.4 to 8.4
Cg -- 39 to 60 in	loam	moderate	2.92 to 3.34 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1900--Okoboji-Canisteo complex, depressional, 0 to 1 percent slopes

Harps

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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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:

<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)

Renville County, Minnesota

1917--Nishna silty clay loam, 0 to 1 percent slopes, frequently flooded

Nishna, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: clayey 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): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	silty clay loam	slow	2.50 to 2.92 in	7.4 to 8.4
Cg -- 21 to 60 in	silty clay	slow	4.29 to 5.07 in	7.4 to 8.4

Rushriver

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Map Unit Description (MN)

Renville County, Minnesota

1917--Nishna silty clay loam, 0 to 1 percent slopes, frequently flooded

Havelock

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Renville County, Minnesota

1958--Danube silty clay, 0 to 2 percent slopes

Danube

Extent: 85 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 2 percent
Parent material: coarse-silty alluvium over sandy alluvium
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): 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>
Apk,Ak -- 0 to 19 in	silty clay	moderately slow	2.65 to 3.21 in	7.4 to 8.4
Bg -- 19 to 31 in	silt loam	moderate	2.44 to 2.69 in	7.4 to 8.4
2Bg -- 31 to 35 in	sandy loam	moderately rapid	0.47 to 0.63 in	7.4 to 8.4
2Cg -- 35 to 60 in	loamy sand	rapid	0.50 to 1.98 in	7.4 to 8.4

Mayer

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)

Renville County, Minnesota

1958--Danube silty clay, 0 to 2 percent slopes

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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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:

<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)

Renville County, Minnesota

1999--Minneiska-Rushriver complex, 0 to 2 percent slopes, frequently flooded

Minneiska, frequently flooded

Extent: 55 percent of the unit

Landform(s): outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy alluvium over sandy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

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) .32

Land capability, nonirrigated 5w

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	silt loam	moderately rapid	1.42 to 1.56 in	7.4 to 8.4
C -- 7 to 60 in	sr to silt loam to sand	moderately rapid	6.86 to 9.50 in	7.4 to 8.4

Rushriver, frequently flooded

Extent: 35 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: stratified sandy and silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated 5w

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 46 in	loam	moderate	7.83 to 10.13 in	7.4 to 8.4
C -- 46 to 60 in	sr to silt loam to coarse sand	rapid	0.83 to 2.07 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

1999--Minneiska-Rushriver complex, 0 to 2 percent slopes, frequently flooded

Havelock

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil: yes

Hydrologic group:

Potential for frost action:

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

Renville 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)

Renville 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)

Renville 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

L83A--Webster clay loam, 0 to 2 percent slopes

Webster

Extent: 50 to 85 percent of the unit

Landform(s): flats on moraines, 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: 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 19 in	clay loam	moderate	3.59 to 3.97 in	6.6 to 7.3
Bg -- 19 to 26 in	clay loam	moderate	1.13 to 1.28 in	6.6 to 7.8
BCg,Cg -- 26 to 60 in	loam	moderate	5.08 to 6.43 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

L85A--Nicollet clay loam, 1 to 3 percent slopes

Nicollet

Extent: 70 to 95 percent of the unit

Landform(s): flats on moraines, 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: somewhat 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 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 17 in	clay loam	moderate	2.88 to 3.72 in	5.6 to 7.3
Bw,Bg -- 17 to 33 in	clay loam	moderate	2.42 to 3.07 in	5.6 to 7.3
Bg -- 33 to 36 in	clay loam	moderate	0.41 to 0.52 in	7.4 to 8.4
Cg -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Renville County, Minnesota

L107A--Canisteo-Glencoe, depressional complex, 0 to 2 percent slopes

Canisteo

Extent: 30 to 70 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: 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	clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
Bkg -- 18 to 39 in	loam	moderate	2.50 to 3.76 in	7.4 to 8.4
Cg -- 39 to 80 in	loam	moderate	6.14 to 7.78 in	7.4 to 8.4

Glencoe, depressional

Extent: 15 to 55 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	clay loam	moderate	1.77 to 2.17 in	6.1 to 7.8
A,ABg -- 10 to 35 in	clay loam	moderate	4.54 to 5.54 in	6.1 to 7.8
Bg -- 35 to 48 in	loam	moderate	1.95 to 2.47 in	6.6 to 7.8
Cg -- 48 to 60 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4

Map Unit Description (MN)

Renville 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

<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 -- 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)

Renville 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)

Renville 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)

Renville County, Minnesota

L179A--Corvuso-Lura, depressional, firm substratum complex, 0 to 2 percent slopes

Corvuso

<i>Extent:</i> 50 to 70 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> rims on depressions on moraines, flats on moraines	<i>Wind erodibility group (WEG):</i> 4L
<i>Slope gradient:</i> 0 to 2 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> fine textured mantle over firm till	<i>Kw factor (surface layer)</i> .20
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 2w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> none	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> poorly drained	<i>Potential for frost action:</i> high

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

Lura, firm substratum, depressional

<i>Extent:</i> 30 to 50 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines	<i>Wind erodibility group (WEG):</i> 4
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 86
<i>Parent material:</i> clayey lacustrine sediments over firm till	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 3w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

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

Renville 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)

Renville 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)

Renville County, Minnesota

L187A--Klossner and Lura 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	
3BCg -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Lura, firm substratum, ponded

Extent: 0 to 100 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): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .24

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>
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)

Renville 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)

Renville 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

<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	
3BCg2 -- 60 to 80 in	clay loam	moderately slow	2.61 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Renville 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)

Renville County, Minnesota

L204C2--Newlondon-Strout-Hawick complex, 6 to 12 percent slopes, moderately eroded

Newlondon

Extent: 50 to 70 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

Extent: 15 to 25 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)

Renville County, Minnesota

L204C2--Newlondon-Strout-Hawick complex, 6 to 12 percent slopes, moderately eroded

Hawick

Extent: 15 to 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) .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	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

Map Unit Description (MN)

Renville County, Minnesota

L206B--Strout-Arkton-Estherville complex, 2 to 6 percent slopes

Strout

Extent: 50 to 70 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)

Renville County, Minnesota

L206B--Strout-Arkton-Estherville complex, 2 to 6 percent slopes

Estherville

Extent: 15 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: somewhat excessively drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	sandy loam	moderately rapid	1.69 to 2.34 in	5.6 to 7.3
Bw1 -- 13 to 18 in	sandy loam	moderately rapid	0.61 to 0.85 in	5.6 to 7.3
2Bw2 -- 18 to 23 in	loamy coarse sand	rapid	0.10 to 0.20 in	5.6 to 7.3
2C -- 23 to 60 in	gravelly coarse sand	rapid	0.74 to 1.48 in	6.6 to 8.4

M-W--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit
Landform(s):
Slope gradient:
Parent material:
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class:

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

<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)

Renville 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: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

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