

## Map Unit Description (MN)

Murray 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]

### 31F--Storden loam, 18 to 40 percent slopes

#### Storden

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 18 to 40 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 7e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	loam	moderate	1.8 to 2.0 in	7.4 to 8.4
H2 -- 9 to 20 in	loam	moderate	1.9 to 2.1 in	7.9 to 8.4
H3 -- 20 to 60 in	clay loam	moderate	5.6 to 6.4 in	7.4 to 8.4

### 33B--Barnes loam, 2 to 4 percent slopes

#### Barnes

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	loam	moderate	1.8 to 2.0 in	6.1 to 7.3
H2 -- 9 to 17 in	loam	moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 17 to 60 in	loam	moderate	7.3 to 8.2 in	7.4 to 8.4

### 33B2--Barnes loam, 3 to 6 percent slopes, eroded

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### 33B2--Barnes loam, 3 to 6 percent slopes, eroded

#### Barnes

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in loam		moderate	1.8 to 2.0 in	6.1 to 7.3
H2 -- 9 to 17 in loam		moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 17 to 60 in loam		moderate	7.3 to 8.2 in	7.4 to 8.4

### 36--Flom clay loam

#### Flom

*Extent:* 99 percent of the unit  
*Landform(s):* swale  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 23 in clay loam		moderate	3.9 to 4.3 in	6.1 to 7.3
H2 -- 23 to 33 in clay loam		moderate	1.5 to 1.9 in	7.4 to 8.4
H3 -- 33 to 60 in clay loam		moderate	3.7 to 4.3 in	7.4 to 8.4

### 51--La Prairie loam

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## 51--La Prairie loam

### La Prairie

*Extent:* 99 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* occasional

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

*Kw (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 13 in	loam	moderate	2.6 to 2.9 in	6.1 to 7.3
H2 -- 13 to 36 in	loam	moderate	3.9 to 4.3 in	7.4 to 8.4
H3 -- 36 to 60 in	sr to fine sandy loam to silty clay loam	moderate	3.4 to 4.6 in	7.4 to 8.4

## 70--Svea loam

### Svea

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	loam	moderate	1.6 to 1.7 in	6.1 to 7.3
H2 -- 8 to 26 in	loam	moderate	3.1 to 3.4 in	6.1 to 7.3
H3 -- 26 to 60 in	loam	moderate	5.8 to 6.4 in	7.4 to 8.4

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## 86--Canisteo clay loam

### Canisteo

*Extent:* 99 percent of the unit  
*Landform(s):* flat  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 17 in	clay loam	moderate	2.9 to 3.2 in	7.4 to 8.4
H2 -- 17 to 23 in	clay loam	moderate	1.0 to 1.1 in	7.4 to 8.4
H3 -- 23 to 36 in	clay loam	moderate	1.9 to 2.5 in	7.9 to 8.4
H4 -- 36 to 60 in	clay loam	moderate	3.4 to 3.8 in	7.4 to 8.4

## 94B--Terril loam, 2 to 8 percent slopes

### Terril

*Extent:* 97 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 8 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 35 in	loam	moderate	7.0 to 7.7 in	6.1 to 7.3
H2 -- 35 to 43 in	loam	moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 43 to 60 in	loam	moderate	2.9 to 3.2 in	7.4 to 8.4

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### 96A--Collinwood silty clay, 0 to 2 percent slopes

#### Collinwood

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .32

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 18 in	silty clay
H2 --	18 to 34 in	silty clay
H3 --	34 to 60 in	silty clay

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderately slow	2.5 to 3.1 in	6.1 to 7.3
moderately slow	2.0 to 2.5 in	6.1 to 7.3
moderately slow	2.9 to 3.9 in	7.4 to 8.4

### 96B--Collinwood silty clay, 2 to 6 percent slopes

#### Collinwood

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .32

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 18 in	silty clay
H2 --	18 to 34 in	silty clay
H3 --	34 to 60 in	silty clay

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderately slow	2.5 to 3.1 in	6.1 to 7.3
moderately slow	2.0 to 2.5 in	6.1 to 7.3
moderately slow	2.9 to 3.9 in	7.4 to 8.4

### 102B--Clarion loam, 2 to 4 percent slopes

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## Map Unit Description (MN)

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### 102B--Clarion loam, 2 to 4 percent slopes

#### Clarion

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 12 in loam		moderate	2.4 to 2.6 in	6.1 to 7.3
H2 -- 12 to 23 in loam		moderate	1.9 to 2.1 in	6.1 to 7.3
H3 -- 23 to 60 in loam		moderate	6.3 to 7.0 in	7.4 to 8.4

### 102B2--Clarion loam, 3 to 6 percent slopes, eroded

#### Clarion

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 12 in loam		moderate	2.4 to 2.6 in	6.1 to 7.3
H2 -- 12 to 23 in loam		moderate	1.9 to 2.1 in	6.1 to 7.3
H3 -- 23 to 60 in loam		moderate	6.3 to 7.0 in	7.4 to 8.4

### 113--Webster clay loam

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## 113--Webster clay loam

### Webster

*Extent:* 99 percent of the unit  
*Landform(s):* swale  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 20 in	clay loam	moderate	3.4 to 3.8 in	6.1 to 7.3
H2 -- 20 to 30 in	clay loam	moderate	1.5 to 1.9 in	6.1 to 7.3
H3 -- 30 to 60 in	clay loam	moderate	4.2 to 4.8 in	7.4 to 8.4

## 114--Glencoe silty clay loam

### Glencoe

*Extent:* 99 percent of the unit  
*Landform(s):* depression  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* frequent  
*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	silty clay loam	moderate	1.6 to 2.0 in	6.1 to 7.3
H2 -- 9 to 33 in	silty clay loam	moderate	4.3 to 5.3 in	6.1 to 7.3
H3 -- 33 to 46 in	clay loam	moderate	1.9 to 2.5 in	6.1 to 7.3
H4 -- 46 to 60 in	clay loam	moderate	1.9 to 2.2 in	7.4 to 8.4

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### 118--Crippin loam

#### Crippin

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 17 in	loam	moderate	3.4 to 3.7 in	7.4 to 8.4
H2 -- 17 to 35 in	loam	moderate	3.1 to 3.4 in	7.9 to 8.4
H3 -- 35 to 60 in	loam	moderate	4.2 to 4.7 in	7.4 to 8.4

### 127A--Sverdrup sandy loam, 0 to 2 percent slopes

#### Sverdrup

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 3s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 15 in	sandy loam	moderately rapid	1.9 to 2.2 in	6.1 to 7.3
H2 -- 15 to 28 in	sandy loam	moderately rapid	1.6 to 1.8 in	6.1 to 7.3
H3 -- 28 to 60 in	sand	rapid	1.6 to 2.2 in	7.4 to 8.4

### 127B--Sverdrup sandy loam, 2 to 6 percent slopes

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### 127B--Sverdrup sandy loam, 2 to 6 percent slopes

#### Sverdrup

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 15 in	sandy loam	moderately rapid	1.9 to 2.2 in	6.1 to 7.3
H2 -- 15 to 28 in	loam	moderately rapid	2.2 to 2.5 in	6.1 to 7.3
H3 -- 28 to 60 in	sand	rapid	1.6 to 2.2 in	7.4 to 8.4

### 127C--Sverdrup sandy loam, 6 to 12 percent slopes

#### Sverdrup

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 15 in	sandy loam	moderately rapid	1.9 to 2.2 in	6.1 to 7.3
H2 -- 15 to 28 in	loam	moderately rapid	2.2 to 2.5 in	6.1 to 7.3
H3 -- 28 to 60 in	sand	rapid	1.6 to 2.2 in	7.4 to 8.4

### 130--Nicollet loam

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### 130--Nicollet loam

#### Nicollet

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1	--	0 to 16 in	loam
H2	--	16 to 28 in	loam
H3	--	28 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

3.2 to 3.6 in	6.1 to 7.3
2.0 to 2.2 in	6.1 to 7.3
5.4 to 6.1 in	7.4 to 8.4

#### *pH*

### 140--Spicer silty clay loam

#### Spicer

*Extent:* 99 percent of the unit

*Landform(s):* flat

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1	--	0 to 14 in	silty clay loam
H2	--	14 to 31 in	silty clay loam
H3	--	31 to 60 in	silt loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

2.6 to 3.1 in	7.4 to 8.4
2.7 to 3.2 in	7.4 to 8.4
5.7 to 6.3 in	7.4 to 8.4

#### *pH*

### 141A--Egeland sandy loam, 0 to 2 percent slopes

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### 141A--Egeland sandy loam, 0 to 2 percent slopes

#### Egeland

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
*Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.4 in	6.1 to 7.3
H2 -- 9 to 26 in	sandy loam	moderately rapid	2.0 to 2.4 in	6.1 to 7.3
H3 -- 26 to 36 in	loamy sand	moderately rapid	0.8 to 1.0 in	7.4 to 8.4
H4 -- 36 to 60 in	sr to fine sand to silt loam	moderate	1.2 to 5.3 in	7.4 to 8.4

### 141B--Egeland sandy loam, 2 to 6 percent slopes

#### Egeland

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
*Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	sandy loam	moderately rapid	1.2 to 1.4 in	6.1 to 7.3
H2 -- 9 to 26 in	sandy loam	moderately rapid	2.0 to 2.4 in	6.1 to 7.3
H3 -- 26 to 36 in	loamy sand	moderately rapid	0.8 to 1.0 in	7.4 to 8.4
H4 -- 36 to 60 in	sr to fine sand to silt loam	moderate	1.2 to 5.3 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 141B--Egeland sandy loam, 2 to 6 percent slopes

### 149B--Everly clay loam, 2 to 4 percent slopes

#### Everly

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 13 in	clay loam	moderate	2.2 to 2.5 in	6.1 to 7.3
H2 -- 13 to 21 in	clay loam	moderate	1.2 to 1.5 in	6.1 to 7.3
H3 -- 21 to 60 in	loam	moderately slow	6.6 to 7.4 in	7.4 to 8.4

### 149B2--Everly clay loam, 3 to 6 percent slopes, eroded

#### Everly

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 13 in	clay loam	moderate	2.2 to 2.5 in	6.1 to 7.3
H2 -- 13 to 21 in	clay loam	moderate	1.2 to 1.5 in	6.1 to 7.3
H3 -- 21 to 60 in	loam	moderate	6.6 to 7.4 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 149B2--Everly clay loam, 3 to 6 percent slopes, eroded

### 149C2--Everly clay loam, 6 to 12 percent slopes, eroded

#### Everly

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### *Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 13 in	clay loam
H2 -- 13 to 21 in	loam
H3 -- 21 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate  
 moderate  
 moderate

#### *Available water capacity*

<i>capacity</i>	<i>pH</i>
2.3 to 2.9 in	6.1 to 7.3
1.3 to 1.5 in	6.1 to 7.3
6.6 to 7.4 in	7.4 to 8.4

### 184--Hamerly loam

#### Hamerly

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 1 to 3 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* high

#### *Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 8 in	loam
H2 -- 8 to 20 in	loam
H3 -- 20 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate  
 moderate  
 moderate

#### *Available water capacity*

<i>capacity</i>	<i>pH</i>
1.6 to 1.7 in	7.4 to 8.4
2.1 to 2.3 in	7.9 to 8.4
6.8 to 7.6 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 184--Hamerly loam

### 210--Fulda silty clay

#### Fulda

*Extent:* 99 percent of the unit  
*Landform(s):* flat  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 16 in	silty clay	slow	2.3 to 2.7 in	6.1 to 7.3
H2 -- 16 to 41 in	silty clay	slow	3.2 to 4.2 in	7.4 to 8.4
H3 -- 41 to 60 in	silty clay loam	slow	3.0 to 3.6 in	7.4 to 8.4

### 211--Lura silty clay

#### Lura

*Extent:* 99 percent of the unit  
*Landform(s):* depression  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 41 in	silty clay	slow	5.7 to 7.0 in	6.1 to 7.3
H2 -- 41 to 60 in	silty clay	moderately slow	2.5 to 3.0 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

# Map Unit Description (MN)

Murray 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]

## 211--Lura silty clay

## 212--Sinai silty clay

### Sinai

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* low

*Representative soil profile:*

*Texture*

H1 --	0 to 17 in	silty clay
H2 --	17 to 30 in	silty clay
H3 --	30 to 60 in	sr to silty clay to silt loam

*Permeability*

*Available water capacity*

*pH*

slow	2.4 to 2.9 in	6.1 to 7.3
slow	1.7 to 2.1 in	6.6 to 7.8
slow	3.3 to 6.6 in	7.4 to 8.4

## 219--Rolfe silt loam

### Rolfe

*Extent:* 99 percent of the unit

*Landform(s):* depression

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .37

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* C

*Potential frost action:* high

*Representative soil profile:*

*Texture*

H1 --	0 to 20 in	silt loam
H2 --	20 to 36 in	silty clay
H3 --	36 to 60 in	clay loam

*Permeability*

*Available water capacity*

*pH*

moderate	4.4 to 4.8 in	6.1 to 7.3
slow	2.0 to 2.5 in	6.1 to 7.3
moderate	3.4 to 3.8 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 219--Rolfe silt loam

### 229--Waldorf silty clay

#### Waldorf

*Extent:* 99 percent of the unit  
*Landform(s):* flat  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential frost action:* high

#### *Representative soil profile:*

H1	--	0 to 21 in	silty clay
H2	--	21 to 42 in	silty clay
H3	--	42 to 60 in	silty clay

#### *Texture*

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderately slow	2.9 to 3.5 in	6.1 to 7.3
moderately slow	2.8 to 3.4 in	6.1 to 7.3
moderately slow	1.9 to 2.7 in	7.4 to 8.4

### 236--Vallers clay loam

#### Vallers

*Extent:* 99 percent of the unit  
*Landform(s):* flat  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

#### *Representative soil profile:*

H1	--	0 to 15 in	clay loam
H2	--	15 to 23 in	clay loam
H3	--	23 to 60 in	loam

#### *Texture*

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	2.5 to 2.8 in	7.4 to 8.4
moderate	1.2 to 1.5 in	7.9 to 8.4
moderate	6.3 to 7.0 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 236--Vallers clay loam

### 241--Letri clay loam

#### Letri

*Extent:* 99 percent of the unit

*Landform(s):* swale

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 20 in	clay loam
H2 --	20 to 34 in	clay loam
H3 --	34 to 60 in	loam

<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
moderate	3.4 to 3.8 in	6.1 to 7.3
moderate	2.1 to 2.6 in	7.4 to 8.4
moderately slow	4.4 to 4.9 in	7.4 to 8.4

### 246--Marysland loam

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 246--Marysland loam

#### Marysland

*Extent:* 99 percent of the unit

*Landform(s):* flat

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 17 in	loam	moderate	3.4 to 3.7 in	7.4 to 8.4
H2 -- 17 to 27 in	loam	moderate	1.7 to 1.9 in	7.9 to 8.4
H3 -- 27 to 60 in	stratified gravelly coarse sand to fine sand	rapid	0.7 to 2.3 in	7.4 to 8.4

### 276--Oldham silty clay loam

#### Oldham

*Extent:* 99 percent of the unit

*Landform(s):* depression

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .37

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* C/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 40 in	silty clay loam	moderately slow	7.2 to 8.8 in	7.4 to 8.4
H2 -- 40 to 60 in	clay loam	moderately slow	2.8 to 3.1 in	7.4 to 8.4

### 284B--Poinsett silty clay loam, 2 to 4 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 284B--Poinsett silty clay loam, 2 to 4 percent slopes

#### Poinsett

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	silty clay loam	moderate	1.6 to 2.0 in	6.1 to 7.3
H2 -- 9 to 29 in	silty clay loam	moderate	3.2 to 3.8 in	6.6 to 7.8
H3 -- 29 to 60 in	silty clay loam	moderate	4.9 to 5.8 in	7.4 to 8.4

### 284B2--Poinsett silty clay loam, 3 to 6 percent slopes, eroded

#### Poinsett

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	silty clay loam	moderate	1.6 to 2.0 in	6.1 to 7.3
H2 -- 9 to 29 in	silty clay loam	moderate	3.2 to 3.8 in	6.6 to 7.8
H3 -- 29 to 60 in	silt loam	moderate	6.1 to 6.8 in	7.4 to 8.4

### 297B--Vienna silty clay loam, 2 to 4 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 297B--Vienna silty clay loam, 2 to 4 percent slopes

#### Vienna

*Extent:* 99 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 10 in	silty clay loam	moderate	1.8 to 2.2 in	6.1 to 7.3
H2 -- 10 to 15 in	silty clay loam	moderate	0.8 to 1.0 in	6.1 to 7.3
H3 -- 15 to 26 in	clay loam	moderately slow	1.7 to 2.1 in	7.9 to 8.4
H4 -- 26 to 60 in	clay loam	moderately slow	4.7 to 5.4 in	7.4 to 8.4

### 297B2--Vienna silty clay loam, 3 to 6 percent slopes, eroded

#### Vienna

*Extent:* 99 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 10 in	silty clay loam	moderate	1.8 to 2.2 in	6.1 to 7.3
H2 -- 10 to 15 in	silty clay loam	moderate	0.8 to 1.0 in	6.1 to 7.3
H3 -- 15 to 26 in	clay loam	moderately slow	1.7 to 2.1 in	7.9 to 8.4
H4 -- 26 to 60 in	clay loam	moderately slow	4.7 to 5.4 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 297B2--Vienna silty clay loam, 3 to 6 percent slopes, eroded

### 339A--Fordville loam, 0 to 2 percent slopes

#### Fordville

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 4  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
*Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 7 in	loam
H2 --	7 to 15 in	loam
H3 --	15 to 27 in	loam
H4 --	27 to 60 in	gravelly sand

<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
moderate	1.4 to 1.6 in	6.1 to 7.3
moderate	1.3 to 1.5 in	6.1 to 7.3
moderately rapid	2.0 to 2.2 in	7.4 to 8.4
very rapid	1.7 to 2.3 in	7.4 to 8.4

### 339B--Fordville loam, 2 to 6 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 339B--Fordville loam, 2 to 6 percent slopes

#### Fordville

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 4  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
*Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in	loam	moderate	1.4 to 1.6 in	6.1 to 7.3
H2 -- 7 to 15 in	loam	moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 15 to 27 in	loam	moderately rapid	2.0 to 2.2 in	7.4 to 8.4
H4 -- 27 to 60 in	gravelly sand	very rapid	1.7 to 2.3 in	7.4 to 8.4

### 341A--Arvilla sandy loam, 0 to 2 percent slopes

#### Arvilla

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* somewhat excessively drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	sandy loam	moderately rapid	1.0 to 1.2 in	6.1 to 7.3
H2 -- 8 to 19 in	sandy loam	moderately rapid	1.3 to 1.5 in	6.1 to 7.3
H3 -- 19 to 60 in	gravelly coarse sand	very rapid	0.8 to 1.6 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 341A--Arvilla sandy loam, 0 to 2 percent slopes

### 341B--Arvilla sandy loam, 2 to 6 percent slopes

#### Arvilla

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 4s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 8 in	sandy loam
H2 --	8 to 19 in	sandy loam
H3 --	19 to 60 in	gravelly coarse sand

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderately rapid	1.0 to 1.2 in	6.1 to 7.3
moderately rapid	1.3 to 1.5 in	6.1 to 7.3
very rapid	0.8 to 1.6 in	7.4 to 8.4

### 341C--Arvilla sandy loam, 6 to 12 percent slopes

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 341C--Arvilla sandy loam, 6 to 12 percent slopes

#### Arvilla

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	sandy loam	moderately rapid	1.0 to 1.2 in	6.1 to 7.3
H2 -- 8 to 19 in	sandy loam	moderately rapid	1.3 to 1.5 in	6.1 to 7.3
H3 -- 19 to 60 in	gravelly coarse sand	very rapid	0.8 to 1.6 in	7.4 to 8.4

### 344--Quam silty clay loam

#### Quam

*Extent:* 99 percent of the unit

*Landform(s):* depression

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

*Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 10 in	silty clay loam	moderately slow	1.8 to 2.2 in	6.1 to 7.3
H2 -- 10 to 57 in	silty clay loam	moderately slow	8.5 to 10.4 in	6.1 to 7.3
H3 -- 57 to 60 in	silty clay loam	moderately slow	0.4 to 0.5 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 345--Wilmonton clay loam

#### Wilmonton

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 15 in	clay loam
H2 --	15 to 24 in	clay loam
H3 --	24 to 60 in	clay loam

#### *Permeability*

moderate
moderately slow
moderately slow

#### *Available water*

#### *capacity*

2.5 to 2.8 in
1.4 to 1.7 in
5.0 to 5.7 in

#### *pH*

6.1 to 7.3
6.6 to 7.8
7.4 to 8.4

### 359--Lamoure silty clay loam, frequently flooded

#### Lamoure

*Extent:* 99 percent of the unit

*Landform(s):* flood plain

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 6w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 11 in	silty clay loam
H2 --	11 to 38 in	silty clay loam
H3 --	38 to 60 in	sr to sandy loam to silty clay

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

2.0 to 2.4 in
4.8 to 5.9 in
2.4 to 4.2 in

#### *pH*

7.4 to 8.4
7.4 to 8.4
7.4 to 8.4

### 392--Biscay loam

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 392--Biscay loam

#### Biscay

*Extent:* 99 percent of the unit

*Landform(s):* flat

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

*Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 22 in	loam	moderate	4.4 to 4.9 in	6.1 to 7.3
H2 -- 22 to 30 in	loam	moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 30 to 38 in	gravelly loam	moderately rapid	1.3 to 1.5 in	7.4 to 8.4
H4 -- 38 to 60 in	stratified very gravelly coarse sand to loamy sand	rapid	0.4 to 2.2 in	7.4 to 8.4

### 402E--Sioux sandy loam, 2 to 40 percent slopes

#### Sioux

*Extent:* 99 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 2 to 40 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 6s

*Hydric soil:* no

*Hydrologic group:* A

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in	sandy loam	moderately rapid	0.9 to 1.1 in	7.4 to 8.4
H2 -- 7 to 13 in	gravelly sandy loam	moderately rapid	0.7 to 0.8 in	7.9 to 8.4
H3 -- 13 to 60 in	very gravelly sand	very rapid	2.3 to 3.3 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 418--Lamoure silty clay loam, occasionally flooded

#### Lamoure

*Extent:* 99 percent of the unit  
*Landform(s):* flood plain  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 11 in	silty clay loam	moderate	2.0 to 2.4 in	7.4 to 8.4
H2 -- 11 to 38 in	silty clay loam	moderate	4.8 to 5.9 in	7.4 to 8.4
H3 -- 38 to 60 in	sr to sandy loam to silty clay	moderate	2.4 to 4.2 in	7.4 to 8.4

### 436--Hidewood silty clay loam

#### Hidewood

*Extent:* 99 percent of the unit  
*Landform(s):* swale  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* B/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 16 in	silty clay loam	moderate	2.9 to 3.6 in	6.1 to 7.3
H2 -- 16 to 31 in	silty clay loam	moderate	2.4 to 2.8 in	7.4 to 8.4
H3 -- 31 to 60 in	clay loam	moderate	4.0 to 4.6 in	7.4 to 8.4

### 437F--Buse loam, 18 to 40 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 437F--Buse loam, 18 to 40 percent slopes

#### Buse

*Extent:* 98 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 18 to 40 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 7e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in loam		moderate	1.8 to 2.0 in	7.4 to 8.4
H2 -- 9 to 24 in loam		moderate	2.5 to 2.8 in	7.9 to 8.4
H3 -- 24 to 60 in loam		moderate	6.1 to 6.8 in	7.4 to 8.4

### 470--Lismore silty clay loam

#### Lismore

*Extent:* 99 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 1 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 1  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in silty clay loam		moderate	1.4 to 1.7 in	6.1 to 7.3
H2 -- 8 to 15 in silty clay loam		moderate	1.1 to 1.3 in	6.1 to 7.3
H3 -- 15 to 31 in clay loam		moderately slow	2.3 to 2.6 in	7.4 to 8.4
H4 -- 31 to 60 in clay loam		moderately slow	4.0 to 4.6 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 506--Overly silty clay loam

#### Overly

*Extent:* 98 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

*Kw (surface layer):* .28

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 14 in	silty clay loam	moderately slow	2.6 to 3.1 in	6.1 to 7.3
H2 -- 14 to 37 in	silty clay loam	moderate	3.7 to 4.3 in	7.4 to 8.4
H3 -- 37 to 60 in	sr to silt loam to silty clay	moderate	3.2 to 3.7 in	7.4 to 8.4

### 562--Knoke silty clay loam

#### Knoke

*Extent:* 99 percent of the unit

*Landform(s):* depression

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .32

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 10 in	silty clay loam	moderately slow	1.8 to 2.2 in	7.4 to 8.4
H2 -- 10 to 20 in	silty clay loam	moderately slow	1.8 to 2.3 in	7.4 to 8.4
H3 -- 20 to 60 in	silty clay	moderately slow	5.2 to 6.4 in	7.9 to 8.4

### 590--Moines clay loam

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 590--Moines clay loam

#### Moines

*Extent:* 99 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 1 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 14 in	clay loam
H2 --	14 to 40 in	loam
H3 --	40 to 60 in	loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	2.4 to 2.7 in	7.4 to 8.4
moderate	4.4 to 4.9 in	7.9 to 8.4
moderately slow	3.3 to 3.7 in	7.4 to 8.4

### 594--Jeffers clay loam

#### Jeffers

*Extent:* 99 percent of the unit

*Landform(s):* flat

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

H1 --	0 to 18 in	clay loam
H2 --	18 to 35 in	clay loam
H3 --	35 to 60 in	clay loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	3.1 to 3.4 in	7.4 to 8.4
moderate	2.5 to 3.2 in	7.9 to 8.4
moderately slow	3.5 to 4.0 in	7.4 to 8.4

### 894D2--Storden-Everyly complex, 12 to 18 percent slopes, eroded

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 894D2--Storden-Everly complex, 12 to 18 percent slopes, eroded

#### Storden

*Extent:* 55 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 12 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 8 in	loam
H2 -- 8 to 20 in	loam
H3 -- 20 to 60 in	loam

*Texture*

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*

1.6 to 1.7 in	7.4 to 8.4
2.1 to 2.3 in	7.9 to 8.4
6.8 to 7.6 in	7.4 to 8.4

*pH*

#### Everly

*Extent:* 39 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 12 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 9 in	clay loam
H2 -- 9 to 21 in	clay loam
H3 -- 21 to 60 in	loam

*Texture*

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*

1.5 to 1.7 in	6.1 to 7.3
1.8 to 2.2 in	6.1 to 7.3
6.6 to 7.4 in	7.4 to 8.4

*pH*

### 902C2--Barnes-Buse loams, 6 to 12 percent slopes, eroded

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 902C2--Barnes-Buse loams, 6 to 12 percent slopes, eroded

#### Barnes

*Extent:* 49 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in loam		moderate	1.6 to 1.7 in	6.1 to 7.3
H2 -- 8 to 17 in loam		moderate	1.5 to 1.7 in	6.1 to 7.3
H3 -- 17 to 60 in loam		moderate	7.3 to 8.2 in	7.4 to 8.4

#### Buse

*Extent:* 34 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in loam		moderate	1.4 to 1.6 in	7.4 to 8.4
H2 -- 7 to 24 in loam		moderate	2.9 to 3.2 in	7.9 to 8.4
H3 -- 24 to 60 in loam		moderate	6.1 to 6.8 in	7.4 to 8.4

### 904B--Arvilla-Barnes-Buse complex, 2 to 6 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 904B--Arvilla-Barnes-Buse complex, 2 to 6 percent slopes

#### Arvilla

*Extent:* 39 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 4s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

*Representative soil profile:*

*Texture*

H1 --	0 to 8 in	sandy loam
H2 --	8 to 19 in	sandy loam
H3 --	19 to 60 in	gravelly coarse sand

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderately rapid	1.0 to 1.2 in	6.1 to 7.3
moderately rapid	1.3 to 1.5 in	6.1 to 7.3
very rapid	0.8 to 1.6 in	7.4 to 8.4

#### Barnes

*Extent:* 33 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .28

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

H1 --	0 to 8 in	loam
H2 --	8 to 18 in	loam
H3 --	18 to 60 in	loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	1.6 to 1.7 in	6.1 to 7.3
moderate	1.7 to 1.9 in	6.1 to 7.3
moderate	7.1 to 7.9 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 904B--Arvilla-Barnes-Buse complex, 2 to 6 percent slopes

#### Buse

*Extent:* 15 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 7 in	loam	moderate	1.4 to 1.6 in	7.4 to 8.4
H2 -- 7 to 24 in	loam	moderate	2.9 to 3.2 in	7.9 to 8.4
H3 -- 24 to 60 in	loam	moderate	6.1 to 6.8 in	7.4 to 8.4

### 904C--Arvilla-Barnes-Buse complex, 6 to 12 percent slopes

#### Arvilla

*Extent:* 39 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* somewhat excessively drained

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	sandy loam	moderately rapid	1.0 to 1.2 in	6.1 to 8.4
H2 -- 8 to 19 in	sandy loam	moderately rapid	1.3 to 1.5 in	6.1 to 8.4
H3 -- 19 to 60 in	gravelly coarse sand	very rapid	0.8 to 1.6 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 904C--Arvilla-Barnes-Buse complex, 6 to 12 percent slopes

#### Barnes

*Extent:* 24 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in loam		moderate	1.6 to 1.7 in	6.1 to 7.3
H2 -- 8 to 18 in loam		moderate	1.7 to 1.9 in	6.1 to 7.3
H3 -- 18 to 60 in loam		moderate	7.1 to 7.9 in	7.4 to 8.4

#### Buse

*Extent:* 24 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in loam		moderate	1.4 to 1.6 in	7.4 to 8.4
H2 -- 7 to 24 in loam		moderate	2.9 to 3.2 in	7.9 to 8.4
H3 -- 24 to 60 in loam		moderate	6.1 to 6.8 in	7.4 to 8.4

### 913D--Buse-Barnes loams, 12 to 18 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 913D--Buse-Barnes loams, 12 to 18 percent slopes

#### Buse

*Extent:* 54 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in loam		moderate	1.8 to 2.0 in	7.4 to 8.4
H2 -- 9 to 24 in loam		moderate	2.5 to 2.8 in	7.9 to 8.4
H3 -- 24 to 60 in loam		moderate	6.1 to 6.8 in	7.4 to 8.4

#### Barnes

*Extent:* 34 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 11 in loam		moderate	2.2 to 2.4 in	6.1 to 7.3
H2 -- 11 to 19 in loam		moderate	1.3 to 1.5 in	6.1 to 7.3
H3 -- 19 to 60 in loam		moderate	7.0 to 7.8 in	7.4 to 8.4

### 917D--Buse-Sioux complex, 12 to 18 percent slopes

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 917D--Buse-Sioux complex, 12 to 18 percent slopes

#### Buse

*Extent:* 49 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in loam		moderate	1.8 to 2.0 in	7.4 to 8.4
H2 -- 9 to 24 in loam		moderate	2.5 to 2.8 in	7.9 to 8.4
H3 -- 24 to 60 in loam		moderate	6.1 to 6.8 in	7.4 to 8.4

#### Sioux

*Extent:* 39 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* excessively drained

*Soil loss tolerance (T factor):* 3  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
*Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 6s  
*Hydric soil:* no  
*Hydrologic group:* A  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in sandy loam		moderately rapid	0.9 to 1.1 in	6.6 to 8.4
H2 -- 7 to 13 in gravelly sandy loam		moderately rapid	0.7 to 0.8 in	7.9 to 8.4
H3 -- 13 to 60 in gravelly sand		very rapid	2.3 to 3.3 in	7.4 to 8.4

### 918D--Buse-Vienna complex, 12 to 18 percent slopes

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 918D--Buse-Vienna complex, 12 to 18 percent slopes

#### Buse

*Extent:* 59 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	loam	moderately slow	1.8 to 2.0 in	7.4 to 8.4
H2 -- 9 to 24 in	loam	moderately slow	2.5 to 2.8 in	7.9 to 8.4
H3 -- 24 to 60 in	loam	moderately slow	6.1 to 6.8 in	7.4 to 8.4

#### Vienna

*Extent:* 30 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 15 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 9 in	silty clay loam	moderate	1.6 to 2.0 in	6.1 to 7.3
H2 -- 9 to 18 in	silty clay loam	moderate	1.4 to 1.7 in	6.1 to 7.3
H3 -- 18 to 26 in	clay loam	moderately slow	1.1 to 1.3 in	7.9 to 8.4
H4 -- 26 to 60 in	clay loam	moderately slow	4.7 to 5.4 in	7.4 to 8.4

### 920C2--Storden-Clarion-Arvilla complex, 6 to 15 percent slopes , eroded

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 920C2--Storden-Clarion-Arvilla complex, 6 to 15 percent slopes , eroded

#### Storden

*Extent:* 39 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 15 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### *Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 7 in	loam
H2 -- 7 to 20 in	loam
H3 -- 20 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*      *pH*

1.4 to 1.6 in	7.4 to 8.4
2.2 to 2.5 in	7.9 to 8.4
6.8 to 7.6 in	7.4 to 8.4

#### Clarion

*Extent:* 29 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 15 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .24  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### *Representative soil profile:*

	<i>Texture</i>
H1 -- 0 to 8 in	loam
H2 -- 8 to 19 in	loam
H3 -- 19 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*      *pH*

1.6 to 1.7 in	6.1 to 7.3
1.9 to 2.1 in	6.1 to 7.3
7.0 to 7.8 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 920C2--Storden-Clarion-Arvilla complex, 6 to 15 percent slopes , eroded

#### Arvilla

*Extent:* 20 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 6 to 15 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 3

*Wind erodibility index (WEI):* 86

*Kw (surface layer):* .20

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	sandy loam	moderately rapid	1.0 to 1.2 in	6.1 to 7.3
H2 -- 8 to 19 in	sandy loam	moderately rapid	1.3 to 1.5 in	6.1 to 7.3
H3 -- 19 to 60 in	gravelly coarse sand	very rapid	0.8 to 1.6 in	7.4 to 8.4

### 921C2--Clarion-Storden loams, 6 to 12 percent slopes, eroded

#### Clarion

*Extent:* 44 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	loam	moderate	1.6 to 1.7 in	6.1 to 7.3
H2 -- 8 to 19 in	loam	moderate	1.9 to 2.1 in	6.1 to 7.3
H3 -- 19 to 60 in	loam	moderate	7.0 to 7.8 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 921C2--Clarion-Storden loams, 6 to 12 percent slopes, eroded

#### Storden

*Extent:* 39 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in loam		moderate	1.4 to 1.6 in	7.4 to 8.4
H2 -- 7 to 20 in loam		moderate	2.2 to 2.5 in	7.9 to 8.4
H3 -- 20 to 60 in loam		moderate	6.8 to 7.6 in	7.4 to 8.4

### 960D2--Storden-Clarion loams, 12 to 18 percent slopes, eroded

#### Storden

*Extent:* 49 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 8 in loam		moderate	1.6 to 1.7 in	7.4 to 8.4
H2 -- 8 to 20 in loam		moderate	2.1 to 2.3 in	7.9 to 8.4
H3 -- 20 to 60 in loam		moderate	6.8 to 7.6 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 960D2--Storden-Clarion loams, 12 to 18 percent slopes, eroded

#### Clarion

*Extent:* 39 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 12 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*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 (surface layer):* .24

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 8 in	loam	moderate	1.6 to 1.7 in	6.1 to 7.3
H2 -- 8 to 19 in	loam	moderate	1.9 to 2.1 in	6.1 to 7.3
H3 -- 19 to 60 in	loam	moderate	7.0 to 7.8 in	7.4 to 8.4

### 964C2--Vienna-Buse complex, 6 to 12 percent slopes, eroded

#### Vienna

*Extent:* 49 percent of the unit

*Landform(s):* moraine

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

*Kw (surface layer):* .28

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 6 in	silty clay loam	moderate	1.1 to 1.3 in	6.1 to 7.3
H2 -- 6 to 15 in	silty clay loam	moderate	1.4 to 1.7 in	6.1 to 7.3
H3 -- 15 to 25 in	clay loam	moderately slow	1.4 to 1.6 in	7.9 to 8.4
H4 -- 25 to 60 in	clay loam	moderately slow	4.9 to 5.5 in	7.4 to 8.4

This report shows only the major soils in each map unit. Others may exist.

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## Map Unit Description (MN)

Murray 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]

### 964C2--Vienna-Buse complex, 6 to 12 percent slopes, eroded

#### Buse

*Extent:* 39 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
H1 -- 0 to 7 in	loam	moderately slow	1.4 to 1.6 in	7.4 to 8.4
H2 -- 7 to 24 in	loam	moderately slow	2.9 to 3.2 in	7.9 to 8.4
H3 -- 24 to 60 in	clay loam	moderately slow	5.0 to 5.7 in	7.4 to 8.4

### 1030--Pits, gravel-Udorthents complex

#### Pits, gravel

*Extent:* 60 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:*  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:*

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

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

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray County, Minnesota

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

### 1030--Pits, gravel-Udorthents complex

#### Udorthents

*Extent:* 40 percent of the unit  
*Landform(s):* moraine  
*Slope gradient:*  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:*

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

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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### 1051--Glencoe silty clay loam, ponded

#### Glencoe

*Extent:* 99 percent of the unit  
*Landform(s):* depression  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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 (surface layer):* .28  
*Land capability class, nonirrigated:* 8w  
*Hydric soil:* yes  
*Hydrologic group:* D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 33 in	silty clay loam	moderate	6.0 to 7.3 in	6.1 to 7.3
H2 -- 33 to 46 in	silty clay loam	moderate	2.1 to 2.5 in	6.1 to 7.3
H3 -- 46 to 60 in	clay loam	moderate	1.9 to 2.2 in	7.4 to 8.4

### 1356--Water, miscellaneous

This report shows only the major soils in each map unit. Others may exist.

## Map Unit Description (MN)

Murray 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]

### 1356--Water, miscellaneous

#### Water, miscellaneous

*Extent:* 100 percent of the unit

*Landform(s):*

*Slope gradient:*

*Parent material:*

*Restrictive feature(s):*

*Flooding:*

*Ponding:*

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

*Kw (surface layer):*

*Land capability class, nonirrigated:*

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:*

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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### 1824--Quam silty clay loam, ponded

#### Quam

*Extent:* 99 percent of the unit

*Landform(s):* depression

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

*Kw (surface layer):* .28

*Land capability class, nonirrigated:* 8w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
H1 -- 0 to 10 in	silty clay loam	moderately slow	1.8 to 2.2 in	6.1 to 7.3
H2 -- 10 to 25 in	silty clay loam	moderately slow	2.8 to 3.4 in	6.1 to 7.3
H3 -- 25 to 60 in	silty clay loam	moderately slow	5.5 to 6.6 in	7.4 to 8.4

### W--Water

This report shows only the major soils in each map unit. Others may exist.

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# Map Unit Description (MN)

Murray 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]

## W--Water

### Water

*Extent:* 100 percent of the unit

*Landform(s):*

*Slope gradient:*

*Parent material:*

*Restrictive feature(s):*

*Flooding:*

*Ponding:*

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

*Kw (surface layer):*

*Land capability class, nonirrigated:*

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:*

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

This report shows only the major soils in each map unit. Others may exist.

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