

Soil Descriptions - Non Technical

8B--Sparta Loamy Sand, 1 To 6 Percent Slopes

Component Description

Sparta and similar soils

Extent: 90 percent of the unit
Slope range: 1 to 6 percent
Surface layer texture: Loamy sand
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
 H1--0 to 16 inches; loamy sand
 H2--16 to 29 inches; loamy sand
 H3--29 to 60 inches; sand

Darfur

Extent: 5 percent of the unit
Geomorphic description:
 Drainageway

Dassel

Extent: 5 percent of the unit
Geomorphic description:
 Depression

8C--Sparta Loamy Sand, 6 To 12 Percent Slopes

Component Description

Sparta and similar soils

Extent: 90 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.1 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
 H1--0 to 7 inches; loamy sand
 H2--7 to 13 inches; loamy fine sand
 H3--13 to 60 inches; sand

Darfur

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

8D--Sparta Loamy Sand, 12 To 25 Percent Slopes

Component Description

Sparta and similar soils

Extent: 90 percent of the unit
Slope range: 12 to 25 percent

Surface layer texture: Loamy sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.7 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
H1--0 to 9 inches; loamy sand
H2--9 to 40 inches; loamy fine sand
H3--40 to 60 inches; sand

Darfur

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

35--Blue Earth Mucky Silt Loam, 0 To 1 Percent Slopes

Component Description

Blue earth and similar soils

Extent: 95 percent of the unit
Geomorphic description:
Lakebed
Slope range: 0 to 1 percent
Surface layer texture: Mucky silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 17.5 percent
Typical profile:
H1--0 to 8 inches; mucky silt loam
H2--8 to 60 inches; mucky silt loam

Canisteco

Extent: 5 percent of the unit
Geomorphic description:
Flat
Ponding: None

39A--Wadena Loam, 0 To 2 Percent Slopes

Component Description

Wadena and similar soils

Extent: 90 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 6.4 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
H1--0 to 13 inches; loam

H2--13 to 29 inches; loam
H3--29 to 60 inches; stratified sand to gravelly coarse sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Flat

41A--Estherville Sandy Loam, 0 To 2 Percent Slopes

Component Description

Estherville and similar soils

Extent: 90 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.7 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
H1--0 to 12 inches; sandy loam
H2--12 to 15 inches; sandy loam
H3--15 to 60 inches; gravelly coarse sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Flat

85--Calco Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Calco and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Occasional March April May June July August
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 22 inches; silty clay loam
H2--22 to 60 inches; silty clay loam

Havelock

Extent: 10 percent of the unit
Geomorphic description:
Flood plain

86--Canisteo Clay Loam, Moderately Fine Substratum, 0 To 2 Percent Slopes

Component Description

Canisteo and similar soils

Extent: 85 percent of the unit

Geomorphic description:

Flat

Slope range: 0 to 2 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 10.0 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 18 inches; clay loam

H2--18 to 26 inches; clay loam

H3--26 to 33 inches; clay loam

H4--33 to 60 inches; loam

Glencoe

Extent: 10 percent of the unit

Geomorphic description:

Depression

Seaforth

Extent: 5 percent of the unit

96B--Collinwood Silty Clay Loam, 3 To 6 Percent Slopes

Component Description

Collinwood and similar soils

Extent: 85 percent of the unit

Slope range: 3 to 6 percent

Surface layer texture: Silty clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

2.5 feet April May

Wet soil moisture status is lowest (depth, months):

More than 5.0 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.5 inches

Content of organic matter in the upper 10 inches: 5.2 percent

Typical profile:

H1--0 to 8 inches; silty clay loam

H2--8 to 32 inches; silty clay

H3--32 to 60 inches; silty clay loam

Waldorf

Extent: 10 percent of the unit

Geomorphic description:

Drainageway

Lura

Extent: 5 percent of the unit

Geomorphic description:

Depression

101B--Truman Silt Loam, 2 To 6 Percent Slopes

Component Description

Truman and similar soils

Extent: 85 percent of the unit

Slope range: 2 to 6 percent

Surface layer texture: Silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December
Ponding: None
Available water capacity to a depth of 60 inches: 12.1 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 14 inches; silt loam
H2--14 to 40 inches; silt loam
H3--40 to 60 inches; silt loam

Madelia

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

102B--Clarion Loam, Moderately Fine Substratum, 2 To 5 Percent Slopes

Component Description

Clarion and similar soils

Extent: 85 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December
Ponding: None
Available water capacity to a depth of 60 inches: 11.1 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
H1--0 to 12 inches; loam
H2--12 to 27 inches; loam
H3--27 to 60 inches; loam

Webster

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

106C2--Lester Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Lester and similar soils

Extent: 85 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:

Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
H1--0 to 9 inches; loam
H2--9 to 27 inches; clay loam
H3--27 to 60 inches; loam

Cordova

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

112--Harps Clay Loam, 0 To 2 Percent Slopes

Component Description

Harps and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Rim
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.8 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
H1--0 to 19 inches; clay loam
H2--19 to 25 inches; clay loam
H3--25 to 60 inches; loam

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

Seaforth

Extent: 5 percent of the unit

113--Webster Clay Loam, 0 To 2 Percent Slopes

Component Description

Webster and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature:

Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
H1--0 to 17 inches; clay loam
H2--17 to 24 inches; clay loam
H3--24 to 60 inches; loam

Glencoe

Extent: 10 percent of the unit
Geomorphic description:
Depression

Nicollet

Extent: 5 percent of the unit

114--Glencoe Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Glencoe and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
H1--0 to 10 inches; clay loam
H2--10 to 34 inches; clay loam
H3--34 to 80 inches; clay loam

Canisteo

Extent: 5 percent of the unit
Geomorphic description:
Rim
Ponding: None

Klossner

Extent: 5 percent of the unit
Geomorphic description:
Depression
Ponding: None

129--Cylinder Loam, 0 To 1 Percent Slopes

Component Description

Cylinder and similar soils

Extent: 85 percent of the unit
Slope range: 0 to 1 percent

Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April
Wet soil moisture status is lowest (depth, months):
4.9 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 6.9 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
H1--0 to 15 inches; loam
H2--15 to 31 inches; loam
H3--31 to 60 inches; gravelly sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Flat

Wadena

Extent: 5 percent of the unit

130--Nicollet Clay Loam, 1 To 3 Percent Slopes

Component Description

Nicollet and similar soils

Extent: 85 percent of the unit
Slope range: 1 to 3 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 16 inches; clay loam
H2--16 to 30 inches; clay loam
H3--30 to 60 inches; loam

Webster

Extent: 10 percent of the unit
Geomorphic description:
Flat

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

134--Okoboji Silty Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Okoboji and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained

Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.6 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
H1--0 to 8 inches; silty clay loam
H2--8 to 28 inches; silty clay loam
H3--28 to 60 inches; silty clay loam

Canisteco
Extent: 5 percent of the unit
Geomorphic description:
Rim

Harps
Extent: 5 percent of the unit

Klossner
Extent: 5 percent of the unit
Geomorphic description:
Depression

136--Madelia Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Madelia and similar soils
Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 16 inches; silty clay loam
H2--16 to 30 inches; silt loam
H3--30 to 60 inches; silt loam

Spicer
Extent: 10 percent of the unit
Geomorphic description:
Flat

Okoboji
Extent: 5 percent of the unit
Geomorphic description:
Depression

140--Spicer Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Spicer and similar soils
Extent: 85 percent of the unit

Geomorphic description:

Flat
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 14 inches; silty clay loam
H2--14 to 27 inches; silty clay loam
H3--27 to 60 inches; silt loam

Madelia

Extent: 10 percent of the unit
Geomorphic description:
Flat

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

143B--Chelsea Loamy Fine Sand, 1 To 6 Percent Slopes

Component Description

Chelsea and similar soils

Extent: 90 percent of the unit
Slope range: 1 to 6 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 0.6 percent
Typical profile:
H1--0 to 6 inches; loamy fine sand
H2--6 to 60 inches; stratified loamy fine sand to fine sandy loam

Granby

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

178--Granby Fine Sandy Loam, 0 To 1 Percent Slopes

Component Description

Granby and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 1 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April May June
Wet soil moisture status is lowest (depth, months):

1.8 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 5.7 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
H1--0 to 13 inches; fine sandy loam
H2--13 to 26 inches; fine sand
H3--26 to 60 inches; fine sand

Dassel
Extent: 10 percent of the unit
Geomorphic description:
Depression

Darfur
Extent: 5 percent of the unit
Geomorphic description:
Flat

181--Litchfield Loamy Fine Sand, 0 To 2 Percent Slopes

Component Description

Litchfield and similar soils
Extent: 85 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April
Wet soil moisture status is lowest (depth, months):
4.9 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 6.4 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
H1--0 to 20 inches; loamy fine sand
H2--20 to 40 inches; stratified fine sand to very fine sandy loam
H3--40 to 60 inches; loamy fine sand

Darfur
Extent: 10 percent of the unit
Geomorphic description:
Flat

Dassel
Extent: 5 percent of the unit
Geomorphic description:
Depression

183--Dassel Mucky Fine Sandy Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Dassel and similar soils
Extent: 85 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Mucky fine sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
1.8 feet August
Ponding does not occur (months):

January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:

H1--0 to 23 inches; mucky fine sandy loam
H2--23 to 31 inches; stratified loamy very fine sand to very fine
sandy loam
H3--31 to 60 inches; fine sand

Darfur

Extent: 10 percent of the unit
Geomorphic description:
Flat

Litchfield

Extent: 5 percent of the unit

197--Kingston Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Kingston and similar soils

Extent: 90 percent of the unit
Slope range: 1 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 16 inches; silty clay loam
H2--16 to 25 inches; silty clay loam
H3--25 to 60 inches; silt loam

Madelia

Extent: 5 percent of the unit
Geomorphic description:
Flat

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

211--Lura Silty Clay, Depressional, 0 To 1 Percent Slopes

Component Description

Lura and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Silty clay
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August

Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 9.3 inches
Content of organic matter in the upper 10 inches: 8.0 percent
Typical profile:
H1--0 to 24 inches; silty clay
H2--24 to 31 inches; silty clay
H3--31 to 60 inches; silty clay

Corvuso

Extent: 5 percent of the unit
Geomorphic description:
Rim

Cosmos

Extent: 5 percent of the unit
Geomorphic description:
Flat

229--Waldorf Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Waldorf and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April May
Wet soil moisture status is lowest (depth, months):
2.6 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 5.8 percent
Typical profile:
H1--0 to 8 inches; silty clay loam
H2--8 to 35 inches; silty clay
H3--35 to 60 inches; silty clay loam

Collinwood

Extent: 5 percent of the unit

Lura

Extent: 5 percent of the unit
Geomorphic description:
Depression

239--Le Sueur Clay Loam, 1 To 3 Percent Slopes

Component Description

Le sueur and similar soils

Extent: 85 percent of the unit
Slope range: 1 to 3 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August

Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
H1--0 to 14 inches; clay loam
H2--14 to 33 inches; clay loam
H3--33 to 60 inches; loam

Cordova

Extent: 10 percent of the unit
Geomorphic description:
Flat

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

281--Darfur Loam, 0 To 2 Percent Slopes

Component Description

Darfur and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
2.0 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 6.5 percent
Typical profile:
H1--0 to 23 inches; loam
H2--23 to 30 inches; very fine sandy loam
H3--30 to 60 inches; stratified very fine sand to loamy very fine sand

Dassel

Extent: 10 percent of the unit
Geomorphic description:
Depression

Litchfield

Extent: 5 percent of the unit

286B--Shorewood Silty Clay Loam, 3 To 6 Percent Slopes

Component Description

Shorewood and similar soils

Extent: 85 percent of the unit
Slope range: 3 to 6 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April May
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 12 inches; silty clay loam
H2--12 to 38 inches; silty clay
H3--38 to 60 inches; silty clay loam

Waldorf

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

311C2--Shorewood Silty Clay, 6 To 12 Percent Slopes, Eroded

Component Description

Shorewood and similar soils

Extent: 85 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Silty clay
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April May
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.0 inches
Content of organic matter in the upper 10 inches: 4.6 percent
Typical profile:
H1--0 to 6 inches; silty clay
H2--6 to 20 inches; silty clay
H3--20 to 60 inches; silty clay loam

Waldorf

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Bold

Extent: 5 percent of the unit

327A--Dickman Sandy Loam, 0 To 2 Percent Slopes

Component Description

Dickman and similar soils

Extent: 90 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.6 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
H1--0 to 12 inches; sandy loam
H2--12 to 18 inches; sandy loam
H3--18 to 60 inches; sand

Darfur

Extent: 5 percent of the unit
Geomorphic description:
Flat

Litchfield

Extent: 5 percent of the unit

327B--Dickman Sandy Loam, 2 To 6 Percent Slopes

Component Description

Dickman and similar soils

Extent: 85 percent of the unit

Slope range: 2 to 6 percent

Surface layer texture: Sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Somewhat excessively drained

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches

Content of organic matter in the upper 10 inches: 3.0 percent

Typical profile:

H1--0 to 12 inches; sandy loam

H2--12 to 30 inches; sandy loam

H3--30 to 60 inches; sand

Litchfield

Extent: 10 percent of the unit

Darfur

Extent: 5 percent of the unit

Geomorphic description:

Drainageway

399--Biscay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Biscay and similar soils

Extent: 85 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

1.8 feet August

Ponding does not occur (months):

January February May June July August September October
November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 6.0 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 14 inches; loam

H2--14 to 25 inches; loam

H3--25 to 60 inches; stratified loamy sand to gravelly coarse sand

Mayer

Extent: 10 percent of the unit

Geomorphic description:

Flat

Klossner

Extent: 5 percent of the unit

Geomorphic description:

Depression

415--Kanmaranzi Loam, 0 To 3 Percent Slopes

Component Description

Kanmaranzi and similar soils

Extent: 85 percent of the unit
Slope range: 0 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.5 inches
Content of organic matter in the upper 10 inches: 3.2 percent
Typical profile:
 H1--0 to 9 inches; loam
 H2--9 to 18 inches; loam
 H3--18 to 60 inches; gravelly coarse sand

Cylinder

Extent: 10 percent of the unit

Biscay

Extent: 5 percent of the unit
Geomorphic description:
 Flat

423--Seaforth Loam, 1 To 3 Percent Slopes

Component Description

Seaforth and similar soils

Extent: 85 percent of the unit
Slope range: 1 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 1.5 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
 H1--0 to 12 inches; loam
 H2--12 to 28 inches; loam
 H3--28 to 60 inches; loam

Canisteco

Extent: 10 percent of the unit
Geomorphic description:
 Flat

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
 Depression

461B--Koronis Loam, 2 To 6 Percent Slopes

Component Description

Koronis and similar soils

Extent: 85 percent of the unit

Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 3.6 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet January February July August
 September October December
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
 H1--0 to 8 inches; loam
 H2--8 to 31 inches; fine sandy loam
 H3--31 to 60 inches; fine sandy loam

Uniongrove

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
 Depression

461C2--Koronis Loam, 6 To 12 Percent Slopes, Eroded

Component Description

Koronis and similar soils

Extent: 85 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
 H1--0 to 8 inches; loam
 H2--8 to 24 inches; fine sandy loam
 H3--24 to 60 inches; fine sandy loam

Forestcity

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
 Depression

511--Marcellon Loam, 0 To 3 Percent Slopes

Component Description

Marcellon and similar soils

Extent: 85 percent of the unit
Slope range: 0 to 3 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None

Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 8.6 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
H1--0 to 13 inches; loam
H2--13 to 32 inches; loam
H3--32 to 60 inches; sandy loam

Uniongrove

Extent: 10 percent of the unit
Geomorphic description:
Flat

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
Depression

523--Houghton Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Houghton and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 84.5 percent
Typical profile:
H1--0 to 7 inches; muck
H2--7 to 60 inches; muck

Klossner

Extent: 10 percent of the unit
Geomorphic description:
Depression

525--Muskego Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Muskego and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April

Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 20.2 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
H1--0 to 10 inches; muck
H2--10 to 40 inches; muck
H3--40 to 60 inches; mucky silt loam

Blue earth

Extent: 10 percent of the unit
Geomorphic description:
Depression

539--Klossner Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Klossner and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 18.3 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
H1--0 to 28 inches; muck
H2--28 to 45 inches; silt loam
H3--45 to 60 inches; loam

Okoboji

Extent: 10 percent of the unit
Geomorphic description:
Depression

548--Medo Muck, Depressional, 0 To 1 Percent Slopes

Component Description

Medo and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August

Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 15.3 inches
Content of organic matter in the upper 10 inches: 35.0 percent
Typical profile:
H1--0 to 24 inches; muck
H2--24 to 29 inches; silt loam
H3--29 to 56 inches; sandy loam
H4--56 to 60 inches; sand

Dassel

Extent: 10 percent of the unit
Geomorphic description:
Depression

610--Calco Silty Clay Loam, 0 To 1 Percent Slopes, Frequently Flooded

Component Description

Calco and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Frequent March April May June
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 13.0 inches
Content of organic matter in the upper 10 inches: 5.2 percent
Typical profile:
H1--0 to 6 inches; silty clay loam
H2--6 to 55 inches; silty clay loam
H3--55 to 60 inches; silty clay loam

Havelock

Extent: 10 percent of the unit
Geomorphic description:
Flood plain

611D--Hawick Gravelly Sandy Loam, 12 To 25 Percent Slopes

Component Description

Hawick and similar soils

Extent: 85 percent of the unit
Slope range: 12 to 25 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.8 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
H1--0 to 7 inches; gravelly sandy loam
H2--7 to 10 inches; gravelly loamy coarse sand
H3--10 to 60 inches; gravelly coarse sand

Minneopa

Extent: 10 percent of the unit

Biscay

Extent: 5 percent of the unit

Geomorphic description:

Drainageway

612B--Wadenill Loam, 2 To 6 Percent Slopes

Component Description

Wadenill and similar soils

Extent: 85 percent of the unit

Slope range: 2 to 6 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

3.6 feet April

Wet soil moisture status is lowest (depth, months):

More than 5.0 feet January February July August
September October December

Ponding: None

Available water capacity to a depth of 60 inches: 9.9 inches

Content of organic matter in the upper 10 inches: 3.5 percent

Typical profile:

H1--0 to 13 inches; loam

H2--13 to 30 inches; loam

H3--30 to 60 inches; sandy loam

Uniongrove

Extent: 10 percent of the unit

Geomorphic description:

Drainageway

Lundlake

Extent: 5 percent of the unit

Geomorphic description:

Depression

613--Grovecity Loam, 1 To 3 Percent Slopes

Component Description

Grovecity and similar soils

Extent: 85 percent of the unit

Slope range: 1 to 3 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

1.5 feet April

Wet soil moisture status is lowest (depth, months):

More than 5.0 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 10.0 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 15 inches; loam

H2--15 to 30 inches; sandy loam

H3--30 to 60 inches; fine sandy loam

Uniongrove

Extent: 10 percent of the unit

Geomorphic description:

Flat

Lundlake

Extent: 5 percent of the unit

Geomorphic description:

Depression

664--Zook Silty Clay Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Zook and similar soils

Extent: 90 percent of the unit

Geomorphic description:

Flood plain

Slope range: 0 to 2 percent

Surface layer texture: Silty clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding does not occur (months):

January February September October November December

Flooding is most likely (frequency, months):

Occasional March April May June July August

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 10 inches; silty clay loam

H2--10 to 41 inches; silty clay

H3--41 to 60 inches; silty clay loam

Calco

Extent: 10 percent of the unit

Geomorphic description:

Flood plain

740--Hamel-Glencoe, Depressional Complex, 0 To 3 Percent Slopes

Component Description

Hamel and similar soils

Extent: 70 percent of the unit

Geomorphic description:

Drainageway

Slope range: 0 to 3 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 11.8 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 28 inches; loam

H2--28 to 56 inches; clay loam

H3--56 to 60 inches; loam

Glencoe and similar soils

Extent: 20 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.5 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
H1--0 to 15 inches; loam
H2--15 to 45 inches; silty clay loam
H3--45 to 60 inches; clay loam

Le sueur
Extent: 10 percent of the unit

804B--Koronis-Sunburg-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Koronis and similar soils

Extent: 50 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December
Ponding: None
Available water capacity to a depth of 60 inches: 9.7 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
H1--0 to 8 inches; loam
H2--8 to 33 inches; loam
H3--33 to 60 inches; sandy loam

Sunburg and similar soils

Extent: 20 percent of the unit
Slope range: 4 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 2.3 percent
Typical profile:
H1--0 to 9 inches; sandy loam
H2--9 to 60 inches; sandy loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Gravelly loamy coarse sand
Depth to restrictive feature:

Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.9 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
H1--0 to 9 inches; gravelly loamy coarse sand
H2--9 to 49 inches; gravelly coarse sand
H3--49 to 60 inches; gravelly coarse sand

Uniongrove

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
Depression

804C2--Koronis-Sunburg-Hawick Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Koronis and similar soils

Extent: 45 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
H1--0 to 8 inches; sandy loam
H2--8 to 26 inches; sandy loam
H3--26 to 60 inches; sandy loam

Sunburg and similar soils

Extent: 25 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
H1--0 to 10 inches; sandy loam
H2--10 to 60 inches; sandy loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Gravelly coarse sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
H1--0 to 9 inches; gravelly coarse sand

H2--9 to 60 inches; gravelly loamy coarse sand

Forestcity

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
Depression

804D2--Koronis-Sunburg-Hawick Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Koronis and similar soils

Extent: 40 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 2.2 percent
Typical profile:
H1--0 to 8 inches; sandy loam
H2--8 to 25 inches; sandy loam
H3--25 to 60 inches; sandy loam

Sunburg and similar soils

Extent: 35 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
H1--0 to 7 inches; sandy loam
H2--7 to 60 inches; sandy loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Gravelly coarse sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.1 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
H1--0 to 7 inches; gravelly coarse sandy loam
H2--7 to 20 inches; gravelly loamy coarse sand
H3--20 to 60 inches; gravelly coarse sand

Forestcity

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

804E--Koronis-Sunburg-Hawick Complex, 18 To 40 Percent Slopes

Component Description

Koronis and similar soils

Extent: 50 percent of the unit
Slope range: 15 to 40 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.0 inches
Content of organic matter in the upper 10 inches: 1.8 percent
Typical profile:
 H1--0 to 5 inches; fine sandy loam
 H2--5 to 21 inches; fine sandy loam
 H3--21 to 60 inches; fine sandy loam

Sunburg and similar soils

Extent: 25 percent of the unit
Slope range: 15 to 40 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
 H1--0 to 4 inches; loam
 H2--4 to 60 inches; fine sandy loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 15 to 40 percent
Surface layer texture: Gravelly loamy coarse sand
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
 H1--0 to 14 inches; gravelly loamy coarse sand
 H2--14 to 60 inches; gravelly coarse sand

Forestcity

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

805C2--Sunburg-Wadenill Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Sunburg and similar soils

Extent: 50 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

H1--0 to 8 inches; sandy loam
H2--8 to 60 inches; sandy loam

Wadenill and similar soils

Extent: 40 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
 H1--0 to 7 inches; loam
 H2--7 to 20 inches; loam
 H3--20 to 60 inches; sandy loam

Forestcity

Extent: 5 percent of the unit
Geomorphic description:
 Drainageway

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
 Depression

805D2--Sunburg-Wadenill Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Sunburg and similar soils

Extent: 65 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
 H1--0 to 7 inches; sandy loam
 H2--7 to 60 inches; sandy loam

Wadenill and similar soils

Extent: 25 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
 H1--0 to 7 inches; loam
 H2--7 to 18 inches; loam
 H3--18 to 60 inches; sandy loam

Forestcity

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

807D2--Koronis-Sunburg Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Koronis and similar soils

Extent: 80 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.0 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
 H1--0 to 9 inches; sandy loam
 H2--9 to 25 inches; loam
 H3--25 to 60 inches; sandy loam

Sunburg and similar soils

Extent: 15 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
 H1--0 to 7 inches; sandy loam
 H2--7 to 60 inches; sandy loam

Forestcity

Extent: 5 percent of the unit
Geomorphic description:
 Drainageway

875B--Estherville-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Estherville and similar soils

Extent: 60 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.6 inches
Content of organic matter in the upper 10 inches: 2.8 percent
Typical profile:
 H1--0 to 9 inches; sandy loam
 H2--9 to 14 inches; sandy loam
 H3--14 to 60 inches; gravelly coarse sand

Hawick and similar soils

Extent: 30 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None
Available water capacity to a depth of 60 inches: 3.2 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
H1--0 to 7 inches; sandy loam
H2--7 to 11 inches; gravelly loamy coarse sand
H3--11 to 60 inches; gravelly coarse sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

875C--Hawick-Estherville Complex, 6 To 12 Percent Slopes

Component Description

Hawick and similar soils

Extent: 60 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 2.8 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
H1--0 to 11 inches; gravelly sandy loam
H2--11 to 60 inches; gravelly coarse sand

Estherville and similar soils

Extent: 25 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
H1--0 to 8 inches; sandy loam
H2--8 to 13 inches; sandy loam
H3--13 to 60 inches; gravelly coarse sand

Minneopa

Extent: 10 percent of the unit

Biscay

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

887B--Clarion-Swanlake Complex, 2 To 6 Percent Slopes

Component Description

Clarion and similar soils

Extent: 70 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April

Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
 September October December

Ponding: None

Available water capacity to a depth of 60 inches: 11.1 inches

Content of organic matter in the upper 10 inches: 4.5 percent

Typical profile:

H1--0 to 11 inches; loam

H2--11 to 30 inches; clay loam

H3--30 to 60 inches; loam

Swanlake and similar soils

Extent: 20 percent of the unit

Slope range: 4 to 6 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

3.6 feet April

Wet soil moisture status is lowest (depth, months):

More than 5.0 feet January February July August
 September October December

Ponding: None

Available water capacity to a depth of 60 inches: 11.1 inches

Content of organic matter in the upper 10 inches: 2.6 percent

Typical profile:

H1--0 to 8 inches; loam

H2--8 to 12 inches; loam

H3--12 to 60 inches; loam

Glencoe

Extent: 5 percent of the unit

Geomorphic description:

Depression

Webster

Extent: 5 percent of the unit

Geomorphic description:

Drainageway

899--Harps-Okoboji, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Harps and similar soils

Extent: 60 percent of the unit

Geomorphic description:

Rim

Slope range: 0 to 2 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 10.6 inches

Content of organic matter in the upper 10 inches: 3.8 percent

Typical profile:

H1--0 to 9 inches; clay loam

H2--9 to 28 inches; loam

H3--28 to 60 inches; loam

Okoboji and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
H1--0 to 17 inches; silty clay loam
H2--17 to 47 inches; silty clay loam
H3--47 to 60 inches; silty clay loam

Seaforth

Extent: 10 percent of the unit

909C2--Bold-Truman Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Bold and similar soils

Extent: 55 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
H1--0 to 7 inches; silt loam
H2--7 to 60 inches; silt loam

Truman and similar soils

Extent: 35 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 10 inches; silt loam
H2--10 to 31 inches; silt loam
H3--31 to 60 inches; silt loam

Madelia

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

909D2--Bold-Truman Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Bold and similar soils

Extent: 65 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
 H1--0 to 7 inches; silt loam
 H2--7 to 60 inches; silt loam

Truman and similar soils

Extent: 25 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
 H1--0 to 13 inches; silt loam
 H2--13 to 22 inches; silt loam
 H3--22 to 60 inches; silt loam

Madelia

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

920B--Clarion-Storden-Hawick Complex, 2 To 6 Percent Slopes

Component Description

Clarion and similar soils

Extent: 50 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 3.6 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet January February July August
 September October December
Ponding: None
Available water capacity to a depth of 60 inches: 11.1 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
 H1--0 to 12 inches; loam
 H2--12 to 23 inches; loam
 H3--23 to 60 inches; sandy loam

Storden and similar soils

Extent: 20 percent of the unit
Slope range: 4 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained

Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December

Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
H1--0 to 7 inches; loam
H2--7 to 37 inches; loam
H3--37 to 60 inches; loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.3 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
H1--0 to 9 inches; gravelly sandy loam
H2--9 to 28 inches; gravelly coarse sand
H3--28 to 60 inches; gravelly coarse sand

Webster

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

945D2--Lester-Storden Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Lester and similar soils

Extent: 70 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
H1--0 to 9 inches; loam
H2--9 to 26 inches; clay loam
H3--26 to 60 inches; loam

Storden and similar soils

Extent: 20 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.4 inches

Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

H1--0 to 5 inches; loam
H2--5 to 28 inches; loam
H3--28 to 60 inches; loam

Hamel

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

945E--Lester-Storden Complex, 18 To 40 Percent Slopes

Component Description

Lester and similar soils

Extent: 70 percent of the unit
Slope range: 18 to 40 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.0 percent
Typical profile:
H1--0 to 7 inches; loam
H2--7 to 23 inches; clay loam
H3--23 to 60 inches; loam

Storden and similar soils

Extent: 20 percent of the unit
Slope range: 18 to 40 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
H1--0 to 9 inches; loam
H2--9 to 30 inches; loam
H3--30 to 60 inches; loam

Hamel

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

956--Canisteeo-Glencoe, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Canisteeo and similar soils

Extent: 65 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August

Ponding: None
Available water capacity to a depth of 60 inches: 9.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 17 inches; clay loam
H2--17 to 23 inches; clay loam
H3--23 to 41 inches; clay loam
H4--41 to 60 inches; loam

Glencoe and similar soils

Extent: 25 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 11.2 inches
Content of organic matter in the upper 10 inches: 6.4 percent
Typical profile:
H1--0 to 7 inches; clay loam
H2--7 to 36 inches; clay loam
H3--36 to 60 inches; loam

Seaforth

Extent: 10 percent of the unit

960C2--Storden-Omsrud Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Storden and similar soils

Extent: 65 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.3 percent
Typical profile:
H1--0 to 8 inches; loam
H2--8 to 21 inches; loam
H3--21 to 60 inches; loam

Omsrud and similar soils

Extent: 25 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 2.9 percent
Typical profile:
H1--0 to 9 inches; loam

H2--9 to 25 inches; loam
H3--25 to 60 inches; loam

Hamel

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

960D2--Storden-Omsrud Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Storden and similar soils

Extent: 65 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
H1--0 to 7 inches; loam
H2--7 to 23 inches; loam
H3--23 to 60 inches; loam

Omsrud and similar soils

Extent: 25 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 11.0 inches
Content of organic matter in the upper 10 inches: 2.6 percent
Typical profile:
H1--0 to 8 inches; loam
H2--8 to 22 inches; loam
H3--22 to 60 inches; loam

Hamel

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

978--Cordova-Rolfe, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Cordova and similar soils

Extent: 60 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.2 inches
Content of organic matter in the upper 10 inches: 5.5 percent

Typical profile:

H1--0 to 15 inches; clay loam
H2--15 to 39 inches; clay loam
H3--39 to 60 inches; loam

Rolfe and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Silt loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

2.0 feet February August

Ponding does not occur (months):

January February May June July August September October

November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 10.8 inches

Content of organic matter in the upper 10 inches: 4.0 percent

Typical profile:

H1--0 to 28 inches; silt loam

H2--28 to 40 inches; silty clay

H3--40 to 60 inches; clay loam

Glencoe

Extent: 10 percent of the unit

Geomorphic description:

Depression

1015--Udipsamments (cut And Fill Land)

Component Description

Udipsamments and similar soils

Extent: 85 percent of the unit

Slope range: 0 to 6 percent

Surface layer texture: Sand

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Excessively drained

Flooding: None

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches

Content of organic matter in the upper 10 inches: 0.2 percent

Typical profile:

H1--0 to 14 inches; sand

H2--14 to 60 inches; sand

H3--60 to 80 inches; coarse sand

Biscay

Extent: 10 percent of the unit

Geomorphic description:

Flat

Darfur

Extent: 5 percent of the unit

Geomorphic description:

Flat

1016--Udorthents, Loamy (cut And Fill Land)

Component Description

Udorthents

Extent: 85 percent of the unit

Slope range: 0 to 20 percent
Surface layer texture: Loam
Drainage class: Well drained
Flooding: None
Ponding: None
Available water capacity to a depth of 60 inches: 6.6 inches
Content of organic matter in the upper 10 inches: 0.8 percent
Typical profile:
H1--0 to 60 inches; loam
H2--60 to 80 inches;

Webster

Extent: 10 percent of the unit
Geomorphic description:
Flat

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

1030--Pits, Gravel-Udipsamments Complex

Component Description

Pits, gravel

Extent: 45 percent of the unit
Ponding: None

Udipsamments

Extent: 45 percent of the unit
Slope range: 0 to 30 percent
Surface layer texture: Sand
Drainage class: Excessively drained
Flooding: None
Ponding: None
Available water capacity to a depth of 60 inches: 4.3 inches
Content of organic matter in the upper 10 inches: 0.2 percent
Typical profile:
H1--0 to 14 inches; sand
H2--14 to 60 inches; sand
H3--60 to 80 inches; coarse sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Flat

1080--Klossner, Okoboji And Glencoe Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Glencoe and similar soils

Extent: 30 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
0.5 foot August September October
Ponding is deepest (depth, months):
1.0 foot January February March April May
June July November December
Available water capacity to a depth of 60 inches: 11.4 inches
Content of organic matter in the upper 10 inches: 12.0 percent
Typical profile:
H1--0 to 42 inches; silty clay loam

H2--42 to 50 inches; clay loam
H3--50 to 60 inches; clay loam

Klossner and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Muck

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status: At the surface all year

Ponding is shallowest (depth, months):

0.5 foot August September October

Ponding is deepest (depth, months):

1.0 foot January February March April May
June July November December

Available water capacity to a depth of 60 inches: 16.3 inches

Content of organic matter in the upper 10 inches: 42.5 percent

Typical profile:

H1--0 to 25 inches; muck

H2--25 to 60 inches; silty clay loam

Okoboji and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Mucky silty clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status: At the surface all year

Ponding is shallowest (depth, months):

0.5 foot August September October

Ponding is deepest (depth, months):

1.0 foot January February March April May
June July November December

Available water capacity to a depth of 60 inches: 11.9 inches

Content of organic matter in the upper 10 inches: 14.0 percent

Typical profile:

H1--0 to 10 inches; mucky silty clay loam

H2--10 to 42 inches; silty clay loam

H3--42 to 60 inches; silty clay loam

Canisteco

Extent: 10 percent of the unit

Geomorphic description:

Rim

1096--Fieldon-Dassel, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Fieldon and similar soils

Extent: 70 percent of the unit

Geomorphic description:

Flat

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 6.8 inches

Content of organic matter in the upper 10 inches: 6.5 percent

Typical profile:

H1--0 to 20 inches; loam

H2--20 to 26 inches; fine sandy loam

H3--26 to 60 inches; stratified fine sand to fine sandy loam

Dassel and similar soils

Extent: 20 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

2.0 feet February August

Ponding does not occur (months):

January February May June July August September October

November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 8.6 inches

Content of organic matter in the upper 10 inches: 11.5 percent

Typical profile:

H1--0 to 21 inches; loam

H2--21 to 32 inches; stratified loamy fine sand to fine sandy loam

H3--32 to 60 inches; stratified fine sand to loamy very fine sand to fine sandy loam

Litchfield

Extent: 10 percent of the unit

1097--Mayer-Biscay, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Mayer and similar soils

Extent: 70 percent of the unit

Geomorphic description:

Flat

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 16 inches; loam

H2--16 to 25 inches; gravelly loam

H3--25 to 60 inches; gravelly sand

Biscay and similar soils

Extent: 20 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 2 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 20 inches; clay loam
H2--20 to 25 inches; clay loam
H3--25 to 28 inches; gravelly sandy loam
H4--28 to 60 inches; gravelly loamy sand

Minneopa

Extent: 10 percent of the unit

1098--Biscay-Biscay, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Biscay and similar soils

Extent: 70 percent of the unit

Geomorphic description:

Flat

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

2.0 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 6.2 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 20 inches; loam

H2--20 to 25 inches; loam

H3--25 to 60 inches; gravelly coarse sand

Biscay and similar soils

Extent: 20 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

1.8 feet August

Ponding does not occur (months):

January February May June July August September October

November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 6.1 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 18 inches; clay loam

H2--18 to 22 inches; clay loam

H3--22 to 26 inches; gravelly sandy loam

H4--26 to 60 inches; gravelly loamy coarse sand

Mayer

Extent: 5 percent of the unit
Geomorphic description:
Flat

Minneopa

Extent: 5 percent of the unit

1099--Granby Loamy Fine Sand, Very Wet, 0 To 1 Percent Slopes

Component Description

Granby and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Loamy fine sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
0.5 foot August September October
Ponding is deepest (depth, months):
1.0 foot January February March April May
June July November December
Available water capacity to a depth of 60 inches: 4.9 inches
Content of organic matter in the upper 10 inches: 7.0 percent
Typical profile:
H1--0 to 12 inches; loamy fine sand
H2--12 to 24 inches; fine sand
H3--24 to 60 inches; loamy fine sand

Darfur

Extent: 5 percent of the unit
Geomorphic description:
Flat

Fieldon

Extent: 5 percent of the unit
Geomorphic description:
Flat

Klossner

Extent: 5 percent of the unit
Geomorphic description:
Depression

1100--Nicollet Silty Clay Loam, 1 To 3 Percent Slopes

Component Description

Nicollet and similar soils

Extent: 85 percent of the unit
Slope range: 1 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 13 inches; silty clay loam
H2--13 to 26 inches; clay loam

H3--26 to 60 inches; clay loam

Webster

Extent: 10 percent of the unit
Geomorphic description:
Flat

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression

1101--Webster Silty Clay Loam, Moderately Fine Substratum, 0 To 2 Percent Slopes

Component Description

Webster and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
H1--0 to 19 inches; silty clay loam
H2--19 to 24 inches; clay loam
H3--24 to 60 inches; loam

Okoboji

Extent: 10 percent of the unit
Geomorphic description:
Depression

Nicollet

Extent: 5 percent of the unit

1159B--Strout-Arkton Complex, 2 To 6 Percent Slopes

Component Description

Strout and similar soils

Extent: 70 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Clay
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April May June
Wet soil moisture status is lowest (depth, months):
5.6 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 8.5 inches
Content of organic matter in the upper 10 inches: 4.5 percent
Typical profile:
H1--0 to 10 inches; clay
H2--10 to 24 inches; clay loam
H3--24 to 60 inches; clay loam

Arkton and similar soils

Extent: 20 percent of the unit
Slope range: 4 to 6 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 2.5 feet April May June
Wet soil moisture status is lowest (depth, months):
 5.6 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 3.3 percent
Typical profile:
 H1--0 to 9 inches; clay loam
 H2--9 to 25 inches; clay
 H3--25 to 60 inches; clay loam

Cosmos

Extent: 5 percent of the unit
Geomorphic description:
 Flat

Lura

Extent: 5 percent of the unit
Geomorphic description:
 Depression

1161--Barry Loam, 0 To 2 Percent Slopes

Component Description

Barry and similar soils

Extent: 85 percent of the unit
Geomorphic description:
 Flat
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 0.5 foot April
Wet soil moisture status is lowest (depth, months):
 3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.2 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
 H1--0 to 11 inches; loam
 H2--11 to 33 inches; sandy clay loam
 H3--33 to 60 inches; sandy loam

Lundlake

Extent: 10 percent of the unit
Geomorphic description:
 Depression

Marcellon

Extent: 5 percent of the unit

1162A--Kandiyohi Clay, 0 To 2 Percent Slopes

Component Description

Kandiyohi and similar soils

Extent: 90 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Clay
Depth to restrictive feature:

Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April May
Wet soil moisture status is lowest (depth, months):
4.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.3 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
H1--0 to 11 inches; clay
H2--11 to 26 inches; clay
H3--26 to 33 inches; clay
H4--33 to 60 inches; clay

Cosmos

Extent: 5 percent of the unit
Geomorphic description:
Flat

Lura

Extent: 5 percent of the unit
Geomorphic description:
Depression

1162B--Kandiyohi Clay, 2 To 5 Percent Slopes

Component Description

Kandiyohi and similar soils

Extent: 85 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Clay
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April May
Wet soil moisture status is lowest (depth, months):
4.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
H1--0 to 10 inches; clay
H2--10 to 23 inches; silty clay
H3--23 to 29 inches; clay loam
H4--29 to 60 inches; clay loam

Cosmos

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Lura

Extent: 5 percent of the unit
Geomorphic description:
Depression

1163--Cohoctah Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Cohoctah and similar soils

Extent: 90 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:

Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Frequent March April May June
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 7.4 inches
Content of organic matter in the upper 10 inches: 5.0 percent
Typical profile:
H1--0 to 17 inches; loam
H2--17 to 22 inches; loam
H3--22 to 60 inches; stratified sand to loamy fine sand to fine sandy loam

Havelock

Extent: 10 percent of the unit
Geomorphic description:
Flood plain

1165--Lundlake Silty Clay Loam, Depressional, 0 To 1 Percent Slopes

Component Description

Lundlake and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 10.7 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
H1--0 to 14 inches; silty clay loam
H2--14 to 35 inches; loam
H3--35 to 47 inches; loam
H4--47 to 60 inches; sandy loam

Swedegrove

Extent: 10 percent of the unit
Geomorphic description:
Rim

Grovecity

Extent: 5 percent of the unit

1168--Swedegrove-Lundlake, Derpressional Complex, 0 To 2 Percent Slopes

Component Description

Swedegrove and similar soils

Extent: 70 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent

Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.0 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 15 inches; loam
H2--15 to 31 inches; loam
H3--31 to 60 inches; sandy loam

Lundlake and similar soils

Extent: 20 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 10.1 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
H1--0 to 12 inches; loam
H2--12 to 28 inches; loam
H3--28 to 36 inches; loam
H4--36 to 60 inches; sandy loam

Grovecity

Extent: 10 percent of the unit

1169--Corvuso-Lura, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Corvuso and similar soils

Extent: 60 percent of the unit
Geomorphic description:
Rim
Slope range: 0 to 2 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April May
Wet soil moisture status is lowest (depth, months):
2.6 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 8.8 inches
Content of organic matter in the upper 10 inches: 5.5 percent
Typical profile:
H1--0 to 11 inches; clay loam
H2--11 to 28 inches; clay
H3--28 to 60 inches; clay loam

Lura and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Silty clay

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

2.0 feet February August

Ponding does not occur (months):

January February May June July August September October
November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 9.6 inches

Content of organic matter in the upper 10 inches: 8.0 percent

Typical profile:

H1--0 to 26 inches; silty clay

H2--26 to 60 inches; silty clay

Kandyohi

Extent: 10 percent of the unit

1171C--Newlondon-Strout Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Newlondon and similar soils

Extent: 65 percent of the unit

Slope range: 6 to 12 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

2.5 feet April May June

Wet soil moisture status is lowest (depth, months):

More than 6.6 feet January February March July
August September October
November December

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches

Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

H1--0 to 7 inches; clay loam

H2--7 to 38 inches; clay loam

H3--38 to 60 inches; clay loam

Strout and similar soils

Extent: 30 percent of the unit

Slope range: 6 to 12 percent

Surface layer texture: Clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

2.5 feet April May June

Wet soil moisture status is lowest (depth, months):

More than 6.6 feet January February March July
August September October
November December

Ponding: None

Available water capacity to a depth of 60 inches: 8.4 inches

Content of organic matter in the upper 10 inches: 4.2 percent

Typical profile:

H1--0 to 9 inches; clay loam

H2--9 to 23 inches; clay loam
H3--23 to 60 inches; clay loam

Danielson

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

1171D--Newlondon-Strout Complex, 12 To 18 Percent Slopes, Eroded

Component Description

Newlondon and similar soils

Extent: 80 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April May June
Wet soil moisture status is lowest (depth, months):
More than 6.6 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 1.2 percent
Typical profile:
H1--0 to 7 inches; clay loam
H2--7 to 38 inches; clay loam
H3--38 to 60 inches; clay loam

Strout and similar soils

Extent: 15 percent of the unit
Slope range: 12 to 18 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.5 feet April May June
Wet soil moisture status is lowest (depth, months):
More than 6.6 feet January February March July
August September October
November December
Ponding: None
Available water capacity to a depth of 60 inches: 8.3 inches
Content of organic matter in the upper 10 inches: 4.2 percent
Typical profile:
H1--0 to 9 inches; clay loam
H2--9 to 19 inches; clay loam
H3--19 to 60 inches; clay loam

Danielson

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

1172C--Sparta-Gardencity Complex, 6 To 12 Percent Slopes

Component Description

Sparta and similar soils

Extent: 70 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loamy sand
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained

Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 5.2 inches
Content of organic matter in the upper 10 inches: 1.5 percent
Typical profile:
H1--0 to 18 inches; loamy sand
H2--18 to 55 inches; loamy fine sand
H3--55 to 60 inches; sand

Gardencity and similar soils

Extent: 20 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.7 inches
Content of organic matter in the upper 10 inches: 2.5 percent
Typical profile:
H1--0 to 7 inches; fine sandy loam
H2--7 to 24 inches; stratified fine sand to very fine sandy loam
H3--24 to 60 inches; stratified fine sand to silt loam

Darfur

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

1173--Muskego And Klossner Soils, Depressional, 0 To 1 Percent Slopes, Frequently Flooded

Component Description

Muskego and similar soils

Extent: 45 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Frequent March April May June
Wet soil moisture status: At the surface all year
Ponding does not occur (months):
September October
Ponding is deepest (depth, months):
3.0 feet April
Available water capacity to a depth of 60 inches: 21.4 inches
Content of organic matter in the upper 10 inches: 75.0 percent
Typical profile:
H1--0 to 45 inches; muck
H2--45 to 60 inches; mucky silt loam

Klossner and similar soils

Extent: 40 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):

Frequent March April May June
Wet soil moisture status: At the surface all year
Ponding does not occur (months):
August September
Ponding is deepest (depth, months):
1.0 foot January February March April May
November December
Available water capacity to a depth of 60 inches: 17.7 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
H1--0 to 22 inches; muck
H2--22 to 45 inches; mucky silt loam
H3--45 to 60 inches; silt loam

Calco

Extent: 10 percent of the unit
Geomorphic description:
Flood plain
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Frequent March April May June
Wet soil moisture status: At the surface all year
Ponding: None

Okoboji

Extent: 5 percent of the unit
Geomorphic description:
Depression
Flooding does not occur (months):
January February June July August September October
November December
Flooding is most likely (frequency, months):
Occasional March April May
Ponding: None

1174--Danielson Clay Loam, 1 To 3 Percent Slopes

Component Description

Danielson and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Drainageway
Slope range: 1 to 3 percent
Surface layer texture: Clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 7.5 percent
Typical profile:
H1--0 to 9 inches; clay loam
H2--9 to 36 inches; silty clay
H3--36 to 51 inches; silty clay
H4--51 to 60 inches; silty clay loam

Lura

Extent: 10 percent of the unit
Geomorphic description:
Depression

Strout

Extent: 5 percent of the unit

1175--Swedegrove Loam, 0 To 2 Percent Slopes

Component Description

Swedegrove and similar soils

Extent: 90 percent of the unit

Geomorphic description:

Flat

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.7 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 14 inches; loam

H2--14 to 20 inches; sandy loam

H3--20 to 60 inches; sandy loam

Lundlake

Extent: 10 percent of the unit

Geomorphic description:

Depression

1176--Litchfield Sandy Loam, 0 To 2 Percent Slopes

Component Description

Litchfield and similar soils

Extent: 85 percent of the unit

Slope range: 0 to 2 percent

Surface layer texture: Sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

2.5 feet April

Wet soil moisture status is lowest (depth, months):

4.9 feet August

Ponding: None

Available water capacity to a depth of 60 inches: 5.6 inches

Content of organic matter in the upper 10 inches: 3.0 percent

Typical profile:

H1--0 to 17 inches; sandy loam

H2--17 to 33 inches; loamy sand

H3--33 to 60 inches; sand

Darfur

Extent: 10 percent of the unit

Geomorphic description:

Flat

Dassel

Extent: 5 percent of the unit

Geomorphic description:

Depression

1177C--Gardencity-Bold Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Gardencity and similar soils

Extent: 70 percent of the unit

Slope range: 6 to 12 percent

Surface layer texture: Fine sandy loam

Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 8.9 inches
Content of organic matter in the upper 10 inches: 3.0 percent
Typical profile:
H1--0 to 13 inches; fine sandy loam
H2--13 to 25 inches; very fine sandy loam
H3--25 to 60 inches; stratified fine sand to silt loam

Bold and similar soils

Extent: 20 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 1.0 percent
Typical profile:
H1--0 to 7 inches; silt loam
H2--7 to 60 inches; silt loam

Darfur

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

Madelia

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

1178--Uniongrove Loam, 0 To 2 Percent Slopes

Component Description

Uniongrove and similar soils

Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.6 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 16 inches; loam
H2--16 to 30 inches; loam
H3--30 to 60 inches; sandy loam

Lundlake

Extent: 10 percent of the unit
Geomorphic description:
Depression

Swedegrove

Extent: 5 percent of the unit
Geomorphic description:

Rim

1183--Crowriver Loam, 0 To 2 Percent Slopes

Component Description

Crowriver and similar soils

Extent: 85 percent of the unit

Geomorphic description:

Rim

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.5 inches

Content of organic matter in the upper 10 inches: 5.0 percent

Typical profile:

H1--0 to 15 inches; loam

H2--15 to 22 inches; loam

H3--22 to 60 inches; sandy loam

Lundlake

Extent: 10 percent of the unit

Geomorphic description:

Depression

Swedegrove

Extent: 5 percent of the unit

Geomorphic description:

Flat

1184--Corvuso Silty Clay Loam, 0 To 2 Percent Slopes

Component Description

Corvuso and similar soils

Extent: 85 percent of the unit

Geomorphic description:

Rim

Slope range: 0 to 2 percent

Surface layer texture: Silty clay

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April May

Wet soil moisture status is lowest (depth, months):

2.6 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.6 inches

Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

H1--0 to 19 inches; silty clay

H2--19 to 26 inches; silty clay

H3--26 to 60 inches; silty clay

Lura

Extent: 10 percent of the unit

Geomorphic description:

Depression

Cosmos

Extent: 5 percent of the unit

Geomorphic description:

Flat

1185--Gardencity Fine Sandy Loam, Moderately Wet, 0 To 2 Percent Slopes

Component Description

Gardencity and similar soils

Extent: 85 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 2.5 feet April
Wet soil moisture status is lowest (depth, months):
 4.9 feet August
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
 H1--0 to 19 inches; fine sandy loam
 H2--19 to 24 inches; fine sandy loam
 H3--24 to 60 inches; stratified loamy fine sand to silt loam

Darfur

Extent: 10 percent of the unit
Geomorphic description:
 Flat

Dassel

Extent: 5 percent of the unit
Geomorphic description:
 Depression

1186--Forestcity-Lundlake, Depressional Complex, 0 To 3 Percent Slopes

Component Description

Forestcity and similar soils

Extent: 80 percent of the unit
Geomorphic description:
 Drainageway
Slope range: 0 to 3 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 0.5 foot April
Wet soil moisture status is lowest (depth, months):
 3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 8.9 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
 H1--0 to 22 inches; fine sandy loam
 H2--22 to 36 inches; loam
 H3--36 to 60 inches; loam
 H4--60 to 65 inches; fine sandy loam

Lundlake and similar soils

Extent: 15 percent of the unit
Geomorphic description:
 Depression
Slope range: 0 to 1 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Very poorly drained

Flooding: None
Wet soil moisture status is highest (depth, months):
At the surface March April
Wet soil moisture status is lowest (depth, months):
2.0 feet February August
Ponding does not occur (months):
January February May June July August September October
November December
Ponding is deepest (depth, months):
1.0 foot April
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 8.5 percent
Typical profile:
H1--0 to 20 inches; loam
H2--20 to 28 inches; loam
H3--28 to 46 inches; loam
H4--46 to 60 inches; sandy loam

Koronis

Extent: 5 percent of the unit

1192--Crowriver-Lundlake, Depressional Complex, 0 To 2 Percent Slopes

Component Description

Crowriver and similar soils

Extent: 70 percent of the unit

Geomorphic description:

Rim

Slope range: 0 to 2 percent

Surface layer texture: Fine sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

0.5 foot April

Wet soil moisture status is lowest (depth, months):

3.3 feet February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.4 inches

Content of organic matter in the upper 10 inches: 5.0 percent

Typical profile:

H1--0 to 13 inches; fine sandy loam

H2--13 to 17 inches; fine sandy loam

H3--17 to 60 inches; sandy loam

Lundlake and similar soils

Extent: 20 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

At the surface March April

Wet soil moisture status is lowest (depth, months):

2.0 feet February August

Ponding does not occur (months):

January February May June July August September October

November December

Ponding is deepest (depth, months):

1.0 foot April

Available water capacity to a depth of 60 inches: 10.0 inches

Content of organic matter in the upper 10 inches: 8.5 percent

Typical profile:

H1--0 to 22 inches; loam

H2--22 to 28 inches; loam

H3--28 to 35 inches; loam

H4--35 to 60 inches; sandy loam

Grovecity
Extent: 5 percent of the unit

Uniongrove
Extent: 5 percent of the unit
Geomorphic description:
Flat

1193--Cosmos Silty Clay, 0 To 2 Percent Slopes

Component Description

Cosmos and similar soils
Extent: 85 percent of the unit
Geomorphic description:
Flat
Slope range: 0 to 2 percent
Surface layer texture: Silty clay
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
0.5 foot April May
Wet soil moisture status is lowest (depth, months):
2.6 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.3 inches
Content of organic matter in the upper 10 inches: 6.0 percent
Typical profile:
H1--0 to 15 inches; silty clay
H2--15 to 30 inches; silty clay
H3--30 to 60 inches; clay loam

Corvuso
Extent: 10 percent of the unit
Geomorphic description:
Rim

Lura
Extent: 5 percent of the unit
Geomorphic description:
Depression

1197--Cohoctah Fine Sandy Loam, 0 To 2 Percent Slopes, Occasionally Flooded

Component Description

Cohoctah and similar soils
Extent: 90 percent of the unit
Geomorphic description:
Flood plain
Slope range: 0 to 2 percent
Surface layer texture: Fine sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Poorly drained
Flooding does not occur (months):
January February September October November December
Flooding is most likely (frequency, months):
Occasional March April May June July August
Wet soil moisture status is highest (depth, months):
0.5 foot April
Wet soil moisture status is lowest (depth, months):
3.3 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.5 inches
Content of organic matter in the upper 10 inches: 9.0 percent
Typical profile:
H1--0 to 21 inches; fine sandy loam
H2--21 to 36 inches; fine sandy loam

H3--36 to 60 inches; stratified loamy sand to sandy loam to loam

Havelock

Extent: 10 percent of the unit

Geomorphic description:

Flood plain

1198B--Rohrbeck-Koronis Complex, 1 To 6 Percent Slopes

Component Description

Rohrbeck and similar soils

Extent: 55 percent of the unit

Slope range: 1 to 5 percent

Surface layer texture: Loamy sand

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Moderately well drained

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 8.2 inches

Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

H1--0 to 6 inches; loamy sand

H2--6 to 25 inches; loamy sand

H3--25 to 41 inches; sandy loam

H4--41 to 60 inches; sandy loam

Koronis and similar soils

Extent: 35 percent of the unit

Slope range: 3 to 6 percent

Surface layer texture: Sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Well drained

Flooding: None

Depth to wet soil moisture status: More than 5.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches

Content of organic matter in the upper 10 inches: 2.4 percent

Typical profile:

H1--0 to 9 inches; sandy loam

H2--9 to 28 inches; loam

H3--28 to 60 inches; sandy loam

Barry

Extent: 5 percent of the unit

Geomorphic description:

Drainageway

Lundlake

Extent: 5 percent of the unit

Geomorphic description:

Depression

1199--Klossner And Lundlake Soils, Ponded

Component Description

Klossner and similar soils

Extent: 50 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Muck

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status: At the surface all year

Ponding is shallowest (depth, months):

0.5 foot August September October
Ponding is deepest (depth, months):
1.0 foot January February March April May
June July November December
Available water capacity to a depth of 60 inches: 19.2 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
H1--0 to 38 inches; muck
H2--38 to 60 inches; mucky silty clay loam

Lundlake and similar soils

Extent: 45 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Mucky loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
0.5 foot August September October
Ponding is deepest (depth, months):
1.0 foot January February March April May
June July November December
Available water capacity to a depth of 60 inches: 11.7 inches
Content of organic matter in the upper 10 inches: 15.0 percent
Typical profile:
H1--0 to 26 inches; mucky loam
H2--26 to 56 inches; loam
H3--56 to 60 inches; sandy loam

Houghton

Extent: 5 percent of the unit
Geomorphic description:
Depression

1203--Muskego, Blue Earth, And Houghton Soils, Ponded

Component Description

Blue earth and similar soils

Extent: 30 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Mucky silt loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
0.5 foot August
Ponding is deepest (depth, months):
3.0 feet March April May
Available water capacity to a depth of 60 inches: 12.6 inches
Content of organic matter in the upper 10 inches: 17.5 percent
Typical profile:
H1--0 to 50 inches; mucky silt loam
H2--50 to 60 inches; mucky silt loam

Houghton and similar soils

Extent: 30 percent of the unit
Geomorphic description:
Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None

Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
 0.5 foot August
Ponding is deepest (depth, months):
 3.0 feet March April May
Available water capacity to a depth of 60 inches: 23.9 inches
Content of organic matter in the upper 10 inches: 84.5 percent
Typical profile:
 H1--0 to 60 inches; muck

Muskego and similar soils

Extent: 30 percent of the unit
Geomorphic description:
 Depression
Slope range: 0 to 1 percent
Surface layer texture: Muck
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding is shallowest (depth, months):
 0.5 foot August
Ponding is deepest (depth, months):
 3.0 feet March April May
Available water capacity to a depth of 60 inches: 13.2 inches
Content of organic matter in the upper 10 inches: 42.5 percent
Typical profile:
 H1--0 to 10 inches; muck
 H2--10 to 29 inches; mucky silt loam, coprogenous earth
 H3--29 to 60 inches; loam

Okoboji

Extent: 10 percent of the unit
Geomorphic description:
 Depression

1204B--Reedslake Loam, 2 To 5 Percent Slopes

Component Description

Reedslake and similar soils

Extent: 85 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 3.6 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet January February July August
 September October December
Ponding: None
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
 H1--0 to 12 inches; loam
 H2--12 to 26 inches; clay loam
 H3--26 to 60 inches; loam

Cordova

Extent: 10 percent of the unit
Geomorphic description:
 Drainageway

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
 Depression

1213C--Cokato-Storden Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Cokato and similar soils

Extent: 70 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.6 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
 H1--0 to 16 inches; loam
 H2--16 to 41 inches; clay loam
 H3--41 to 60 inches; loam

Storden and similar soils

Extent: 20 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
 H1--0 to 9 inches; loam
 H2--9 to 18 inches; loam
 H3--18 to 60 inches; loam

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
 Depression

Hamel

Extent: 5 percent of the unit
Geomorphic description:
 Drainageway

1220C--Cokato-Storden-Hawick Complex, 6 To 12 Percent Slopes, Eroded

Component Description

Cokato and similar soils

Extent: 55 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.3 inches
Content of organic matter in the upper 10 inches: 4.0 percent
Typical profile:
 H1--0 to 10 inches; loam
 H2--10 to 29 inches; clay loam
 H3--29 to 60 inches; loam

Storden and similar soils

Extent: 20 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Loam

Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 1.4 percent
Typical profile:
H1--0 to 9 inches; loam
H2--9 to 60 inches; loam

Hawick and similar soils

Extent: 15 percent of the unit
Slope range: 6 to 12 percent
Surface layer texture: Gravelly sandy loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Excessively drained
Flooding: None
Depth to wet soil moisture status: More than 5.0 feet all year
Ponding: None
Available water capacity to a depth of 60 inches: 3.5 inches
Content of organic matter in the upper 10 inches: 1.7 percent
Typical profile:
H1--0 to 8 inches; gravelly sandy loam
H2--8 to 33 inches; gravelly loamy coarse sand
H3--33 to 60 inches; gravelly coarse sand

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

Hamel

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

1356--Water, Miscellaneous

Component Description

Water

Extent: 100 percent of the unit

1362B--Angus Loam, 2 To 5 Percent Slopes

Component Description

Angus and similar soils

Extent: 85 percent of the unit
Slope range: 2 to 5 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
3.6 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February July August
September October December
Ponding: None
Available water capacity to a depth of 60 inches: 10.5 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
H1--0 to 9 inches; loam
H2--9 to 35 inches; clay loam
H3--35 to 60 inches; loam

Cordova

Extent: 10 percent of the unit
Geomorphic description:
Drainageway

Glencoe

Extent: 5 percent of the unit
Geomorphic description:
Depression

1383A--Shorewood Silty Clay Loam, Moderately Wet, 0 To 3 Percent Slopes

Component Description

Shorewood and similar soils

Extent: 90 percent of the unit
Slope range: 0 to 3 percent
Surface layer texture: Silty clay loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Somewhat poorly drained
Flooding: None
Wet soil moisture status is highest (depth, months):
1.5 feet April May
Wet soil moisture status is lowest (depth, months):
4.9 feet February August
Ponding: None
Available water capacity to a depth of 60 inches: 9.4 inches
Content of organic matter in the upper 10 inches: 5.2 percent
Typical profile:
H1--0 to 9 inches; silty clay loam
H2--9 to 46 inches; silty clay
H3--46 to 60 inches; silty clay loam

Rolfe

Extent: 5 percent of the unit
Geomorphic description:
Depression

Waldorf

Extent: 5 percent of the unit
Geomorphic description:
Flat

1384--Minneopa Loam, 0 To 2 Percent Slopes

Component Description

Minneopa and similar soils

Extent: 85 percent of the unit
Slope range: 0 to 2 percent
Surface layer texture: Loam
Depth to restrictive feature:
Very deep (more than 60 inches)
Drainage class: Moderately well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
2.0 feet April
Wet soil moisture status is lowest (depth, months):
More than 5.0 feet January February
Ponding: None
Available water capacity to a depth of 60 inches: 4.8 inches
Content of organic matter in the upper 10 inches: 2.4 percent
Typical profile:
H1--0 to 7 inches; loam
H2--7 to 15 inches; sandy loam
H3--15 to 25 inches; gravelly loamy sand
H4--25 to 60 inches; gravelly sand

Biscay

Extent: 10 percent of the unit
Geomorphic description:
Flat

Estherville

Extent: 5 percent of the unit

1385--Havelock Loam, 0 To 2 Percent Slopes, Frequently Flooded

Component Description

Havelock and similar soils

Extent: 90 percent of the unit

Geomorphic description:

Flood plain

Slope range: 0 to 2 percent

Surface layer texture: Loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Poorly drained

Flooding does not occur (months):

January February September October November December

Flooding is most likely (frequency, months):

Frequent

March April May June

Wet soil moisture status is highest (depth, months):

0.5 foot

April

Wet soil moisture status is lowest (depth, months):

3.3 feet

February August

Ponding: None

Available water capacity to a depth of 60 inches: 11.3 inches

Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 15 inches; loam

H2--15 to 38 inches; loam

H3--38 to 60 inches; loam

Calco

Extent: 10 percent of the unit

Geomorphic description:

Flood plain

1387A--Collinwood Silty Clay Loam, Moderately Wet, 0 To 3 Percent Slopes

Component Description

Collinwood and similar soils

Extent: 90 percent of the unit

Slope range: 0 to 3 percent

Surface layer texture: Silty clay loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Somewhat poorly drained

Flooding: None

Wet soil moisture status is highest (depth, months):

1.5 feet

April May

Wet soil moisture status is lowest (depth, months):

4.9 feet

February August

Ponding: None

Available water capacity to a depth of 60 inches: 8.5 inches

Content of organic matter in the upper 10 inches: 6.5 percent

Typical profile:

H1--0 to 13 inches; silty clay loam

H2--13 to 32 inches; silty clay

H3--32 to 60 inches; silty clay loam

Rolfe

Extent: 5 percent of the unit

Geomorphic description:

Depression

Waldorf

Extent: 5 percent of the unit

Geomorphic description:

Flat

1391B--Wadenill-Sunburg Complex, 2 To 6 Percent Slopes

Component Description

Wadenill and similar soils

Extent: 70 percent of the unit
Slope range: 2 to 6 percent
Surface layer texture: Loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 3.6 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet January February July August
 September October December
Ponding: None
Available water capacity to a depth of 60 inches: 9.7 inches
Content of organic matter in the upper 10 inches: 3.3 percent
Typical profile:
 H1--0 to 9 inches; loam
 H2--9 to 25 inches; loam
 H3--25 to 60 inches; fine sandy loam

Sunburg and similar soils

Extent: 20 percent of the unit
Slope range: 4 to 6 percent
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Well drained
Flooding: None
Wet soil moisture status is highest (depth, months):
 3.6 feet April
Wet soil moisture status is lowest (depth, months):
 More than 5.0 feet January February July August
 September October December
Ponding: None
Available water capacity to a depth of 60 inches: 9.1 inches
Content of organic matter in the upper 10 inches: 1.9 percent
Typical profile:
 H1--0 to 7 inches;
 H2--7 to 60 inches;

Lundlake

Extent: 5 percent of the unit
Geomorphic description:
 Depression

Uniongrove

Extent: 5 percent of the unit
Geomorphic description:
 Drainageway

1406--Medo, Dassel And Biscay Soils, Ponded, 0 To 1 Percent Slopes

Component Description

Biscay and similar soils

Extent: 30 percent of the unit
Geomorphic description:
 Depression
Slope range: 0 to 1 percent
Surface layer texture: Mucky loam
Depth to restrictive feature:
 Very deep (more than 60 inches)
Drainage class: Very poorly drained
Flooding: None
Wet soil moisture status: At the surface all year
Ponding: At 0.5 foot all year
Available water capacity to a depth of 60 inches: 6.5 inches
Content of organic matter in the upper 10 inches: 6.0 percent

Typical profile:

H1--0 to 10 inches; mucky loam
H2--10 to 29 inches; loam
H3--29 to 60 inches; stratified loamy sand to gravelly coarse sand

Dassel and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Fine sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status: At the surface all year

Ponding: At 0.5 foot all year

Available water capacity to a depth of 60 inches: 7.7 inches

Content of organic matter in the upper 10 inches: 9.0 percent

Typical profile:

H1--0 to 14 inches; fine sandy loam

H2--14 to 31 inches; stratified loamy fine sand to fine sandy loam

H3--31 to 60 inches; stratified loamy sand to coarse sand

Medo and similar soils

Extent: 30 percent of the unit

Geomorphic description:

Depression

Slope range: 0 to 1 percent

Surface layer texture: Muck

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Very poorly drained

Flooding: None

Wet soil moisture status: At the surface all year

Ponding: At 0.5 foot all year

Available water capacity to a depth of 60 inches: 12.2 inches

Content of organic matter in the upper 10 inches: 35.0 percent

Typical profile:

H1--0 to 20 inches; muck

H2--20 to 28 inches; mucky silt loam

H3--28 to 34 inches; sandy loam

H4--34 to 60 inches; fine sand

Houghton

Extent: 10 percent of the unit

Geomorphic description:

Depression

1801B--Gardencity Very Fine Sandy Loam, 2 To 6 Percent Slopes

Component Description

Gardencity and similar soils

Extent: 85 percent of the unit

Slope range: 2 to 6 percent

Surface layer texture: Very fine sandy loam

Depth to restrictive feature:

Very deep (more than 60 inches)

Drainage class: Well drained

Flooding: None

Wet soil moisture status is highest (depth, months):

3.6 feet April

Wet soil moisture status is lowest (depth, months):

More than 5.0 feet January February July August
September October December

Ponding: None

Available water capacity to a depth of 60 inches: 8.9 inches

Content of organic matter in the upper 10 inches: 3.0 percent

Typical profile:

H1--0 to 13 inches; very fine sandy loam

H2--13 to 34 inches; very fine sandy loam
H3--34 to 60 inches; stratified loamy very fine sand to very fine
sandy loam

Madelia

Extent: 5 percent of the unit
Geomorphic description:
Drainageway

Sparta

Extent: 5 percent of the unit

Truman

Extent: 5 percent of the unit

W--Water

Component Description

Water

Extent: 100 percent of the unit