**Appendix A**
**Soil Units within the Survey Area**
**Rochester Area Reliability Project**

| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| ArB – Arkport very fine sandy loam, 0 to 6 percent slopes | Well drained soils located on deltas on lake plains. The parent material consists of glaciofluvial or deltaic deposits with a high content of fine and very fine sand. This soil is not flooded or ponded and there is no zone of water saturation within a depth of 72 inches. |
| Ca - Canandaigua silt loam | Very poorly drained soils occurring on depressions. The parent material consists of silty and clayey glaciolacustrine deposits. This soil is frequently ponded but not flooded. *This soil meets hydric criteria*. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 10 percent. |
| CeB - Cayuga silt loam, 2 to 6 percent slopes | Moderately well drained soils occurring on lake plains, till plains. The parent material consists of clayey glaciolacustrine deposits over loamy till derived from limestone, dolomite, sandstone, or shale. This soil is not flooded or ponded. Organic matter content in the surface horizon is about 4 percent. |
| ChA - Churchville silt loam, 0 to 2 percent slopes | Somewhat poorly drained soils occurring on lake plains, till plains. The parent material consists of clayey glaciolacustrine deposits over loamy till. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. |
| CkA - Claverack loamy fine sand, 0 to 2 percent slopes | Moderately well drained soils occurring on lake plains. The parent material consists of sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. |
| CkB - Claverack loamy fine sand, 2 to 6 percent slopes | Moderately well drained soils occurring on lake plains. The parent material consists of sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. |
| CoB - Colonie loamy | Well drained soils occurring on beach ridges, deltas. The |

**Appendix A**
**Soil Units within the Survey Area**
**Rochester Area Reliability Project**

| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| fine sand, 0 to 6 percent slopes | parent material consists of sandy glaciofluvial or eolian deposits. This soil is not flooded or ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. |
| CoC - Colonie loamy fine sand, 6 to 12 percent slopes | Well drained soils occurring on beach ridges, deltas. The parent material consists of sandy glaciofluvial or eolian deposits. This soil is not flooded or ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. |
| Cu - Cosad loamy fine sand | Somewhat poorly drained soils occurring on lake plains. The parent material consists of sandy glaciofluvial or deltaic deposits over clayey glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 5 percent. |
| Cw - Cut and fill land | Moderately well drained soils that are not flooded or ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 1 percent. |
| DuB - Dunkirk silt loam, 2 to 6 percent slopes | Well drained soils occurring on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. This soil is not flooded or ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. |
| Ee - Eel silt loam | Moderately well drained soils occurring on flood plains. The parent material consists of silty alluvium. This soil is occasionally flooded but not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| ElB - Elnora loamy fine sand, 2 to 6 percent slopes | Moderately well drained soils occurring on beach ridges, deltas. The parent material consists of sandy glaciofluvial, eolian, or deltaic deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during February, March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| Fw - Fresh water marsh | Very poorly drained soils occurring on flood plains and |

**Appendix A**
**Soil Units within the Survey Area**
**Rochester Area Reliability Project**

| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| | depressions. Parent material consists of organic material. This soil is frequently ponded but not flooded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, September, October, November, December. *This soil meets hydric criteria*. Organic matter content in the surface horizon is between 9 percent in the aquents component and 72 percent in the saprist component. |
| Ge - Genesee silt loam | Well drained soils occurring on flood plains. The parent material consists of silty alluvium mainly from areas of siltstone, shale, and limestone. This soil is occasionally flooded but not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 percent. |
| HlA - Hilton loam, 0 to 3 percent slopes | Moderately well drained soils occurring on drumlins and till plains. The parent material consists of calcareous loamy till derived principally from sandstone and limestone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 5 percent. |
| HlB - Hilton loam, 3 to 8 percent slopes | Moderately well drained soils occurring on drumlins, till plains. The parent material consists of calcareous loamy till derived principally from sandstone and limestone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 5 percent. |
| HmB - Hilton-Cazenovia stony silt loams, 3 to 8 percent slopes | The Hilton component makes up 50 percent of the map unit and Cazenovia component accounts for the remaining 50 percent. The natural drainage class is well drained to moderately well drained. The Hilton component occurs on drumlins and till plains and the Cazenovia component occurs on reworked lake plains and till plains. The parent material consists of of calcareous loamy till derived principally from sandstone and limestone in the Hilton component and loamy till that contains limestone with an admixture of reddish lake-laid clays or reddish clay shale in the Cazenovia component. These soils are not flooded or |

**Appendix A**
**Soil Units within the Survey Area**
**Rochester Area Reliability Project**

| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| | ponded. A seasonal zone of water saturation in the Hilton component is at 21 inches during January, February, March, April, May, June, July, August, September, October, November, December. A seasonal zone of water saturation is at 36 inches during March, April, May in the Cazenovia component. Organic matter content in the surface horizon in the Hilton component is about 6 percent and 5 percent in the Cazenovia component. |
| HnC - Honeoye silt loam, 8 to 15 percent slopes | Well drained soils occurring on drumlins and till plains. The parent material consists of loamy till derived from limestone, dolomite, and calcareous shale, and from lesser amounts of sandstone and siltstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 51 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| Le - Lakemont silt loam | Poorly drained soils occurring on depressions. The parent material consists of reddish clayey and silty glaciolacustrine deposits. This soil is occasionally ponded but not flooded. *This soil meets hydric criteria*. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 6 percent. |
| Lm – Lamson very fine sandy loam | Very poorly drained soils occurring on depressions. The parent material consists of deltaic or glaciolacustrine deposits with a high content of fine and very fine sand. This soil is occasionally ponded but not flooded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. *This soil meets hydric criteria*. Organic matter content in the surface horizon is about 6 percent. |
| LoB - Lima and Cazenovia silt loams, limestone substratum, 0 to 6 percent slopes | The Cazenovia, limestone substratum component makes up 40 percent of the map unit and the Lima, limestone substratum component makes up 40 percent of the map unit. These soils are moderately well drained. The Cazenovia, limestone substratum component occurs on reworked lake plains, till plains and the Lima, limestone substratum component occur on drumlins, till plains. The parent material of the Cazenovia, limestone substratum component consists of loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale. The parent material of the Lima, limestone |

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**Soil Units within the Survey Area**
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| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| | substratum component consists of loamy till derived mainly from limestone and calcareous shale. These soils are not flooded or ponded. A seasonal zone of water saturation is at 36 inches during March, April, May in the Cazenovia, limestone substratum component. In the Lima, linestone csubstratum component, a seasonal zone of water saturation is at 21 inches during March, April, May. Organic matter content in the surface horizon is about 6 percent in the Cazenovia component and 4 percent in the Lima component. |
| Mb - Made land | Moderately well drained soils that are not flooded or ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 1 percent. |
| Mn - Minoa very fine sandy loam | Somewhat poorly drained soils occurring on deltas on lake plains. The parent material consists of deltaic or glaciolacustrine deposits with a high content of fine and very fine sand. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during February, March, April. Organic matter content in the surface horizon is about 4 percent. |
| Mr - Muck, deep | Very poorly drained soils occurring on swamps and marshes. The parent material consists of organic material. This soil is frequently ponded but not flooded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. *This soil meets hydric criteria*. Organic matter content in the surface horizon is about 84 percent. |
| Ng - Niagara silt loam | Somewhat poorly drained soils occurring on lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 4 percent. |
| OdA - Odessa silt loam, 0 to 2 percent slopes | Somewhat poorly drained soils occurring on lake plains. The parent material consists of reddish clayey and silty glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. |

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**Soil Units within the Survey Area**
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| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| | Organic matter content in the surface horizon is about 6 percent. |
| OdB - Odessa silt loam, 2 to 6 percent slopes | Somewhat poorly drained soils occurring on lake plains. The parent material consists of reddish clayey and silty glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 6 percent. |
| OfB - Ontario fine sandy loam, 3 to 8 percent slopes | Well drained soils occurring on drumlins, till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| OfC - Ontario fine sandy loam, 8 to 15 percent slopes | Well drained soils occurring on drumlins and till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| OnB - Ontario loam, 3 to 8 percent slopes | Well drained soils occurring on drumlins and till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| OnC - Ontario loam, 8 to 15 percent slopes | Well drained soils occurring on drumlins and till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| OnD3 - Ontario loam, 15 to 25 percent slopes, eroded | Well drained soils occurring on drumlins and till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| OnF - Ontario loam, 25 to 60 percent slopes | Well drained soils on drumlins and till plains. The parent material consists of calcareous till high in limestone and sandstone. This soil is not flooded or ponded. A seasonal |

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| NRCS Map Unit | NRCS Soil Series Description |
|---|---|
| | zone of water saturation is at 40 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| PhA - Phelps gravelly fine sandy loam, 0 to 3 percent slopes | Moderately well drained soils occurring on valley trains and terraces. The parent material consists of loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone. This soil is not flooded or ponded. A seasonal zone of water saturation is at 21 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| SeB - Schoharie silt loam, 2 to 6 percent slopes | Moderately well drained soils occurring on lake plains. The parent material consists of reddish clayey and silty glaciolacustrine deposits. This soil is not flooded or ponded. A seasonal zone of water saturation is at 27 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. |
| Ub - Urban land | Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area. |
| W - Water | Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area. |
| Wg - Wayland silt loam | Very poorly drained soils occurring on flood plains. The parent material consists of silty and clayey alluvium washed from uplands that contain some calcareous drift. This soil is frequently flooded and frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. *This soil meets hydric criteria*. Organic matter content in the surface horizon is about 6 percent. |