

Major Land Resource Area 088X

Northern Minnesota Glacial Lake Basins

Accessed: 06/20/2026

Ecological site keys

MLRA 88 Ecological Site Key

I. Organic Material

a. Site floods or ponds

- i. Organic soil which occurs on floodplains, and floods occasionally to very frequently ... F088XY001MN – Floodplain Peatland
- ii. Organic soil that is frequently ponded 12 months out of the year ... F088XY002MN – Marsh
- iii. Organic soil that does not flood or pond

B. Organic soils with more than 40 centimeters organic matter (Terric and Typic Histosols)

- 1 Dominant pH less than 4.5 within a depth of 130 centimeters ... F088XY004MN – Acid Peatland
- 2 Dominant pH of 4.5 or more within a depth of 130 centimeters

- a. Open fen/bog concept with ponding =4 months during growing season ... F088XY003MN – Open Peatland

- b. Wooded canopy concept with ponding duration <4 months during growing season ... F088XY005MN – Forestland Peatland

- A. Organic soil with 0 to 40 centimeters of organic matter underlain by mineral sediments that can have frequent ponding for up to 9 months. Includes soils with 20 to 40 centimeters organic material (Histic Humaquepts) and sites with less than 20 cm of organic material. Can also include sites with mucky modified mineral surface texture that occur in depressions that dry out in summer ... F088XY007MN – Wet Depressional Forest

I. Mineral Materials

a. Landscape position - footslopes, floodplains, and terraces

- i. Footslope and toeslope positions; flats and swales with gradients of 0-2 percent ... F088XY008MN – Wet Mixed Forest
- ii. Floodplains and alluvial flats; flooding occurs frequent to very frequent for long to very long duration ... F088XY006MN – Floodplain Forest Wet
- iii. Stream terraces subject to occasional to rare flooding ... F088XY009MN – Floodplain Terrace Forest

b. Landscape position - summit, shoulder, and backslope positions and slight rises on flats

- i. Soils with bedrock restrictions less than 100 cm ... F088XY010MN – Bedrock Controlled Upland Forest
- ii. Soils without bedrock restrictions within a depth of 100 cm

1 Dominantly fine soil textures (clay, silty clay, silty clay loam, loam, or very fine sandy loam) within a depth of 50 cm ...

F088XY014MN – Clayey Upland Wet-Mesic Hardwood Forest

2 Dominantly medium soil textures (loamy, fine sandy loam, silty loam) within a depth of 50 centimeters; sandy loam, loamy sand or loamy fine sand capped (arenic) soils; very fine sandy loam and loamy very fine sand in wind blown (eolian) dune soils ...

F088XY015MN – Loamy Upland Wet-Mesic Mixed Forest

3 Dominantly coarser soil textures (coarse sand, sand, fine sand, loamy fine sand, loamy very fine sand)

a. Depth to seasonal high water table greater than 100 cm ... F088XY012MN – Very Dry Sandy Upland Coniferous Forest

b. Depth to seasonal high water table 50-100 cm ... F088XY013MN – Dry Sandy Upland Coniferous Forest

c. Depth to seasonal high water table 25-50 cm ... F088XY011MN – Moist Sandy Mixed Forest