

Overall Strategy:
Improve Water Quality

Impairment: Impaired for
Nutrients (phosphorus)

**Subwatershed Lake
Cover/Use:**
17.2% Open Water
15.4% Developed Land
2.0% Wetlands
14.6% Cultivated Crops
23.0% Forest
27.9% Grassland



Water Quality	10-Year Average (2008-2017)	Trend
Secchi	3 ft.	Insufficient Data
Total Phosphorus	87 µg/L	Insufficient Data
Ortho Phosphate	3 µg/L	Insufficient Data
Chlorophyll-a	23 µg/L	Insufficient Data

Short Term Goals - Year 2025

- Achieve a 5-year mean summer phosphorus concentration at or below 60 µg/L ± 4%
- Maintain mean summer Secchi depth no less than 3.5 ft

Long Range Goals – Year 2035

- Achieve a 5-year mean summer phosphorus concentration at or below 60 µg/L ± 4%
- Maintain mean summer Secchi depth no less than 3.5 ft

Basic Facts

DNR ID/ Becker No	MN03-0398-00 / 398
Township(s)	Detroit (Sec 19, 20)
Lake Classification	Natural Environment
Lake Area	44.1 acres
Littoral Area	44.1 acres (100%)
Sub-watershed Area	219 acres
Inlet(s)	None
Outlet(s)	None
Control Structures	None
Highest Recorded*	Not Recorded
Lowest Recorded*	Not Recorded
Ordinary High Water Level*	Not Recorded
Recorded Range*	Not Recorded
Maximum Depth	Not Recorded
Main Fish Species	N/A
Secondary Fish Species	N/A
MN DNR/ Private Fish Stocking	N/A
Aquatic Invasive Species (2015)	None listed
Public Access Sites	None
Marinas	None
Public Beach	None
References	DNR Lake Finder, Becker County

*Elevations NGVD 29

** Elevations NAVD 88

Overall Assessment

Wine Lake is small 44 acre natural environment lake located just north of the City limits of Detroit Lakes. There is one commercial business located on the east shoreline that uses the lake for watercraft testing. Wine lake is listed as a nutrient impaired lake with average summer phosphorus levels of 87ppm and water clarity of 3 feet which exceeds the shallow lake standard of 60ppm and 1 meter (3.28ft)

The lake was monitored for water quality for 3 year (2009-2011). The lake has not surface water inlet and is recharged by stormwater runoff and groundwater interactions. Wine Lake is a landlocked basin with no residential development, and it therefore low priority for water quality monitoring. Land use in the drainage area is composed of 34% grassland, 28% forested area, 19% developed, 18% cropland, and 2% wetlands.

Past Studies

Implementation

Planned/Potential Projects:

Capital Improvement Projects:

Projects & Programs

Ongoing Programs: