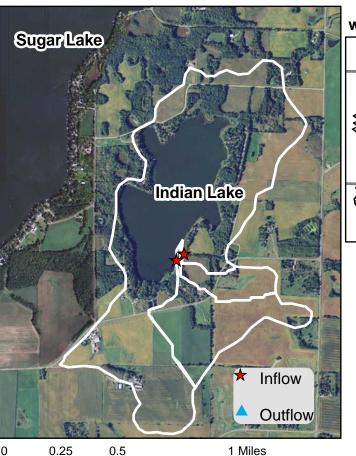
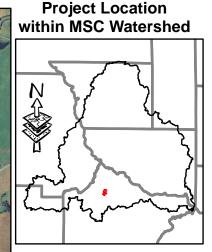
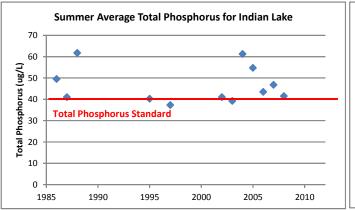
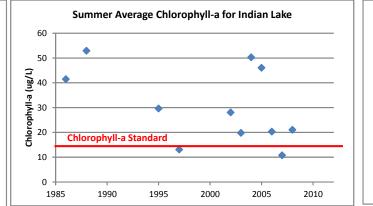
Indian Lake (86-0223)- DRAFT

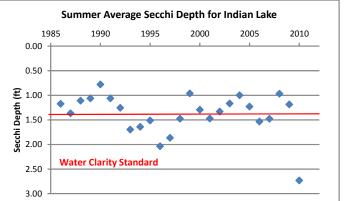
Indian Lake Watershed











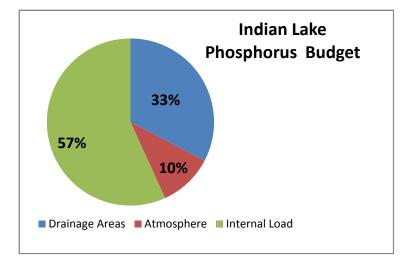
Lake Data

Surface Area: 135 Acres Maximum Depth: 31 feet Littoral Area: 56 Acres

Contributing

Watershed Area: 445 Acres

Classification: Deep Lake



Questions/Comments can be directed to:

Tiffany Determan Sherburne SWCD 763-241-1170 x 3 tdeterman@sherburneswcd.org

or

Joe Jacobs Wright SWCD 763-682-1982 x 3 joe.jacobs@mn.nacdnet.net

	% Reducion Required	
Watershed (LA)		20%
SSTS		100%
Atmosphere		0%
Groundwater		0%
Internal		35%

Summary

- In-lake phosphorus, chlorophyll-a and secchi disk depth have varied through the years, however they typically hang at or near the State Standard.
- Indian Lake health is based off of a limited dataset; thus, local knowledge and input are instrumental.
- The following characteristics seem to protect the quality of water in Silver Lake: very small watershed, relatively high percentage of deep waters.
- Two small ditched inlets flow into the south east corner of the lake, no water quality monitoring has been gathered.
- The most recent aquatic plant survey was done in 2003, Eurasian watermilfoil was confirmed present at that time; additionally, curlyleaf pondweed was identified as growing to nuisance levels in the spring in most of the near shore areas.
- Internal nutrient recycling during lake mixing events likely has a major influence on in lake water quality.
- Local knowledge identified that an aerator along with algaecide was used to reduce internal loads in 2006 &
 2007. This may explain the increased quality of water since that time.
- Decreased water quality occurred in and after 2004, since that time, water quality has improved, this may just be a cyclical occurrence- did something notable occur?

Recommended Activities

- Methods to manage exotic aquatic plant species and enhance native plant species should be employed.- is there anything being done?
- Quantification of sediment release rates (internal nutrient recycling) would help in prioritization of cleanup strategies. Methods to reduce said source may include: management of rough fish communities, boating education/guidelines, alum treatments, or other innovative reduction strategies. Internal treatment should be considered after watershed sources have been exhausted.
- Ensure minimal water quality impacts of rural developments around the lake; for example, no untreated stormwater should be directed into the lake, the amount of impervious surfaces in developed areas should be kept to a minimum, natural buffers of vegetation should be maintained between lawns and the lakeshore.
- Monitoring flow and nutrients in both ditched inlets will aid in identifying approximate contributions levels as well as to establish a baseline for future conditions.
- Establishment of a regular In-lake monitoring program will aid in monitoring future monitor trends.