

Soo Lake

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 Clarity Report of August 4,
 2016



Land & Water Conservation Department

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Soo Lake AIS Monitoring and Water Clarity Report

WBIC: 1018900
 Previous AIS Findings: None
 New AIS Findings: None
 Field Date: August 3, 2013
 Field Crew: Stephanie Boismenu, AIS Coordinator, and Aubrey Nycz, AIS Project Assistant, Oneida County Land and Water Conservation Department
 Report By: Aubrey Nycz

Stephanie and I monitored Soo Lake on August 3rd, 2016. Soo Lake is located in Rhinelander, WI in Oneida County (Figure 1). It is a seepage lake of 133 acres with a maximum depth of 13 feet. The substrate on the lake is 35% sand, 25% gravel, 10% rock, and 30% muck. The lake has musky, panfish, largemouth bass, and walleye. Soo Lake’s trophic state is mesotrophic. According to dictionary.com, mesotrophic lakes are characterized by a moderate amount of dissolved nutrients.

There are not public boat landings on Spp Lake, , so Stephanie and I launched our canoe at Walter William’s house. Before we began paddling around the lake’s perimeter, we used our aqua scopes to check the shoreline for any invasive species. We did not find anything suspicious. Surprisingly, we could not find a single snail on Soo Lake. It was about 85 degrees F outside, and very sunny. We visually monitored the entire perimeter of Soo Lake, and we stopped to do two AIS checks with the aqua scopes throughout the day. No invasive species were found during our aquatic invasive species checks.

We used a contour map of Soo Lake to assist us in finding the deep hole, but we still had some difficulties finding the deep hole because the map did not appear to have been updated recently. After locating the deep hole, we took GPS coordinates, tested the water clarity using the Secchi disk, obtained the dissolved oxygen levels using the dissolved oxygen meter, and obtained the water temperature levels (Table 1).

Findings: All taken starting at 2:00 p.m.

Aquatic Invasive Species:

None

Secchi:

The Secchi reading on this lake was 7 feet out of a 13 foot max depth. The water color was a clear yellow, so I was not surprised that the lake had been clear for 7 feet.

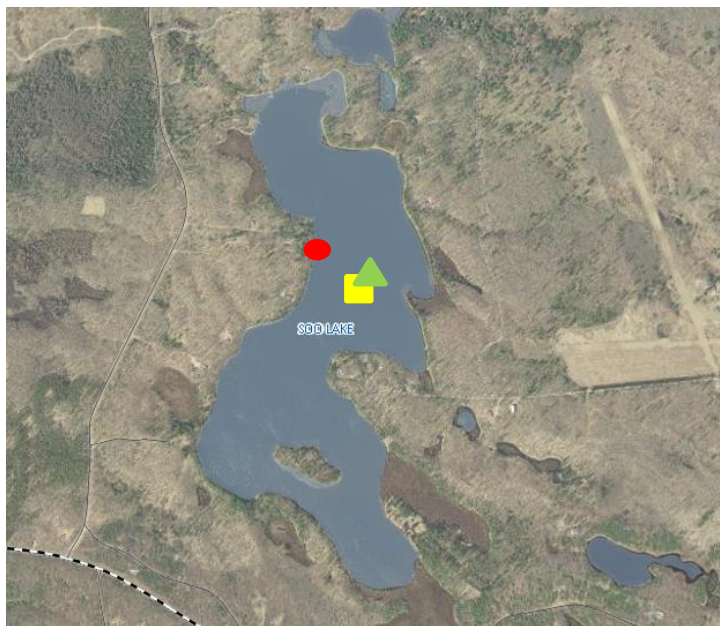
Dissolved Oxygen:

These measurements can be seen in Table 1 at 2 foot increments.

Figure 1. Map of Oneida County, WI with Soo Lake circled in red.



Figure 2. Map of Soo Lake; the red circle shows where we entered the lake, the yellow square shows where the deep hole can be found, the green triangle shows where we obtained our Secchi Disk coordinates, and the orange line shows where we monitored the lake.



Soo Lake Deep Hole

Latitude 45.66

Longitude -89.54

Table 1. Dissolved oxygen levels and temperatures at the deep hole.

Depth (Feet)	Dissolved Oxygen Levels (mg/L)	Temperature (F)
2	7.63	83.4
4	7.65	81.4
6	7.54	80.2
8	7.23	79.4
10	6.38	78.0
12	4.87	67.7

Resources:

<https://oneidacounty.maps.arcgis.com/apps/webappviewer/index.html?id=c0144697a23243d6beb981727c3e6e2b>

<http://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=1018900&page=facts>