QUICK FACTS

**Location:** Deep Lake is located within the City of North Oaks. The land use around the lake is large lot residential and protected open space. By 2016, much of the land in the northern part of the subwatershed has been developed for residential use.

<table>
<thead>
<tr>
<th>Subwatershed Size</th>
<th>716 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area</td>
<td>78 acres</td>
</tr>
<tr>
<td>Maximum Depth</td>
<td>11 ft</td>
</tr>
<tr>
<td>Average Depth</td>
<td>5 ft</td>
</tr>
</tbody>
</table>

**Common Fish:**
- Carp, Walleye, Bass, Sunfish, Northern Pike

**Predominant Vegetation:**
- Fern Pondweed

**Invasive Species:**
- Common Carp, Curly Leaf Pondweed, Yellow Iris, Mystery Snails

**Lake Summary:** Deep lake is a little over 80 acres and sits between and is hydrologically connected to Wilkinson Lake to the north and Pleasant Lake to the south. A channel connects the three lakes. A Deep Lake Preservation Committee was formed in 2009 by the residents living around Deep Lake to help maintain and improve the quality of the lake. While Deep’s nitrogen and ammonia levels are below State standards, it tends to have the highest concentrations in the VLAWMO watershed. Total Phosphorus and Chlorophyll-A have been trending upward since sampling began in 2009. By mid to late summer Deep Lake is very weedy and this has been a concern for residents. Incoming water from Wilkinson (an impaired water body for high nutrients) is a contributing factor to these abundant weeds as well as large algal blooms.
NUTRIENT SUMMARY:
VLAWMO measures lake electrical conductivity to gauge levels of sodium, chloride, nitrate, sulfate, calcium, and other metals. High conductivity indicates high levels of minerals that may pose problems for the lake.

Deep Lake conductivity is high compared to most area lakes. Deep is unusual because TP levels are high yet ChlA level are low. Typically in a water body TP and ChlA mirror each other.

This poses questions for further study and continued observation.

DEEP LAKE DEPTH:

PROJECT HIGHLIGHT:
In the fall of 2015, VLAWMO worked with the Ramsey Conservation District and the North Oaks Homeowners Association to restore a portion of the channel between Deep and Pleasant Lake. Previously, the banks showed signs of erosion. A combination of rip rap and native vegetation were used to secure the bank and prevent further erosion. A crew from the Conservation Corps of Minnesota and Iowa performed much of the labor, while ongoing maintenance is done through volunteers and contractors.

Visit VLAWMO’s online project map for a complete list of Deep Lake reports. Visit vlawmo.org and find the “Project Map” link on the bottom of the homepage.

Updated 1/2/2019 – NV