LOCATION: Deep Lake is located in the City of North Oaks. 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.

LAKE SUMMARY: Deep Lake is hydrologically connected to Wilkinson Lake to the north and Pleasant Lake to the south. A channel connects the lakes. Although Deep’s nitrogen and ammonia levels are below State standards, it has the highest concentrations in the VLAWMO watershed. Total Phosphorus and Chlorophyll-A have been trending upward since sampling began in 2009. Incoming water from Wilkinson (an impaired water body for nutrients) is a contributing factor to periodic algal blooms.
**Nutrients:**

VLAWMO measures lake electrical conductivity to gauge levels of sodium, chloride, nitrate, sulfate, calcium, and other metals. High electrical conductivity indicates high levels of minerals that may pose problems for the lake.

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

**Deep Lake Annual Total Phosphorus (TP) and Chlorophyll A (ChlA)**

A pair of flying squirrels were among the many species documented as part of remote-camera surveys at Deep Lake in 2019.

**PROJECT HIGHLIGHT:**

In the fall of 2015, VLAWMO worked with the Ramsey Conservation District and the North Oaks Homeowners’ Association (NOHOA) to restore a portion of the channel between Deep and Pleasant Lake that was eroded. A combination of rip rap and native vegetation was used to secure the bank and prevent further erosion with help from Conservation Corps of Minnesota. NOHOA provides maintenance with Natural Shore Technologies.

Visit VLAWMO.org/waterbodies for more studies and reports on Deep Lake.