

## 2012 Water Quality Testing Results

**Inlet 1:** located near Silver Bay Road and Rognaldson Road on the northern end of lake

Concern was whether water quality was being affected by run-off from an automotive salvage company located north of Upper South Long Lake. The MPCA had required monitoring of that business quarterly beginning in June 1, 2011 and ending May 31, 2012. The LID board decided to continue testing of the same parameters that were required by the MPCA with an option to test for further contaminants if needed. There were to be two summer samples taken during high rain/run-off events. The first sample was taken in early June, but the second was not taken due to a lack of heavy rains in August. The LID intends to do two spring snow melt tests and two summer tests in the coming year, 2013.

Testing laboratory: RMB Environmental Laboratories, Inc. in Detroit Lakes, MN

Sampler was Joel Brazeman, member USLLIA and LID

Tests run were: Chemical Oxygen Demand, pH, TSS (Total Suspended Solids), Aluminum, Copper, Iron, Lead, and Zinc

Results showed most within acceptable range when compared to benchmarks for automotive salvage yards or scrap recycling facilities. There was a slight elevation in TSS, 126 mg/L (benchmark 100 mg/L) and iron, 1.4 mg/L (benchmark 1.0 mg/L).

**Inlet 2:** located near Paradise Shores Road on the east side of the lake

Concern was whether excess contaminants were entering the lake following the wash-out of a culvert and roadway (Paradise Shores Road) during heavy spring run-off. Only one sampling was done in early June.

Testing laboratory: A.W. Research Laboratories, Inc. in Brainerd, MN.

Sampler was Dan Martonik, board member USLLIA and member LID

Tests run were: Conductivity, pH, Total Phosphorus, and TSS

Results showed pH in normal range and others in the low range of what would be expected from storm water run-off. Laboratory analysis suggests that further samples be taken further upstream to avoid having the lake water mix in to the sample. The LID will test again following this suggestion in the spring of 2013.

**Additional Testing:** RMB Environmental Laboratories will continue to be used for this testing

Water quality testing in the deepest portion of the lake continues. Dan Martonik collects these samples. The latest, from August 19, 2012, showed total phosphorus within expected range, chlorophyll-a above expected range, and secchi depth reading below expected range.

## AIS (Aquatic Invasive Species) Treatment

The 2012 treatment for curly leaf pondweed was contracted out to PLM (Professional Lake Management) and was performed on May 7<sup>th</sup>. Acreage treated this year was approximately 22 acres, down from 38 acres in 2011. It appears that progress has been made on the north end of the lake as the treatment there was less than two acres. Treatments will continue with an assessment of area to be treated done in early 2013.

**Additional Future Projects:** The LID would like to test all inlets into Upper South Long Lake to establish baselines for each. The specific parameters or elements to be tested are yet to be determined. It may vary by site depending on the type of watershed draining into that particular area. We expect to utilize information from various agencies such as the Watershed District, MPCA, DNR, and testing laboratories.

Report submitted by Ruth Naber, LID board member