

**2014 Water Testing Results for Inlets to Upper South Long Lake**

Testing in 2014 continued on all four major inlets to the lake. **An explanation of many of the tests that are being run is provided on the LID link of the USLLIA web site (*Water quality test explanations*) for a better understanding of the reasons for those tests and the benchmarks/standards.** The 2014 samples were taken on April 25th, July 17th, and September 18th. Each set of results was compared to the previous collection as well as the comparable collection of the previous year. Baselines are being established and, at this time, there does not appear to be any reason to believe that any inlet is threatening the health of Upper South Long Lake.

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

The metals testing continues to show results well within the benchmarks set by the MPCA for a recycling/salvage yard. Iron continues to be a bit elevated, but not a concern. Total phosphorus was elevated some earlier in the year (.08 mg/L), but dropped in September (.03 mg/L) when it would be expected to be highest. Many readings in September were significantly lower than the readings of September 2013.

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

A concern with the April and July samples was the low pH readings (6.43 and 6.47) since pH below 6.5 may affect fish spawning and solubility of metals, but in September the pH reading was 7.26 -nearer the 2013 readings. Phosphorus levels are also a bit high (0.062 mg/L in July and 0.048 mg/L in September).

**Inlet 3:** located at the end of Rognaldson Road on the west side of the lake

Conductivity readings at this site continue to be high - nearly twice that at the other inlets (376 - 429 umhos/cm) and well above the acceptable range for our ecosystem. TSS was also high in April (10 mg/L), but has returned to desirable levels (1 mg/L in September). Most of the September 2014 readings were lower when compared to both September of 2013 and July of 2014.

**Inlet 4:** the Nokasippi River with samples taken behind Nokasippi Resort

All results there are in the acceptable range. Conductivity remains at the high end of the acceptable range. (240 umhos/cm) TSS was very high during spring run-off in April (10 mg/L), but returned to 2 mg/L by September.