

Water Quality Report

Winona Lake, September 12, 2014

Important news: Variable Milfoil has recently been detected in Lake Waukegan for the first time, and efforts have begun to remove it using divers. Anyone who takes boats/canoes/kayaks to and from Waukegan from Winona must take special care to inspect and remove any plant life from boats, trailers, oars, shoes/sandals, live wells and any other surface before re-entering Lake Winona. This is sad news, indeed, about our sister lake. *Please be extra careful if you desire to go to Waukegan via Snake River, you surely do not want to be the one responsible for bringing an invasive weed to our pristine lake.*

Waukegan is downstream of Winona, but boats can easily transport weeds to Winona.

This news further supports the efforts we are taking to establish a lake host program. Yet, even with a working program on Waukegan, milfoil somehow made its way to that lake. Below is a link to a guide by the NH DES with information on checking your boat/vehicle/trailer for “aquatic hitchhikers.”

<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/boater.pdf>

Water Quality:

Our deep water/composite water tests show increases in turbidity, which means there is some suspended matter present in the water (such as clay, silt, and algae). This increase could be due to construction near the water or sediment flowing in from streams. We will conduct another test in late September and hope to see that the levels have settled a bit.

The **outlet by the boat launch** shows slight increases in phosphorous, as well as a larger increase in conductivity. Both of these increases represent septic system, animal waste, lawn fertilizer, and road and construction erosion. Should you have any kind of construction on your lake-side property, please instruct your contractor to take special care not to disturb the water and it is mindful to consult with the DES before doing any unusual work such as retaining walls, walkways, etc. Please maintain your septic system and pump regularly. I don't mean to sound like a “broken record” but septic systems and lawn care products are the biggest polluters of lake water.

Heights Brook (at the Anchorage Beach) shows increased conductivity, decreased transparency, Phosphorous levels are higher as well, but still in a safe range. E-coli were 20 parts per 100 ml.

Hawkins Inlet shows increased PH, increased conductivity and the highest levels of phosphorous since Sept. of 2011. E-coli were 50 parts per ml, double the level of Heights Brook. As noted at the Association potluck in August, we have added a testing site at the Hawkins Pond outlet for September's test in order to see if the higher readings of phosphorous/E-coli are coming directly from Hawkins Pond or from something occurring along the stream that flows into Winona.

Residents of Hawkins Pond will begin a water testing program in the spring 2015. We are pleased they will begin monitoring water quality and working with DES as their water quality directly impacts our water.

Our most recent test shows the **North Inlet** has made some improvements (hooray!) While e-coli were slightly higher (still in safe ranges) 40 parts per 100 ml, other areas that had been on the rise were lower. These changes are good and we hope to see some other areas stabilize. Phosphorous (one of our main concerns) was down, turbidity (stirred up sediments) and conductivity were lower. Elevated conductivity and phosphorous levels are most often a result of road salt, septic issues, or wildlife waste. Decreases here are hopefully something that will continue over time.

York Brook remains stable and the higher Phosphorous readings in that area are lower, which is also good news. If test results next season show stability, this location will be tested only once per season.

We will add an **inlet in Chute's Cove** to our September test and monitor levels here as we do other areas where water is coming into our lake. We are especially interested in this inlet as there is a culvert that goes under Winona Road and road salt could impact test results. We will report on this location in the near future. There are two other inlets we hope to add to our water testing program in the future and perhaps rotate the tests in these inlets in order to save money, and also if the inlets are fairly stable.

Conclusion:

Overall, Lake Winona remains in good shape and has some very good readings in comparison with other lakes. We need to keep an eye on the usual things that affect phosphorous readings, of course, such as our septic systems, yard waste and storm run-off. Our biggest concerns at this time are the Hawkins and North Inlets. Continued monitoring is necessary and we are pleased to have our new equipment purchased with the DES grant we were given. If you were not present at our most recent meeting and would like to see the equipment, please let me know and I will be happy to demonstrate it for you.

Thank you to all who have participated in our water quality efforts.

Respectfully submitted,
Linda Heminway