November 14 Healthy Lakes: Key takeaways from Stantec presentation:

Tonight the Healthy Lakes team heard a summary of the final Alum Feasibility Study report from Stantec. This has been a two year grant to study the feasibility of using an alum treatment to control the phosphorus in our lakes. High levels of phosphorus in lakes leads to algae blooms and depletes oxygen (to the point of anoxia, where the lake is devoid of oxygen).

Alum Feasibility

Briggs had the highest levels of phosphorus release and reported sediment cores with anoxia (no oxygen). This is in the deepest areas of the lake, as this is where sediments settle over time. Stantec recommends treating the 122 acres of the lake that are 20 feet or deeper with an alum treatment that would bind the phosphorus and make it unavailable to algae.

Carp Study

Anything over 89 lbs per acres is above the ecological threshold for Common Carp. Our lakes have 4-5 times that number, with Julia and Rush having the highest loads.

Phosphorus Load percentages

Charts were shown with percentages of problems for each lake. In Julia, 64% of the phosphorus load is attributed to Carp and in Rush 40% is attributed to Carp. In Briggs, 50% come internally (from phosphorus in sediments), and that in turn impacts Julia and especially Rush.

Stantec recommendations:

Treat Briggs with Alum.

Remove/manage carp in all three lakes, but especially Julia and Rush.

Continue watershed reduction actions for all three lakes.

Seek grant funding to cover costs.

A recording of this presentation will be available soon. I will be receiving the draft of the final report for review next week. When it has been finalized, it will be made available to all. The Healthy Lakes team will be discussing the recommendations and exploring grant options at our meeting on Dec. 5th.