

## 2015 Water Quality Testing Report for WLLID AGM March 30<sup>th</sup> 2016.

### **Lake levels**

2015 May 16<sup>th</sup> the lake level was 10'' below the bottom of the last meter stick

2014 May 14<sup>th</sup> 18 1/2'' below bottom of the last meter stick

2013 May 13<sup>th</sup> 17 1/2' below bottom of last meter stick.

So in 2015 lake level started to rise earlier than in the past 2 years

2015 June 18<sup>th</sup> lake level maxed and rose 140 cm

2014 July 4<sup>th</sup> lake level maxed out and rose 247cm

2013 June 28<sup>th</sup> lake level maxed out and rose 351 cm

So in 2015 lake level maxed out earlier and lower than in the past 2 years

2015 Aug. 26<sup>th</sup> bottom of the last meter stick

2014 Sept. 10<sup>th</sup> still 1.8 cm from the bottom of the last meter stick

2013 Oct. 10<sup>th</sup> bottom of last meter stick

So in 2015 lake level dropped off much earlier than in the past 2 years.

### Lake Levels

*In 2015 the lake level started to rise earlier, max out earlier with a lower than average increase and was low again weeks ahead of 2013-2014 figures. As of now it is still dropping slightly.*

*2015 increase 140 cm-- 2014 247cm --2013 351cm*

*This year Ice Off was 3 weeks ahead of normal*

### **Water Testing Report.**

*Lake testing is a proactive activity much like the annual checkup many of us have at the Dr. If we check out OK we leave smiling and return home happy until the next check up. If on the other hand something shows up most people have it looked at and have it treated. The lake is also a living body and it needs its regular check up and that's what we try to do.*

*Lake water temperatures and oxygen levels were done 1m from surface and 1m from bottom twice each month from April to late October 2015 at a depth of approx 50ft at the southern section of the lake.*

*Temperature and oxygen levels are two basic indications of the health of a lake.*

*Yesterday lake temp was 7.0 C and O2 level was 8.9 mg/l*

*April 5<sup>th</sup> top 8.4 C 8.58 mg/l O2-- bottom 7.9 C 8.29mg/l O2*

*Aug. 8<sup>th</sup> top 21.4 C 5.51mg/l O2-- bottom 13.4 C 0.12mg/l O2*

*2015 oxygen and temperature figures showed similar patterns as past years. If significant changes occurs further analysis and investigations would have to take place. We are very fortunate that the lake flushes out each year as levels rise and drop an average of about 8 vertical feet. This action along with the responsible actions of all lake users is important for the future health of Wasa Lake.*

*An indication of phosphorus levels in the lake water would be of value as they have not been done for several years.*

*Phosphorus is a common constituent of fertilizers, manure and organic wastes in sewage. It is an essential element for plant life, but when there is too much of it in water, it can speed up a reduction of dissolved oxygen in the water. Phosphorus tends to attach itself to soil particles and moves into surface water bodies from run off. It can also migrate with groundwater flows. Bank erosion and lawn run off during floods can transport a lot of phosphorus to water bodies. The increase we have seen in aquatic plant growth and the occasional algae bloom is quite likely, partly due to excess phosphorus entering the lake during the recent floods.*

### ***E.coli Levels***

*The presence of E.coli bacteria is the most appropriate indicator of fecal contamination in fresh recreational water. Recreational waters may be contaminated with fecal material from sewage systems, animals and storm water run off especially during very high water.*

*With the continued support of B. C. Interior Health Association the WLLID trustees took samples for E.coli testing at two week intervals in June, July and August at Wasa Provincial Park's Main Beach and Campers' Beach and also from two other lake front access sites. All 24 samples came back at 5 or less E.coli counts which is very low, and were rated as, "no water quality issues"*

*Once again, we are thankful the IHA has agreed to support the WLLID to conduct similar testing during the 2016 summer.*

*The WLLID does not have the authority to make public announcements about Wasa Lake water quality.*

*The IHA does receive all test results and if consistent high levels were reported then IHA would follow up with further investigations and make appropriate public announcements if necessary.*

*We do share the Ecoli levels in the Tri Village Buzz WLLID reports and on the website.*

***Together we need to create a community of interest, to build and share collective knowledge and "Be the Eyes on the Lake"***