

Wabana Chain of Lakes water quality plan

8/19/2016

MISSION

The Wabana Chain of Lakes Association (WCOLA) is dedicated to maintaining and improving the ecological environment of the lakes and lakeshores in the Wabana Chain of Lakes and the surrounding area in Itasca County, Minnesota. The Association will promote an atmosphere for friendship and community through expanded social interaction among its members and the surrounding lake shore community.

Objective

Protect the quality of our lake waters by using regular secchi readings and periodic water sample collection and analysis for key chemical content as indicators of improvement or potential problems requiring attendant action. Implement AIS inspections and other early indicator methodologies. Communicate other water impacting concerns and take appropriate actions.

Aquatic Invasive Species (AIS) management Plan

Continue funding AIS boat launch inspections partnered with Itasca Water Legacy Partnership (IWLP) and support the Itasca Coalition of Lakes Association (ICOLA) sponsored AIS risk assessment. Encourage Wabana Township continued funding for inspections. Promote use of the ICOLA sponsored PVC pipe Zebra Mussel collections device and an early indicator of problems. Attend and participate in IWLP, DNR, Itasca Soil and Water Conservation District (SWCD) and other conferences and training programs. Disseminate AIS information to the lake owners and users through publications and education. Consider establishment of a team to do shore line inspections especially near boat landings to augment the AIS inspector's efforts.

Water testing plan

Gather all WCOLA water sampling data, provide to RMB Labs and John Downing. RMB Labs will format our data and enter the data into the Minnesota Pollution Control Agency (MPCA) data base. Support MPCA's continued sampling of the chain of lakes for 2016.

Keep in contact with RMB Labs, MPCA, SWCD, DNR, IWLP, and John Downing. Review MPCA analysis from 2015 and prior WCOLA reports on lake quality for definition of trends and sampling sites necessary to continue. With IWLP support, have RMB Labs develop a report based upon trend analysis for our lakes using all our data.

Using RMB Labs analysis and our own, and MPCA suggested procedures, and affordability, the plan developed going forward is as follows:

- Continue volunteer secchi readings at least every two weeks from ice-out through September at sites consistent with MPCA sites plus selected others.
- Implement chemical testing to correlate with and compliment MPCA testing:

Use sampling protocol based upon MPCA guidelines ex timing, water depth, sample handling etc

Sample the same five sites as MPCA and 1 site each on both Little Trout and Little Wabana. Consider dropping Lt Wabana should the information collected suggest

Use certified lab consistently for analysis (ex. RMB labs)

Sample two years in a row at the midpoint of the MPCA ten year cycle

Sample five times per sample year at ice-out (May), June, July, August, and September consistent with dates used by the MPCA

Use certified organization (ex. RMB labs) for sample collection and analysis.

- Analyze for Total Phosphorus and Chlorophyll-a and depend upon MPCA data for other chemicals of interest ex. Nitrogen, dissolved Oxygen etc.
- Make sure all data collected is entered into the MPCA data base
- Fund sample collection and analysis through Association dues and special contributions. Investigate grant funding possibilities

Sampling	2015	2016	17	18	19	2020	2021	22	23	24	2025	2026
MPCA	X	X									X	X
WCOLA						X	X					

Sites	TN	TS	BN	BS	LT	WN	WC	WS	WW	LW
Past	X	X	X	X	X	X	X	X	X	X*
Plan	X	X	X		X		X		X	X

X=WCOLA only

Septic Systems

Provide septic information to all chain of lakes property owners regarding effective use, what not to put in the system, pumping frequency etc. Investigate status of failed systems.

Mercury/Sulfides

Investigate Mercury and Sulfur levels found in the chain of lakes. Determine what levels are dangerous or harmful and prepare/disseminate any warnings necessary. Publish in the newsletter appropriate information.

Permit variance request investigations

Maintain communications with county personnel involved in the permit process and the DNR to be apprised of permits requesting variances to zoning and code regulations on lake property. Attend the on-site investigations and make the government personnel aware of any concerns exposed. Should the need arise, inform the all lake property owners of the issue and seek resolution.

Fish Management Plan

Review the DNR produced Lake Management Plans for Bluewater, Trout and Wabana. Communicate with DNR Fisheries officials to understand their plans. Communicate those plans and other DNR comments with all chain of lakes property owners and ask for feedback. Influence DNR decisions based upon the desires of the chain of lakes property owners

Water testing plan for 2017 and out

Adjust this 10 year plan for secchi readings and chemical sampling as well as AIS control actions using data received and modify the plan as needed. Review report data every three years to determine what if any need for changes in the sampling, frequency, location, methodology, analysis lab.

Maintain on-going memberships with IWLP and ICOLA. Investigate potential relationships with other organizations, including lake associations dedicated to maintaining/improving lake quality. Expand relations with various government functions particularly DNR, MPCA, Forest Services, and SWCD.

Keep the WCOLA membership as well as all Wabana Chain of Lakes property owners aware of issues of concern.