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Outcomes - Ann Lake Stakeholders Meeting #2 - 12/1/21
Ogilvie Civic Center, 6:30 – 8:30 pm

In attendance:
27 people in attendance:
Ann Lake residence: Scot Sandhoefner, Gordon Koncur, Eric Schneider, Lauren Hill-Klemm, Rich Anderson, Amy; Fish Lake Improvement Assn.: Jim Kutil, Dave Gabbert; Pokegama Lake Association: Al Johnson; Ann Lake Twp. Supervisors: Paul Hoppe; ALWA: Sharon Smith, Jeff Hamme, Margot Kohl; Knife Lake Twp. Rep.: Gerald Evenson; SWCD Supervisor: Jon Sanford, SWCD Staff: Deanna Pomije, Josh Votruba; DNR Staff: Ann Geisen, Craig Wills, Leslie George, Erica Hoaglund, Tim Marion; MPCA Staff: Jeff Strom, Karen Evans, Dennis Wasley; Stantec: Dendy Lofton; EutroPhix: Pamela Dugan;

Purpose Statement: This is the second of two meetings for the various stakeholder or representatives of Ann Lake to meet and discuss potential treatment options for Ann Lake. Treatments meant to address the high nutrient content in the lakes' bottom sediment. The goal is to decide on the best treatment for Ann Lake or for the no treatment option.

To begin the meeting Deanna Pomije from Kanabec SWCD gave a brief overview of the first stakeholders meeting that took place in September. The first meeting involved introducing and discussing the various treatment options for Ann Lake to reduce the high internal phosphorus load. These treatments included ALUM, PHOSLOCK, Polyaluminum Chloride, Hypolimnetic Aeration, Dredging, and Drawdown. Following the first stakeholders meeting; the stakeholders were asked to discuss the treatment options with their constituents, seeking comments. Following Deanna's recap of the meeting she went around and asked the attendees/stakeholders their comments received regarding the treatments. Many of the attendees noted that they were in favor of the treatment and would like something done to clean up the lake since the algae has been bad in recent years. Paul Hoppe with Ann Lake Township noted that there is a lot of interest in protecting the tax base and good water quality plays into this. Jeff Hamme mentioned that the Ann Lake Watershed Alliance (ALWA) and many families around the lake endorse a treatment of some sort. A couple of Ann Lake residence previously noted a concern about putting chemicals in the lake. Some expressed concerns over the high cost of the treatments and how to pay for one. Another Ann Lake resident mentioned that if a treatment performed well, it could set a positive example for other lakes in this region.

Overall concerns from the state agencies pertained mainly to wild rice and aquatic animals as a result of a potential ALUM Treatment. Craig Wills with the DNR mentioned that if the original purpose for a treatment is to meet water quality standard and with Ann getting closer to meeting water quality standards; would it make sense to wait for a few years and get more monitoring data. Jeff Hamme responded by asking; How much monitoring data do we need to show there is a trend in phosphorus levels going down?

ALUM

Following the comment opportunity for the stakeholders the State agency's provided comments on the different proposed treatments to address our high phosphorus internal load. A concern of the DNR that what brought up by Ann Geisen was that the ALUM treatment could affect wild rice due to the sulfate in aluminum sulfate (ALUM). Other proposed treatments may not pose a threat to wild rice but are more expensive. With some of the current monitoring results showing phosphorus levels declining, the DNR mentioned the option of doing nothing and continuing to monitor the phosphorus levels in the lake. They stated that Ann Lake is one of the higher quality lakes compared with other lakes in their area. It was brought up that for an ALUM treatment, a fall application makes more sense than spring/summer as this would be less impactful to wild rice since it would be dormant. You wouldn't want to apply ALUM during an active algae bloom.

Erica Hoaglund with the DNR mentioned that if we did decide to go forward with an ALUM treatment that an endangered/sensitive species survey would need to be done before a treatment, since a treatment could potentially impact these species. Depending on the survey results it could also require an avoidance plan completed. The impact to native freshwater mussels was mentioned as a possible concern, as there are mussels in the greater Snake River Watershed. Dennis W. of MPCA follow up saying that about 90% of the invertebrates would not be impacted by the treatment. A very small amount of aluminum would be used.

A concern brough up regarding a potential ALUM treatment was whether it could potentially wash away before binding to the bottom sediment. Camp Creek would flow over the proposed treatment area. Dendy Lofton answered this question by stating, applicators take into account lake conditions and have set requirements for which conditions at which to apply ALUM. In addition, most of the ALUM settles very quickly within 1-2 days. A concern brought up by the DNR was that flood events could cause sediment to resettle over the applied treatment. Resuspension of ALUM was brought up as a concern with boat traffic. Dendy L. commented that at the depth of the treatment – boats will not resuspend the ALUM treatment.

A question that was asked for the state agencies was what kind of phosphorus reduction could we expect to see during the treatment timeline for ALUM? Dennis W. of MPCA responded by saying, that in the MN lakes that have been treated they have seen anywhere from a 20-70% reduction in phosphorus and that they would expect to see a dramatic improvement right away.

Jim Kutil with the Fish Lake Improvement Assn. asked, "When was the last time the lake bottom sediment was tested for the internal load?" Pomije responded by saying that the lake was last tested in 2016.

Overall, the major concerns noted by the DNR on an ALUM treatment to Ann Lake are the valuable natural resources, that could be affected by such a treatment. Ann Lake has a high walleye population, is a popular waterfowl area with the Wildlife Management Area (WMA) on the east side of the lake, and the potential impact to wild rice.

Based on the completed internal load feasibility study, monitoring would be part of the plan as well as adapting subsequent treatment based on the monitoring results.

Ann Lake – current Water Quality – no action alternative

The current state of water quality of Ann Lake was talked about briefly. Phosphorus continues to be monitored by ALWA and is showing some signs of lowered numbers. Chlorophyll-a is also shown to be high in Ann Lake. Someone mentioned that we may lower Phosphorus within standards but not get Chlorophyll-a low enough to delist Ann as impaired. There was a suggestion to redo to Total Maximum Daily Load (TMDL) report from 2013 completed by the MPCA, as the study is dated.

PHOSLOCK

Following the ALUM discussion, Pam Dugan with Eutrophix was asked to review PHOSLOCK with the group briefly. PHOSLOCK is about 95% bentonite clay with ~5% lanthanum. The material is a slurry that is broadcasted over a lake. So far in the US has had approximately 10-20 lakes that have been treated with PHOSLOCK. Currently more known about ALUM in the US, as it is much more commonly used; however, there is a lot of scientific literature on PHOSLOCK, where it is more commonly used in other countries. The appeal to this product over ALUM is that it has no negative effects on wild rice, whereas ALUM may. Pam Dugan mentioned that due to the sensitivities of Ann Lake; that perhaps PHOSLOCK would be a better option than ALUM. The longevity of the product is approximately 8-10 years.

Drawdown

Lastly the final option discussed during the meeting was a lake drawdown. Overall, the DNR mentioned this could be a good option to reduce the phosphorus. There has not been a feasibility study done on Ann for a drawdown. It's suspected that to drawdown the deep section of the lake it may require long distance pumping. However, Jeff Hamme of ALWA mentioned that he does not think there would be enough public support for this option. Dendy Lofton with Stantec also brought up that this treatment would not affectively remove phosphorus buried deep within the sediments.

Following discussion of the treatments Deanna Pomije closed with asking if any of the stakeholders would like to form a subcommittee to research and discuss the different treatment options monthly until a decision is made. Deanna will send a follow up email asking for volunteers for the subcommittee.