

Town of Phelps Lakes Report – 2019

Long Lake

1. In 2018, the Long lake of Phelps Lake District spent approximately \$24, 025 in its efforts to control and manage AIS. These efforts focused on Diver Assisted Suction Harvesting (DASH) and 256 hours of Clean Boats Clean Waters (CBCW) inspections.
2. The lake contains rainbow smelt which is an invasive species. The district is working with the University of Wisconsin-Milwaukee Lake Science Group to control the rainbow smelt by planting lake trout to eat the smelt. While walleye do eat the smelt there is a downside—the smelt contain a chemical that renders walleye eggs infertile. The district is also planting cisco to assist with smelt control.
3. In 2019, the lake district will continue AIS treatment (DASH) and will finalize updating their 5-year Lake Management Plan. The costs for 2019 are expected to exceed \$52,000.

North/South Twin Lakes

It has been a very busy fall/winter where our team has communicated with many stakeholders regarding lake management of the Twin Lakes including;

- Lake District Members
- Mole Lake tribe
- Lac du Flambeau Tribe
- GLIFWC (Great Lakes Indian Council)
- Pioneer lake Association
- Wisconsin DNR

Our purpose was to develop relationships, partnerships and transparency as we all have an interest in protecting our resource, The Twins!

Our efforts to date, have resulted in approval to treat the Twins this spring as follows;

- Treatments will occur after all tribal spearing has been completed
- N Twin Lake (Lakota corridor) will be treated with a chemical called ProcellaCOR. This chemical has very selective impact on EWM with minimal impact on native plants. Additionally, this chemical is rapidly absorbed into the EWM, whereas

other chemicals absorption is not as rapid. This new herbicide, while costly, we are very hopeful will have a positive impact on the EWM creep into N Twin! We expect to see impact of the EWM population diminishing within 2-3 weeks of treatment.

- N Twin will have 15 days of DASH (Diver assisted suction harvesting) in the 25 acres around the island which were treated herbicidally in spring 2017. Last summer we spent 8 days of DASH in this area and expect the 15 days this year should provide a great post treatment cleanup of this colony. This does not mean EWM will be gone, however, we are optimistic to have good control of this area after this summer.

- S Twin will be treated with pelletized Fluridone this summer. This product is a slow release , low dose herbicide which requires an extended contact period to be effective. An initial treatment will occur in late May with bump treatments planned for July and September. There will be a very low level of this product in the water throughout the summer and into ice over. This chemical has been used in many lakes specifically in central and southern Wisconsin where other herbicides have been ineffective. A chemical fact sheet and product label can be found on our website. We have no concerns this will impact fish, water quality or humans. We do expect some impact to certain native plant species and will be monitoring that closely. We believe this is the best herbicide available today for a whole lake treatment where other herbicides, because of the inability of the herbicide to have sufficient contact time with EWM, have been marginally effective. Our long term plan is to monitor EWM closely in 2020 and perform follow up DASH to areas where additional cleanup is warranted.

One critical item for all to be aware of is that this herbicide will take 4-6 weeks before you see the EWM population impacted. The herbicide essentially starves EWM from its' ability to photosynthesis and it slowly dies off. Thus, in order to prevent fragmentation of EWM which will be present in early summer, we are asking all riparians to recreate in water depths > 14' outside of the EWM zone. Compliance with this request will reduce the ability of early fragmentation into our lakes and improve the efficacy of our Fluridone treatment.

The Twins have received grants for both herbicide treatments as well as management activities through summer of 2021. Additionally, we are contemplating an aerial survey of N Twin in order to efficiently identify areas of EWM initial growth before they become extensive.

We plan to update signs at all three landings on the Twins as they are in disrepair as a result of being 20+ years old.

Lastly, we will be talking with both Town of Phelps and Conover about the possibility of having a donation box at each landing which would be used to specifically combat AIS. One possibility is the purchase of equipment at each landing that can be used to spray boats, air compression, and other ancillary devices to specifically combat AIS.

Please check out our Lake District website nsslakedistrict.com which will be our primary means to keep our riparians updated on what is happening on the Twin Lakes!

Smoky Lake

There is an ongoing need for professional remediation services, particularly as the plants grow at a greater depth. Though some volunteer efforts can assist with removal in shallow waters, professional services are required for Diver-Assisted Suction Harvesting (DASH) and hand harvesting by snorkelers when plants grow at depths more than 4-5 feet. In the summer of 2017 the lake depth increased by 2 feet and continued to rise 8 inches in 2018, making professional diver assistance more essential. The Wisconsin DNR has not approved Smoky Lake for herbicidal treatments and so it is limited in pursuing more labor-intensive hand removal options.

Current Grants:

- An application was made for a third Rapid Response Grant for the summers of 2018 and 2019 for DNR funding in the amount of \$20,000. This is the last grant eligibility for this program. This grant application was made by the Smoky Lake Preservation Association, which has been approved as a WDNR Qualified Lake Association.
- A WDNR Lake Planning Grant application was approved in April 2017. This two year grant reflects a project budget of \$30,636.36 and reflects a 67/33

cost-sharing percentage. Much of the planning is to be completed in 2017 and 2018 but with the late award there might be some work that continues into 2019. The Town of Phelps is a sponsor of this grant. Lew Raker is working to coordinate this program.

- A WDNR Clean Boats Clean Waters grant was approved for 2018 funding in the amount of \$2575 to be used toward the \$3434 expenses for the program managed by the University of Oshkosh. A grant was also approved in 2019 in the amount of \$2955 to be used toward the \$3940 total project cost.

EWM Remediation

- The Wisconsin DNR will not authorize the use of herbicidal treatments to address the spread of Eurasian Water Milfoil in Smoky Lake for 2017. The size and density of the infestation do not meet the minimum standards for treatment.
- During the summer of 2017, Many Waters, Inc. provided professional services as consultant and provided remediation through hand removal. DASH (Diver-Assisted-Suction-Harvesting) was planned as well but equipment malfunction prevented the work being done in 2018. These services are primarily financed through DNR grant funds.
- Aquatic Plant Management Services also provided professional hand harvesting by snorkelers with the cost of \$6375.25. These expenses were largely funded using WDNR expenses. It is anticipated that in the summer of 2018 expenses for these services will increase and that funding needs will exceed what is in the grant budget.
- Volunteers will continue to assist in hand removal, but the lake is limited in qualified divers and those able to work with snorkels. Most volunteer efforts are focused on shallow water removal. The summers of 2017 and 2018 saw a substantial increase of depth in the lake. There was less growth in shallow waters but greater concentrations of EWM at greater depths.

- Smoky Lake has established a group of lake monitor volunteers with each assigned a designated area. Volunteers are asked to report on aquatic plant life and to report any new areas of AIS infestation. Lew and Mary Lou Raker oversee this program and assure the documentation of volunteer hours in accordance with WDNR standards.

Education and Outreach

- Smoky Lake has for several years participated in the Clean Boats Clean Waters Program at its own expense without the support of grant funding. Expenses for this program in 2017 ran \$1717 for 100 hours . In 2018 Smoky Lake has contracted for 200 hours of time at the boat landing to help educate boaters about practices that will help stop the spread of invasive species from lake-to-lake.
- Many Waters and trained volunteers help train new Smoky Lake volunteers in proper remediation and lake monitoring techniques.
- Smoky Lake AIS members have continued to reach out to other area lakes to learn more about protocols used to address the practical and budgetary issues of contending with AIS.
- In conjunction with the Lake Planning grant a survey, approved by the WDNR, was sent out to lake-owners and other stakeholders to gather more information regarding lake conditions and usage. The survey results will be included in the Lake Management Plan.

Smoky Lake Property-Owners Activities

- The lake has an active and committed Conservation Committee (formerly Aquatic Plant Management Committee) . It is currently chaired by Lydia Cooley, (cell number 262-689-3153, cottage number, 906-548-9488, email cooley.lydiay@gmail.com)
- In October 2016 the Smoky Lake Preservation Association was founded as a Wisconsin Corporation. In the spring of 2017, this association received approval as a 501c3 organization from the IRS. In December of 2017, this

association was approved by the WDNR as a Qualified Lake Association and The Smoky Lake Preservation Association is now able to apply for grants without the need for sponsorship.

Closing Remarks

The funding awards by the Town of Phelps Lakes Committee have been greatly appreciated and used to help in Smoky Lake efforts to abate the spread of EWM in its waters. We recognize that these waters are used and appreciated by others beyond our immediate lake community.

Lac Vieux Desert (LVD)

LAC Vieux Desert 2018

- WI DNR stocked 40,800 large walleye fingerlings
- Year 1 of our two year lake management plan update
- We had 7 days a week Clean Boats Clean Waters inspectors at the Thunder Bay Landing
- We hand removed and suction harvested EWM from the beginning of June until late September
- The lake association worked with the LVD Tribe and stocked 1.7 million walleye fry into the lake
- Several plant surveys throughout the year

For the past 5 years we have been averaging about \$18,000 per year in survey work and EWM removal efforts. This year we do not have any grant money to help us remove EWM from our lake, it will be all out of pocket so any help that we can get would be appreciated.

This is what is planned for LVD for the 2019 season:

- Many Waters will be doing several plant surveys along with hand pulling and suction harvesting EWM.

- We will be participating in the Clean Boats Clean Waters Program again this year.
- The LVD Lake Association will be running their walleye hatchery.
- WIDNR is supposed to stock about 1,000 musky fingerlings in the fall.
- Our Lake Management Plan is now 6 years old so it is out of date, we are in the second year of updating our Lake Management Plan which we believe will be a two year process. We are hoping to finish the update and be applying for grants next year.
- The LVD Tribe has put in a request to lower our lake level 12-18 inches to help promote growing rice, we will be contacting all property owners and see what the general consensus of the property owners are before taking action.

Kentuck Lake

As in past years, we continue to experience high phosphorus levels related to internal nutrient loading which subsequently results in blue-green algal blooms during the summer months. Occasionally, these algal blooms become toxic (cyanobacteria) and it is then advised that people and pets not enter the water. We continue to conduct water sampling every 10 days/17 times from shortly after ice-out until mid-October.

As you are aware, the Board of Commissioners had been researching the possibility of installing a destratification system in the deep hole on the northeast side of the lake in hope that this will solve our water quality issues. We have been working with Onterra, LLC, and based on the results of their research and our water sampling they strongly believe that installing this system will be of great benefit. Since this project needs the approval of many entities including the Mole Lake Tribe, GLIFWC, USDA and more, this project is on temporary hold at least until 2020-2021.

We are keeping a watchful eye on the Eurasian Water Milfoil (EWM), and have no plans to do any treatment in 2019. There are numerous patches of EWM but as of last summer these did not create any problems with boat navigation.

In 2019, KLPRD applied for and received a WDNR grant to help monitor boat activity through the Clean Boats Clean Waters program. With this funding we are able to pay a UW-Oshkosh student to assist in monitoring the Phelps Town boat landing and federal boat landing at the Kentuck Lake Campground to prevent the spread of AIS. We also have several people residing on Kentuck Lake who have been trained in identifying AIS and who conduct boat inspections at both landing to help defray costs. However, as our lake members age their ability to volunteer declines. As a result, the KLPRD has incurred additional costs to continue the CBCW program.

Imogene lake

1. Imogene Lake continues to be AIS free.
2. Lake water continues to be stained with tannin from an adjacent wetland.
3. Lake Monitoring continues through the Citizen Lake Monitoring Network (CLMN) program.

Big Sand Lake

The Big Sand Lake Property Owners Association in 2018 conducted water quality testing and as expected Big Sand has excellent water quality. We again participated in Clean Boats and Clean Waters. A point intercept survey was conducted to track the growth of Eurasian Milfoil which was recorded at a reading of 5.4. This reading is statistically unchanged since 2015. We had set a trigger point of 15 for a full lake treatment. So this was very good news. With the help of the Mole Lake Tribe a fish survey was conducted, and this year another survey will be done for comparison to provide data for our walleye stocking program. We were unable to stock walleye in 2018 because the DNR had reinstated a strain requirement and no fingerlings of the required strain were available.

In 2019 we will again be doing water testing, Clean Boats & Clean Waters, a point intercept survey, a fish survey, and walleye stocking. This year we will be stocking 5000 walleye fingerlings (6-8 inches in length) at a cost of \$10,000 from the Mole Lake Tribe. Because of this commitment the Tribe has graciously decided to donate an additional 2090 walleye for a total in all of 7090 fingerlings.

Spectacle Lake

The Spectacle Lake District has retained the services of White Water Associates, Inc.

In September, 2018, monitoring indicated that the lake was holding its own. The average transparency reading was 13' and would be classified as "good." The values for phosphorus and chlorophyll "a" are quite low. This, combines with the high Secchi transparency readings would suggest a classification of oligotrophic which is excellent. The pH is near neutral.

A zooplankton tow conducted at three locations to look for AIS found only native species. A meander search along the shoreline identifies one invasive species, Chinese mystery snail (CMS). There was one live and two dead CMS along the water's edge. There was one live CMS found by the boat landing. This findings are consistent with previous survey findings.

The Spectacle Lake District commissioners will be meeting with the Phelps Town Board at their June meeting to discuss ordinance questions.