

PIPE & NORTH PIPE LAKES PROTECTION AND
REHABILITATION DISTRICT

Commission Meeting
Saturday January 15, 2022
Remote meeting by Zoom

Attending:

By Zoom conference call

Jan Breyer, Natalie Lovejoy, Tim Larson, Jim McCarthy, Gene Schultz

Prof Joe Magner - guest

Public attendees: over 6 lake residents participated in the meeting by Zoom.

Meeting:

The meeting was convened by Zoom video conference call at 9:00 am. The minutes of the prior meeting (Oct 15, 2021) were reviewed and approved.

Treasurer's Report:

The most current financials through 12/31/2021 were presented and approved. Gene Schultz screen shared the year end income and expenses, the account balances and the Grant summary. Income was \$19,227.01, expenses \$18,282.52. The year- end totals do not reflect invoices of @\$11,000 for the Grant studies because they were received in January 2022. Bank balances were \$68,459.39 in checking, \$25,491.71 in Rapid Response Savings.

No Town or County reports

Water Quality Study Updates:

Commissioner Tim Larson provided a summary of the Internal Load and Geochemistry reports. Tim reported that the Internal Load study by Prof James concluded that there is not significant internal loading from the phosphorous stratified on the bottom of North Pipe. Tim then discussed the role of algae in North Pipe. Blue green – cyanobacteria- algae are present but do not appear to be causing release of phosphorous from bottom sediment layer. While it is possible for bottom sourced algae to be treated with alum treatment, an alum treatment is not recommended as a long-term treatment.

Greg Warner commented that blue green algae is present in North Pipe. There is a toxic form of the algae and it is found in the bottom sediment layer. However, up to now that toxic type is not communicating to the upper levels of North Pipe.

Larry Bresina said that Lovelace Lake near Balsam experienced a toxic bloom resulting in dark blobs. He said that if anyone sees dark blobs to notify the District and try to retrieve them so that they can be analyzed.

Natalie Lovejoy said that testing provides only snapshots. She sees blobs every day in the morning but then they disappear later in the day.

Tim Larson noted that all testing is based on snapshots but that the species are found at all levels and the species identified do not change.

Greg Warner inquired about aeration as a solution. Larry Bresina responded that aeration was attempted in Vadnais Lake in St Paul but was stopped because it caused more problems than it solved.

Tim Larson then discussed the Geochemistry study conducted on both Pipe and North Pipe. The study points to the importance of individual lake lot management. Tim reported that last Monday he met with Dr. Udai Singh, Prof Joe Magner, Jeremy Williamson, Larry Bresina and Jan Breyer. Dr Singh is currently with the Mississippi Watershed Management and was previously with the Minnehaha Creek Watershed. Dr. Singh suggested the construction of weirs to measure runoff. Tim Larson made a motion to approve up to \$5,000 for construction of V notch weirs to measure run off. The motion passed.

Other items discussed were updating the 2018-2023 Lake management Plan; using a landscape architect to develop plans for lake lots, undertake year-round precipitation measurement, and redo the bathymetry of North Pipe. There was discussion whether lake lot runoff affects North Pipe as much as it does on Pipe.

Natalie Lovejoy inquired why there has been such a large algae bloom this summer. Is it legacy phosphorous? Tim Larson said that the Internal Load study by Prof Bill James does not support theory of legacy phosphorous being a significant contributor to the problem.

Algae Treatment - Sonic Buoys

There was discussion about an algae treatment device sold by LG Sonic. It sells a buoy that emits an ultrasound that causes algae to freeze up and fall down to the bottom of the lake. It also records lake statistics and the type of algae present.

LG claims the buoy can reduce algae blooms up to 85%. The buoy is 3' wide by 5' long. It is solar powered. It costs \$61,000 per buoy plus an annual monitoring fee (\$8,000?). North Pipe may need 2 buoys. No LG sonic buoys have been used in Wisconsin. LG Sonic representatives claim the buoys work on recreational lakes although most uses to date have been on municipal water treatment ponds. It was agreed that we need more information about the buoys and their track record on recreational lakes similar to North Pipe. There was also discussion of possible funding sources- state, county grants, lake owner contributions in addition to Lake district funds.

Natalie Lovejoy stated that LG Sonic indicated that federal grants may be available for the purchase of their equipment. Natalie will follow up with LG Sonic and the Wisconsin DNR to get more information.

Updated Lake Map

Natalie Lovejoy reported that the names are updated. They still need to be transferred to the map before it can be printed. They plan for it to be ready for distribution in May, 2022.

Data Archiving and Maintenance.

Jan Breyer updated on possibilities for database hosting and management. No proposals agreed to and no action taken.

Public Discussion

Larry Bresina asked about a monitoring program for the 2022 season. Tim Larson agreed to make a list of lake and tributary monitoring planned for 2022.

Adjournment.

The meeting was adjourned at 10:45 am

Respectfully Submitted,
Jim McCarthy, Secretary