

Colon Township Lake Board Meeting Minutes

September 25, 2023

Colon Township Hall, Colon, MI

1. Call to Order: Chairman Borgert called meeting to order at 9:00 AM
Approval of agenda Tenney/Bell, all yes
2. Roll Call Board Members Present: Borgert, Bell, Conklin, Crawford, Tenney, Wenzel. Absent: None
3. Roll Call Advisory Committee Members Present: Bell, Borgert, Camper, Charles, Costello, Crawford, Tenney. Absent: Gentz, Newman, Schneiter, Taylor.
Paul Hausler from Progressive AE and Andy Tomaszewski from PLM were also present. Please note in the minutes both gentlemen will be referred to by their first name only with no reference to their company affiliation.
4. Motion, by Wenzel & second by Tenney to approve minutes of September 9, 2023 meeting. All yes, Motion carried.
5. New Business
 - a) Tenney reviewed the E-coli readings from 9/13. Levels in the creeks remain high, but the readings in Palmer Lake are in acceptable ranges. Bell suggested testing just past dam West of Matteson Lake. Some discussion took place about E. coli levels in Matteson Lake and the inlets and outflow. Paul suggested that E. coli gets diluted in the lake and thought the levels coming over the dam would be low but testing could be beneficial.
Motion, by Crawford & second by Bell, to include testing the water outflow just West of the dam at Matteson Lake when the October water samples are taken. All yes, Motion carried.
One additional test to be done on or about 10/9.
 - b) Paul reviewed the previously approved testing proposal for the 2023-2024 Big Swan Creek and Little Swan Creek Watershed and provided a map of the watershed area. Progressive AE intends to test 6 sites a total of 8 times during the testing period from October 1, 2023 to September 30, 2024. A total of 4 tests will be taken during low flow periods and 4 tests will be taken during high flow periods at each test site. Testing results would be used in applying for grants and creating a watershed management plan. Paul also believes that including Big Swan Creek, Little Swan Creek and Matteson Lake in grant applications makes sense and increases the likelihood of approval of a watershed management plan. However, there are no guarantees as there are many applicants and little funding at the state level.
 - c) Andy reviewed the treatment of Lilly Pads done in mid-September. The access lanes across the Palmer Lake channel were treated on the edges because the Lilly Pads were starting to encroach on the navigation lanes. The North and South sides of the long dock just North of the Decker Road bridge were re-treated this year at no cost. The treatment last year did not have the desired effect of opening navigation lanes around the dock. Bell asked if the navigation lanes around the dock appeared to have any use. Andy replied they looked like there was minimal use. Discussion was had about the need for use of the navigation lanes to keep the Lilly Pads from encroaching each year. Andy felt the macrophyte treatments this year were at the lowest levels he can recall. Paul noted that Starry Stonewort was not present in the surveys but said several thin leaf pondweeds were found in their surveys. Andy said late summer water samples were taken and expects to issue a report in November or December.
 - d) Much discussion was had about applying for a permit for treating Long Lake with Phycomycin to remove the Limnospira algae, which is predominant in the water column. Andy and Paul both said copper-based algaecides are the preferred method of treating algae

but agreed that restrictions imposed on copper-based algaecides by EGLE would most likely not be permitted. Andy said SePro recommends treating the water with Phycomycin after their review of the SeScript analysis done earlier this year. The proposal put forth by SePro notes that a Phycomycin treatment was done on Bass Lake in Michigan, but there was no information about the location of that lake. Borgert suggested that a permit must have been granted for Bass Lake to be treated. Andy noted that it is very difficult to shift a lake from an algae dominated system to a macrophyte dominated system. There was a lot of discussion about treatment timing and dose rates. Andy believes the dosage rate would be determined by the number of algae present at the time of treatment and thought another water sample would be needed just before treatment. Further discussion was had about how long the water clarity would last. Andy and Paul both said they had no experience with Phycomycin and said water clarity would depend on a lot of factors, so they were hesitant to give any guidance. The goal of removing algae from the water column is to improve water clarity, allowing rooted macrophytes to start growing and compete with the algae. Paul and Andy were not sure how viable the macrophyte seed beds were after such a long period without much growth. There was a question posed about retreatment. It is believed that any treatment would be at a reduced rate and would largely be determined by the number of algae present and the permit approved by EGLE. Andy said the permitting process would require a lake management plan and Andy believes he has all the data he needs to prepare the EGLE permit application. Costello asked about the secondary effect the gizzard shad may have on the algae and turbidity. Borgert suggested there is a very limited number of zooplankton to eat available algae and the algae available is not their preferred food source. Dr. Bishop from SePro was called to help answer some of the questions brought up in our earlier discussion. Dr. Bishop did not have a lot of information about the Phycomycin treatments done previously on Bass Lake, nor the location of Bass Lake. He did note Bass Lake had an intense monitoring program in place when the treatment was done. He also did not believe any treatments had been done on Bass Lake in the last couple of years.

Question: Is Phycomycin application rate dependent on number of algae present? *Dr. Bishop said treatment rates would be dependent on the number of algae present prior to treatment. He also suggested that secchi disk readings would be helpful to determine dosing rates. Andy asked Dr. Bishop if they could expedite testing prior to treatment and Dr. Bishop indicated that could be accommodated.*

Question: When should a Phycomycin treatment be done? *Dr. Bishop said treatment should be done early in the bloom to reduce application rates and hopefully reproduction rates.*

Question: Where should the water column be treated? *Dr. Bishop recommends treating the top 4 or 5 feet of the water column.*

Question: Will the flushing rate of 14 days create any issues? *Dr. Bishop said the flushing rate should not create an issue for Phycomycin to be effective as it does not stay in the water column very long.*

Question: How should the lake be treated? *Dr. Bishop said the proposal would be to treat half of Long Lake, then treat the other half of Long Lake a week later. Dr. Bishop said the same areas of the lake could be treated twice, at the South end, rather than treating the same water twice as it moves through Long Lake.*

Question: Dr. Bishop wanted to know if the algae was growing in the lake or delivered through Swan Creek. *Borgert and Andy agreed the water coming into Long Lake through Swan Creek had much more clarity than the water in Long Lake leading to the belief that the algae is growing in Long Lake.*

Question: Will treatment be required on a yearly basis? *Dr. Bishop said this is a complicated question. He believes clear water would allow macrophytes to establish and grow, reducing the nutrients available for algae. Depending on the success of the macrophytes in the lake it could take multiple treatments/years to achieve the desired results. Any retreatment*

rates would depend on Secchi disk readings and algae type/density in the ongoing monitoring program.

Conversation with Dr. Bishop ended at this point.

Bell questioned the need to treat Lepley Lake as it is a contributor to Long Lake. Paul said treating Lepley Lake would be difficult and should be tested prior to deciding on treatment. Costello said Phycomycin would be used up fast and should not have much residual effect based on his understanding of the science behind the makeup. Paul suggested Phycomycin will be most effective in the first 24 to 48 hours. Phycomycin would be applied on the surface and with drip lines about 12 inches below the surface. Phycomycin will slowly sink and be used up by any algae it encounters. Crawford asked for recommendations from Paul and Andy. Paul stated the cost of a Phycomycin treatment is prohibitive and it is not used very much in Michigan. Paul said copper products are more effective and less expensive, but EGLE restrictions would not allow an early spring treatment. Andy said this is uncharted territory for him. Andy was not sure if Phycomycin would work, but also noted that no other treatments have been effective. Andy acknowledged that a Phycomycin treatment may be a last effort to reduce the algae. Andy said this type of treatment would be an evaluation that all parties would be watching closely. Andy did not have a recommendation. Charles asked if other algae could be introduced into the system to make a difference. Borgert stated the limnotherix is very dominant and must have an advantage over other algae species. Borgert believes the limnotherix would outcompete any other algae introduced. Wenzel asked about the complaints received about the water clarity. Several people acknowledged receipt of complaints. Costello believes many riparian's have learned to accept the water clarity. It was agreed that all riparian's would prefer to have better water clarity.

Motion, by Crawford & Second by Tenney, was made to move forward with the application for a permit to treat Long Lake with Phycomycin per recommendations by SePro. All yes, motion carried.

The cost for the treatment is around \$60,000.00. Andy said that is just an estimate and will need to be adjusted based on testing/monitoring requirements in the permit issued by EGLE.

- e) No public comments.
- f) 2024 Lake board meetings scheduled for 4/13, 5/11, 6/8, 7/13, 8/10, and 9/14. All meetings are scheduled to be held at the Colon Township Hall at 10:00 a.m. Public welcome.
- g) Motion, by Wenzel & second by Bell, to adjourn at 10:39 All yes, Motion carried.

Respectfully Submitted,
Jim Crawford
Colon Lake Board Secretary