

PLATTE LAKE IMPROVEMENT ASSOCIATION
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www.platte-lake.org

Dear PLIA Member:

Greetings from Platte Lake. It has been some time since our last newsletter and we have new information to share related to our ongoing implementation of the MDNR/PLIA Consent Agreement and status of hatchery and lake related studies.

CONSENT AGREEMENT

For reference, the Consent Agreement that the PLIA entered into with the DNR on March 10, 2000 was structured in three phases: Phase I- Construction, Phase II-Three year test period and Phase III-Five year compliance period. We are presently in the second year of three year test period. The period ends June 30, 2007. During the three year test period the discharge is limited to 225 lb P (Phosphorus)/yr and a maximum of 70 lb P/3 months. The limits reduce to 175 lb P/yr and 55 lb P/3 months in the five year compliance period.

For 2005, the Hatchery discharge was 226.2 lb P versus the 225 lb P limit and the three month 70 lb P limit was violated in October 78.3 lb P and November 77.4 lb P. This resulted in \$8000.00 in fines paid to the penalty fund to be used for lake and watershed improvement projects.

The DNR attempted to run the hatchery at maximum design production and essentially found that they could not comply with their court mandated discharge limitations. As a result, an extensive amount of hatchery process studies and related modifications are under investigation to reduce phosphorus discharge. Additionally, since the demand for hatchery reared fish has been reduced due to the lack of alewives, etc. in the Great Lakes, the Hatchery is reducing production to further reduce discharge. Chinook salmon production was reduced from 4.065 million to 2.7 million and Coho Salmon production was reduced from 1.5 million to 825 thousand.

Bi-weekly meetings/phone conferences continue between the PLIA, DNR and Dr. Canale, Settlement Agreement Implementation coordinator. The meetings are complete with Agenda, Minutes and related action items. I must say that this has continued since the Agreement was signed on March 10, 2000 – six years and still going! The meetings have been extremely productive and the DNR has been very receptive to new ideas on hatchery process changes suggested by Dr. Canale and I. Having worked in the corporate environment for 33 years, I can attest to the fact that having someone from the outside suggesting how to run your facility is generally not immediately received with great enthusiasm much less their ideas implemented. Gary Whelan, State Hatchery Operations Manager, has been able to put aside “all defensiveness” and exert the leadership to do what is right. As a result, some of the matters being seriously researched could potentially result in up to a 50 % reduction in Hatchery discharge. I know this seems to drag on and on for those of you who have been with us for a long time, but we are getting close to some significant break throughs. The lake will be the ultimate benefactor. Bear with us.

Additionally, Dr. Canale has completed a detailed Hatchery process phosphorus mass balance and an interactive Hatchery process model that includes the bio-energetic input of fish rearing, etc. The model was demonstrated at an all day May 5, 2006 Annual Review meeting at the Hatchery. The model allows one to thoroughly evaluate Hatchery process flow and fish rearing scenarios related to maximizing growth, food utilization and minimizing discharge in an effort to fine tune decision making related to facility operation. It is a significant value added accomplishment.

PLATTE LAKE

The total average lake phosphorus concentration increased last year to 8.18 ug/l (micro-gram per liter). This was up from 7.1 ug/l in 2004. It appears that in addition to an increase in phosphorus discharge from the hatchery, we had a significant pollen deposition event directly into the lake during the extremely dry spring which continued until the rain events of the Fourth of July weekend. Hopefully things will be different this year I must add it is pouring rain in torrents as I am writing this.

In an effort to determine what else has to be done to bring the lake into attainment of the 8.0 ug/l in lake phosphorus standard, a watershed flow and phosphorus mass balance have been completed as well as preliminary steady state and seasonal water quality models for the lake. A detailed Platte Lake sediment study has been completed and the results are available for the lake models. A phosphorus bioavailability study has been approved and we expect a graduate study to be selected shortly. This is especially important as some forms of phosphorus are more readily available for plant use than others. We need to understand what they are and use the results to guide our lake and watershed management practices. We suspect the results could be very profound.

Additionally, a project for the calibration of the previously developed Platte River Watershed EPA BASINs model with an enhanced user interface has been commissioned. This \$35,000.00 project has been funded by accumulated penalty funds as well as approx. \$17K in direct PLIA funding. Limno-Tech of Ann Arbor is the contractor. Once completed, we should have a tool to predict the impact of changes in watershed land use and related point and non-point source discharges and their effect on the attainment of the 8.0 ug/l in lake phosphorus standard. This will allow us to determine with accuracy the impact of proposed future development as it relates to Platte Lake and be a guide for our acceptance/rejection of such proposals. We expect project completion by year end 2006.

Based on what we know today, we need to remove additional phosphorus from the watershed to ensure compliance with the 8.0 ug/l standard 95% of the time which is our goal for lake restoration. We must look to reducing other sources than the Hatchery.

WHAT YOU CAN DO?

As stated at the Annual meeting last year, we are proud to say that Lake Township has modified its zoning ordinance to further reduce the phosphorus load to the lake. For complete details, the

ordinance is on the PLIA WEB Page. Bottom line, phosphate containing fertilizer is banned. Also, do whatever you can to clean the beach and remove washed up vegetation and organic matter to a place where it cannot re-enter the lake. I have personally removed 10 wheelbarrow s full of chara which is the spongy green filamental algae that grows on the bottom and is now washed up on the beach of the north shore in wind rows. In some places it is buried by a half inch or less of sand and is up to a foot deep and four or five feet in width from the edge of the lake. Also, please collect all clippings within 25 feet of the lake when mowing. Dispose of them where they cannot re-enter the lake.

We have been in contact with the Benzie County Planning Commission in an effort to propagate the Lake Township zoning changes and phosphate fertilization ban. They are responsible for the zoning of Benzonia Township. It is our understanding that they will not get to the matter until later in the year. We urge all of those in Benzonia Township to contact/urge the Benzie County Planning Commission and Township Commissioners to adopt the Lake Township ordinance and related phosphate fertilization ban. It is the right thing to do for Platte Lake. Please let your voice be heard.

There is no reason we all cannot personally practice what Lake Township has enacted last summer.....start now! Stop fertilization. If you must, use a phosphorus free fertilizer. If you have a lawn service, insist they use phosphate free fertilizer and if they won't comply, find another lawn service. Don't take no for an answer. Additionally, I will attempt to drum up support for a phosphate fertilization ban for the entire State of Michigan. The State of Minnesota has already enacted for non-agricultural uses.

SUMMARY

A lot has been done toward improving Platte Lake and we have seen the results. A clear pristine Platte Lake can be attained. Our effort now is focused on attaining it year after year after year in spite of changing weather conditions, etc. This will require continued vigilance and determination to stay the course and do what is right in spite of any and all distraction.

Please send in your dues and any contributions you can afford as we still need money to fund the effort. Please note that we are a 501C3 organization and contributions are fully deductible.

Please feel free to call or e-mail with any questions, comments, concerns and observations.

Thanks,

Wilfred Swiecki

President, PLIA

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