

Little St. Germain Lake District
1599 Shields Road
St. Germain, WI 54558



Little St. Germain Lake District Board of Commissioners
& Term Expirations

Elected commissioners

President	Ted Ritter	September 2010	tritter3@verizon.net
Secretary	Lou Mirek	September 2009	ljmirek@verizon.net
Treasurer	Erv Stiemke	September 2008	info@stiemkesresort.com

Appointed commissioners

Town Bd.	Todd Wiese	Open ended term
County Bd.	Craig Weberg	Open ended term

Newsletter #1
Winter 2007-08

The Board of Commissioners of the Little St. Germain Lake Protection & Rehabilitation District hopes you find this newsletter a welcome improvement over past communications.

The newsletter is one of three methods by which communications between the Board and district property owners will be improved. Please look for information in this edition regarding a website in the making and an e-mail broadcast system now ailable to you.

Mailing labels for this newsletter will always be obtained from Vilas County tax records. ***Please DO NOT request address changes from your Lake District Board of Commissioners.*** All address updates must be made in writing to the Vilas County Treasurer at 330 Court Street, Eagle River, WI 54521. Be sure to include your parcel computer number as it appears on your tax bill when requesting a mailing address change.

Your e-mailed comments regarding this newsletter will be welcome at: **tritter3@verizon.net**.

In This Issue

- | | |
|---------------------------------------|--|
| - Website coming | - E-mail broadcast system available |
| - Water clarity improvement status | - Invasive species update |
| - Beaver control on Muskellunge Creek | |

E-MAIL BROADCAST SYSTEM NOW AVAILABLE

Would you like to be kept better informed about newsworthy happenings regarding Little St. Germain lake? If so, please send a brief e-mail message to **tritter3@verizon.net** requesting your name and address be included on the Little Saint e-mail broadcast list. Information of interest will be sent periodically to all names on the list.

Names will be kept confidential:

- Individual names and addresses will not appear on the broadcasts.
- Names and addresses will not be provided to organizations who often buy such lists.

The Board of Commissioners hopes you take advantage of this efficient method of sharing important information in a timely and cost effective manner.

Please submit your name and e-mail address today to **tritter3@verizon.net**.

WEBSITE COMING!

Our lake district will soon have a functioning website. It will offer access to both historical and current information including meeting minutes, financial statements, lake study reports, the status of ongoing invasive species management efforts, native plant control programs, summer buoy and winter aeration projects, a history of district equalized valuations and tax levies and much more.

The website will be Internet accessible before spring, 2008. Its address will be announced via the e-mail broadcast system discussed above.

WATER CLARITY IMPROVEMENT UPDATE

Few lakes undergo the extensive studies that have been conducted on Little Saint to determine the cause of and possible remedies for annual algal blooms. Many of you have been asking for years when the studies will end and a fix will be found. The Board of Commissioners is now happy to announce **there is nothing left to study!**

Every conceivable source of phosphorous loading has been evaluated from ground water flows around the lake, to absorption of nutrients into Muskellunge Creek, to concentrations of phosphorous in the lake bottom sediment. These lengthy studies, conducted by professional consultants, often with State funding, have revealed much about the complexity of the lake. The study findings (soon to be available on the lake district website) make great reading for anyone with a bend toward limnology or sufferers of insomnia!

Two primary sources of phosphorous trigger annual algae blooms in Little Saint:

1. Muskellunge Creek water flow doubles in volume between Muskellunge Lake and Little Saint. The water volume increase is from ground water flowing into the creek between the two lakes. The watershed soil is rich in natural phosphorous which enters the Creek and is carried downstream to Little Saint. That explains why East Bay experiences the worst algal blooms.
2. Phosphorous from Muskellunge Creek, from in-lake plant decay and from groundwater, settles to

Continued: WATER CLARITY IMPROVEMENT UPDATE

the lake bottom where it accumulates in the sediment. Core sample analysis indicates that phosphorous in the sediment is a major contributor to algal blooms.

The combined effect of these two sources cause blooms of varying intensity and duration. Since rainfall in the watershed varies dramatically from year to year and even from week to week within a year, the amount of phosphorous entering the lake from Muskellunge Creek causes “spikes” in algal blooms already triggered by phosphorous laden sediment.

Options for managing phosphorous in both Muskellunge Creek and the lake sediment have been considered. Barr Engineering in Minneapolis specializes in this topic and has experience with improving water clarity by introducing ALUM (aluminum sulfate) to water bodies. Information on ALUM TREATMENTS TO CONTROL PHOSPHOROUS IN LAKES can be reviewed in a WI DNR document on the Internet at: http://www.dnr.state.wi.us/org/water/fhp/papers/alum_brochure.pdf

Barr has concluded that due to a variety of reasons (primarily cost related), in-stream treatment to remove phosphorous in Muskellunge Creek is not feasible. While in-stream phosphorous management has been highly successful in some situations, it is not a practical solution for Little St. Germain Lake.

Barr does believe, however, that managing the phosphorous in the lake sediment would have very favorable results. Predictions are that water clarity levels common in spring (not crystal clear, but far better than mid-to-late summer) could be maintained throughout the summer and that the “spikes” could be eliminated. A single treatment (split over two years to minimize pH impact) would likely produce significant improvement in water clarity for up to ten years.

The cost of ALUM treatments is very high. The Board of Commissioners is considering possible funding options. Public information meetings will be conducted next spring and summer to provide district property owners opportunities to learn more about Barr’s study findings and how an ALUM treatment program could be paid for. In the meantime, a request will be made of the DNR to evaluate Barr’s study findings. A vote will likely be taken at the 2008 lake district annual meeting in September to determine whether or not to implement Barr’s recommendation.

Two public informational meetings to provide more details about the proposed ALUM treatment program and possible methods of funding it will be held in the St. Germain Community Center:

Saturday, May 24, 2008, 9:00am

Sunday, July 6, 2008, 9:00am

Please be watching for more information in e-mail broadcasts on this long awaited potential program for reducing algal blooms.

BEAVER CONTROL ON MUSKELLUNGE CREEK

It became apparent over the years that beaver activity in Muskellunge Creek was not helping the algae problem in the lake. Beaver activity over many decades had resulted in impoundments where water was able to absorb nutrients from the soil before meandering downstream into Little Saint. Efforts to improve water clarity in the lake had to begin with beaver management.

The Board of Commissioners contracted with the U. S. Dept. of Agriculture Wildlife Services in 2006 to remove all beavers and their handy work from Muskellunge Lake to Little Saint. Workers removed approximately 25 to 30 old dams and lodges that they predict had been accumulating in the stream for the past 40 years or longer. Very few beavers were found. By the end of summer, 2006, the stream was flowing fast and cold with no impoundments. The degree to which this project reduced phosphorous from entering Little Saint is uncertain, but the effort was certainly beneficial.

USDA Wildlife Services was contracted with again in 2007 to continue monitoring the creek from the ground and via aerial observation. End of season reports were that no new beaver activity had yet occurred and the stream continues to flow unobstructed.

INVASIVE SPECIES UPDATE

Curly-leaf pondweed (CLP) and Eurasian Watermilfoil (EWM) continue to challenge the dedicated volunteers who are determined to keep these two very invasive plants below nuisance levels.

The high density plant masses in portions of East and No-Fish bays in the years leading up to 2003 were identified in 2002 as CLP. This rude awakening to the realities of aquatic invasive species launched the Board of Commissioners and several volunteers into an action plan that has proved to be time consuming, expensive and never ending.

Although CLP has seemingly all but disappeared since a chemical control program was initiated in early 2003, it is only because of unwavering commitment to a long term management plan that the lake can be enjoyed without encountering CLP high density colonies. The same is true for the EWM management program launched in 2004.

Efforts to manage these invasive plants on Little St. Germain Lake have been critical to the development of CLP and EWM "Best Management Practices" for the DNR's 18 county Northern Region. A five year management plan written in 2003 by lake resident John Manki lead to a 50% cost share grant from the State of WI. The five year plan carried a projected implementation cost of \$240,000 of which the State committed to paying \$120,000. Until recently, ours was the only lake in the Northern Region to have a long term plan and State funding support for managing invasive plants. As of spring, 2008, most of Vilas County's other 20 lakes known to harbor EWM will have DNR approved management plans and State cost share programs in place. The plans for those lakes have been developed partially based on what has been learned from invasive plant management efforts on Little St. Germain Lake since 2003.

We will enter the fifth year of our program in 2008. The wheels have already started turning for developing an updated long range plan to carry us forward starting in 2009. Much has been learned about CLP and EWM management during the initial five years. The new plan will reflect improved methodology as now mandated by the DNR. Additional funding will also be sought, but only time will tell how much financial support we will be awarded by the State.