

LITTLE ST. GERMAIN LAKE PROTECTION
AND REHABILITATION DISTRICT
ST. GERMAIN, WISCONSIN

Elected Commissioners

Steve Sward, President
Erv Steimke, Treasurer
Lou Mirek, Secretary

Appointed Commissioners

Ted Ritter, Town of St. Germain

ROLL CALL: Meeting called to order by Steve Sward at 9:00 am at the St. Germain Community Center. Commissioners present were Steve Sward, Erv Stiemke, and Lou Mirek .
? absences. Approximately 33 Lake District members were present.

APPROVAL OF AGENDA

Motion to approve by Carol Kohloff
Seconded by Ted Ritter
Motion approved by unanimous vote.

REVIEW OF MINUTES 2006 ANNUAL MEETING by Steve Sward

Motion to approve the 2006 Annual Meeting Minutes was made by Lee Holthaus
Seconded by Dick Kenney
Motion approved by unanimous vote.

FINANCIAL REPORT/BUDGET & ESTIMATED SUMMARY OF 2007 EXPENSES by Erv Stiemke

1. Reviewed financial report year ended December 31, 2006 (see attachment)
Steve Sward – footnote for grant money
2. Erv Stiemke reviewed the budget and estimated summary of 2007 expenses (see attachment)

Native Weed Control:

We actually saved \$5000+ so our total estimated expense should be about \$13,000. The budgeted amount was \$18,000.

Exotic Weed Control:

The expenses are much higher than the budget due to many colonies being found. The DNR approved our request for treatment so the treatment was done. Footnote (a) indicates \$25,440 of grant money was used for this purpose. The \$25,440 is one-half of the DNR grant money.

Robert Nussbaum raised the question that the 2007 budgeted amount of \$22,000 for Exotic Weed Control does not reflect the \$25,440 from the DNR. Erv states the public wanted to see the numbers of the actual expenditures, therefore, the report was written this way with footnotes to explain. Steve Sward agreed with Bob Nussbaum. Steve suggested the \$116,503 should be adjusted to \$116,503 minus 25,440 = \$91,063 to show the lakes net debt.

Aeration Operating Expense:

The estimated expenses are \$3488 over the budgeted amount. Erv explained that there were unforeseen problems. At both aeration sites pipes came apart outside the building and water backed up under the building. There now is a different type of connection. Also, a pump went out. Another one was rebuilt. We now have an extra aeration pump.

Long Term Aquatic Plant Mgmt and Water Quality:

The estimated expenses are \$12,226 over the budgeted amount. This is due to the Barr Engineering contract for sediment study approved at a special meeting on May 27, 2007. See footnote (d) of Budget Report.

Steve Sward states our budgeted amount does not reflect the decision to have the Barr Engineering study expense.

3. EXOTIC SPECIAL MANAGEMENT UPDATE by John Manki

We are in year 4 of our 5 year plan. We will be working on a new grant proposal for 2009 and beyond.

Success Criteria Status:

In 2003 we identified our success criteria to be a 95% reduction of leaf bed acreage of Curly Leaf Pond and Eurasian Milfoil with a follow-up of spot treatment as needed. Now we are in the 4th year and we can say we had aggressive objectives based on little information. But, this was good because it kept us on top of this issue.

2007 Activities:

We hired Onterra to do a survey of Curly Leaf Pond and Eurasian Milfoil. They did a very thorough survey. It was more accurate than the volunteer program.

Based on their findings we treated CLP and EM in May. The DNR does not allow treatment after 5/31/07 but we did negotiate with the DNR for spot treatment.

In late May 4.7 acres of CLP was found where Muskellunge Creek enters into Upper East Bay. Kudos to the team that acted quickly to get the treatment approved by the DNR.

In Mid-July there was a post treatment survey to measure the success of the treatment. Onterra participated in that. The outcome is that we were quite successful especially in West Bay for EM. We had a calibration (?) coordination with Onterra on both our survey methodology and our GPS coordinates. We were using a variety of GPS equipment that did not coordinate with Onterra's GPS equipment. We purchased some GPS units that are the same as Onterra's. Our data gathering will be more accurate.

We are applying for a new grant in 2009. Some of the DNR's regulations are changing. It is going to be very difficult to get any treatment approved unless the Lake District has a very comprehensive aquatic plant management plan. We have started to put together the plan to get this done.

Volunteer monitoring is ongoing and we need more help.

We are continuing to monitor Muskellunge Creek. Treatment here is very difficult. It did not look as bad this year as last year. The most feasible treatment now is the drip treatment but that is difficult to execute. So, we are just going to continue to monitor and watch for any significant change.

Per our management plan success criteria we wanted 2007 to be down to 25 acres of Curly Leaf Pond and Eurasian Milfoil would be in spot treatment. But in 2007 we actually treated 46.3 versus 21 acres of 2006. We went up in acreage because of our developing a better detection methodology with Onterra which is more accurate. In 2007 we treated 21.5 acres versus 6.2 acres

in 2006. This is beyond our goal of spot treatment because mid year last year we found additional affected areas and treated them this year. Just like Curly Leaf, we developed a better detection methodology expanded our treatment areas.

	2006 Actual	2007 Plan	2007 Actual
Curly Leaf Pond	21 acres	25 acres	46.3 acres
Eurasian Milfoil	6.2 acres	spot trx	21.5 acres

Regarding our budget, we budgeted \$26,000 and spent \$51,000 due to our developing the better plans. We underspent previous years, therefore, we had additional monies to spend. We do have \$53,000 remaining with a budget of \$30,500 so we are \$22,500 ahead of budget.

In conclusion, our detection accuracy and, therefore, treatment accuracy is improving.

Onterra has done an overall plant survey of the lake and we are very, very healthy compared to other lakes relative to exotics species. Now we will develop a plan going forward.

We reviewed a map of incidence of CLP and EM along with treatment areas. Curly Leaf is largely restricted to East Bay and No Fish Bay at this time. It appears we were success in not letting CLP spread to other bays. EM is much more difficult to contain than CLP. It is extensive in West Bay but also found in East Bay and South Bay.

Our aquatic management plan will stay to course for 2008. There are continued volunteer opportunities. We are continuing to increase the communication. Steve Sward provided his telephone number and email address. It is continuing to be difficult to monitor the lake with limited resources, but thanks to Ted Ritter, Mark Hiller, Lou Mirek, Tom Best. Onterra is doing a great job and very, very responsive. The DNR is also very responsive to our needs. But we still need additional volunteers.

In summary, we are very successful at locating and controlling colonies. We are not getting any of the bedding that alarmed us in 2002. Our improved methodology is resulting in better treatment plans. This is not an exact science and continuing to evolve.

The ATM (?) plan is required to continue. We are targeting August, 2008, for the next grant submission to the DNR.

This is a long term battle which will require long term efforts. But the cost and benefit ratio is well worth it.

(?)Ted Ritter – Chem drip is costly, we usedlens and we have been successful

Carole Question: Will new grant be the same as last one in terms of dollars and will it be another 5 year program? Until we start working with the DNR on that, we do not know. Ideally, another 5 year at 50% would be best. We were the first group to go after the first grant. But now everyone is applying for these grants and will be competing with many other groups for

grant dollars. It may depend how successful our plan has been in the past as to what we will get in the future. We will probably work together with Onterra to put together a report on our plan.

(?)Question: Should we submit samples to the DNR? You can contact the DNR but you can also contact Lou Mirek (477-2879), Mark Hiller (_____), Tom Best (_____) and Ted Ritter (_____) for positive identification. The important thing is to get a sample and accurate location.

Ted Ritter: Our present status is not a reflection of poor management or bad planning. But when the DNR started this 5 years ago they did not have an aquatic plant management methodology. He thought for as long as these plants have been in the southern part of the state there would be best management practices to use. When in fact, the plant management methodology is evolving out of the northern region of Wisconsin in Little Saint Germain Lake. Much of what we are doing is setting a state-wide standard. Detection of beds up until one year ago was terribly inadequate. There is much higher tech equipment now. What you see on the surface of the water is just the tip of iceberg but we need to treat the iceberg. Onterra is using high tech underwater cameras and mapping. It is very detailed on the maps where the problem areas exist and need treatment or indicate success.

Robert Nussbaum: (1) We bought GPS equipment that was compatible with Onterra's GPS equipment. He is concerned that if we go to another company or Onterra goes out of business, will we have the same problem of GPS reckoning and locating. If there is a software glitch then a consultant should be able to deal with it from the broad data that was generated by our original GPS systems whether they were district owned or privately owned. Answer – Lou Mirek – we did have old technology and we now have current technology that everyone has. Everyone is always updating their technology. (2) Exotic weed management: He was concerned about the fact that he was trained to do the volunteer work but he was never called. (3) Locations: South Bay has a private landing in the southeast corner of the upper bay in South Bay, landing at Black Bear Lodge, landing at Cox's Estroid, and maybe more. There is a landing at Bib's. He is concerned that just monitoring at the one public boat launch is not going to do the job. Resorts have a large majority of transient launchers. His observation at the public boat launch is there is no volunteer present and/or no boats being launched. The monitoring of the public boat launch is a "spit in the ocean". Ted – Answer: **THE PURPOSE OF THE MONITORING AT THE PUBLIC/PRIVATE BOAT LAUNCH IS TO STOP THE SPREAD FROM OTHER LAKES TO OUR LAKE AND FROM OUR LAKE TO OTHER LAKES.**

(4) **THE OTHER CONCERN IS THE SPREAD WITHIN OUR LAKE.** He is concerned about the spread of exotics by the props of Personal water crafts and motor boats causing them to drift all over the lake. Should we mark where the exotics are and keep people away with motors running. It would be okay to go to these areas just not with the prop churning it up. Steve - Answer: There is not a lot to be gained because EWM will break off all by itself. (a) buoying off the areas would be a big task. (b) floaters do spread it but per Onterra the conditions have to be ideal to spread.

Comment: Given the nature of how this spreads so easily, it is surprising our lake is not completely filled with EWM. Answer: Our present condition is a reflection of our program. It would be much worse without what we have been accomplishing.

Steve Sward: John Manki is our single greatest asset. His willingness and ability to devote himself to our program has been outstanding. Without the help of John Manki, Ted Ritter, Mark Hiller, Tom Best and _____.

Steve Sward: Five years ago we were one of the only ones with a 5 year plan and were able to get the money we needed. Everyone else is now doing 5 year plans and we may have to share more money with them in the next 5 year plan. Hopefully, our present plan will work and not require as much money as we needed in the past.

9:58

4. NATIVE WEED CONTROL UPDATE – Erv Stiemke

Cliff Schmidt does our mechanical harvesting. Last year's annual meeting we approved access removal of weeds in the west end of East Bay. He did it in June for 10 access sites. His fee was not to exceed \$3000 - his fee was \$2850 and the permit was \$130. We do not know how much he took out. In August (Sunday to Thursday – 48 hours) he harvested the bottom end of South Bay. He took out 29 harvester loads which is 72.5 tons of vegetation. He found new EWM spots -2 new colonies that Erv harvested with a rake. If you see something, you can take it out. If Cliff sees EWM he will forward that info to Onterra or John so it is part of their records, so they know where to attend to. We budgeted \$15,000 and we spent \$8380 plus permit fee.

Steve Sward: This seems to be less of a problem than in past years, especially, in No Fish Bay.

Q: Steve Pitterle have there been any changes in native weeds since our treatment. John Manki stated we have seen some improvement.

DIFFICULT TO UNDERSTAND??????????????

10:05

5. PHOSPHOROUS REMEDIATION UPDATE – _____, Keith Pilgrim and Brian, Barr Engineering.

The Barr Engineering report is available online _____

Steve Sward – We employed Barr Engineering to: (1) Define algae/phosphorous problem. (2) Determine options for treatment and 3) determine cost of treatment.

Last Spring we looked at multiple options. One is not feasible due to economics.

They presented each bay and identified the magnitude of the problems in each bay.

They put data into a model and come up with concentrations of phosphorous in the entire lake. They can figure out an alum dose from the amount of mobile phosphorous. They can then convert the mobile phosphorous to aluminum phosphorous.

They presented a range of costs to treat each bay. They stressed that they thought the cost would be more on the low end because they would not want to use a high dose of alum because of the effect on the alkalinity of the water.

Q: John Manki – does phosphorus from Musky Creek come to our lake? ????????????????

A: Brian - Yes

Q: Does Muskellunge Lake go through the same cycles as we do?????????????????

A:

They sampled sediment looking for the amount of mobile phosphorous.

Low Oxygen conditions near sediment surface causes the iron to be reduced and this allows the phosphorous to be released from the sediment into the water. Therefore, better conditions for algae growth and poor conditions for water clarity.

There are other sources for sediment phosphorous. One of which is organic phosphorous which over time will break down to mobile phosphorous.

Treatment Options:

You can add metals to bind the phosphorous: Iron, Calcium or Aluminum.

Iron is not a good choice because in low oxygen levels it will release the phosphorous.

Calcium is better at a higher pH than you will see in the national lakes system.

Aluminum not affected by much, therefore, it will bind under most conditions. It will be a permanent binding.

LSG: Very large range of concentrations of mobile phosphorous throughout the lake.

Alum is actually Aluminum sulfate compound. Aluminum is very abundant in our earth's crust. It is a permanent binder. Once the phosphorous is bound to the aluminum it will not come out of the sediment. This has been used for a about 4 decades. There is a question of how much to use. This has been a guess lately. Swedish study is scientific and offers a guideline.

They presented a case of a lake that had an alum treatment 10 years ago. The lake is still meeting the goals of water clarity and concentration of mobile phosphorous is 50% lower than prior to treatment. They only did 2/3 of the recommended dose due to the budget.

Water clarity should be expected to improve to 15 feet within 4 years after alum treatment.

In summary, they presented each bay and identified the magnitude of the problems in each bay.

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Keith: If they did an alum treatment they would only do where the mobile phosphorous concentration is high so as to not waste any money where it was not needed.

The inflow treatment facility would cost \$1,000,000 to construct and \$300,000/yr maintenance for 10 years would be \$3,000,000.

Recommendation: Treat East and South Bay with Alum. Do one-half of the dose initially and then the other half in one or five years. Alkalinity in LSG is fairly low. Alum treatment could have an effect on the alkalinity, therefore, you want to split up this treatment. Alum crashes the pH temporarily then there is a buffering capacity sediment takes it back up. You do not want the temporary decline in pH to be too great.

Q: Will the pH of ground water be affected?

A: Ground water pH will not be affected just the surface water.

Alum is a slight acid. You could add a buffering compound to avoid the changes in pH but that would be substantially more expensive. It is less costly to just split up the treatments over time.

Q. Have there been any environmental studies on the impact on ecosystem and wildlife?

A: You have to watch the pH carefully. The fish can be affected by the change in pH. But there are steps taken to avoid this. There will be alkalinity tests taken periodically.

Robert Nussbaum asked for an explanation of the differences in the phosphorous concentrations in each bay and this was explained.

Q: Is this treatment strictly done for the purpose of water clarity or is there an effect on native plant life?

A: There is an effect on the native plant life. The native plant life will be stronger and will avoid the curly pond weed from taking over.

Q: What affect does the aeration have?

A: He suspects it will help the alum treatment in the winter. Fresh algae decompose faster. The oxygen helps.

Q: Would more aeration systems help?

A: Possibly not because it does enhance transport and mixture and you are going into deeper levels of the sediment. You do not want to release more phosphorous from the lower levels of the sediment????????????????????/

Q: What is the cost of the total treatment?

A: \$880,000 total for 10 years

Q: How would this alum treatment be done?

A: It takes about a week. There would be tanker trucks at boat launch. Treatment areas would be determined by GPS coordinates.

11:03

6. SELF-HELP PROGRAM & WATER SAMPLING – Erv Stiemke
Cliff _____ has done water sampling and providing the raw data that has allowed this program to go forward. He has worked for us and State of Wisconsin. The State of Wis will always have this data for us.

11:05

7. TOWN LAKES COMMITTEE REPORT – Ted Ritter

The idea of Town Lakes Committees are unique to Vilas County. St. Germain was the first to have a Town Lakes Committee. They are working primarily to increase public awareness and prevention of spread of Aquatic Invasive Species. There are a number of accomplishments they have provided. There are grocery store plastic bags with the Clean Waters/Clean Lakes, there are placemats in restaurants, this summer there was a booth at the Flea Market that provided information and conducted free watercraft inspection training programs. Your St. Germain reps are Lou Mirek who has served one year; Tom Best, who has served 2 – 2 yr terms and does not want to serve any longer. He has been extremely busy on our lake. He aided the effort in mapping. We need a new representative. Chuck Their chairs the committee. The other lakes represented are Big St. Germain, Little St. Germain, Lost, Found and Alma/Moon. It meets once a month especially in Spring, Summer and Fall. They are doing a lot of very good things. We do need another Little St. Germain representative. You can talk to myself, Tom Best or Lou Mirek.

Public Boat Launch Monitoring: Our boat launches do not have enough traffic to justify someone sitting at the boat launch. Someone could sit their all day and never see a boat. That is the nature of the problem. All private boat launches have been identified and the land owners agreed to putting up signage. The Town Lakes Committee will work with private landowners with launches to understand the clean boats/clean waters campaign.

Lou Mirek: This last year there was difficulty in communicating with those who have expressed the desire to volunteer. Lou Mirek sent a signup sheet around asking the volunteers to provide all telephone numbers and email addresses to increase the communication.

Q: What did you find at the boat launches?

A: Carol Kohloff said it was a very easy process. There is a checklist to follow. People were thankful. You are not allowed to remove it from the boat but ask the boat owner to remove the weeds. Carol Kohloff's experience was that there were maybe only 3 vehicles that had weeds that had to be removed.

It is hard to figure out prime time to be at the launch because it really is sporadic. If you have time and you communicate with one person, that is helpful. The information that is put on the form is

given to the state and we can get feedback from the state on the number and kinds of boats that are using our lakes and how many people are aware of the clean boats/clean waters campaign.

8. APPROVAL OF LEVY FOR 2008

Operating Expense:	\$ 7,000
Materials:	\$ 2,000
Native Weed Control:	\$10,000
Exotic Weed Control:	\$ 9,000 (balance of grant)
Fish Stocking:	\$ 1,000
Aeration:	\$ 8,000
Long term Aquatic Plant mgmt and water quality	\$20,000 (for future projects beyond what we anticipate)
TOTAL	\$57,000

This is \$4,000 less than last year.

1ST – Robert Nussbaum

2nd – Lee Holthaus or Dick Kenney

Approved

9. OUTGOING PRESIDENT’S REPORT – Steve Sward has been president for 12 years. He feels satisfied with our programs and accomplishments. These accomplishments have occurred because of the formation of the Lakes District Committee.

Cost for phosphorous treatment \$500-\$800,000 (East and South Bay)

If it was an average of \$600,000 for treatment with 5 year amortization. Last year our levy was about \$60,000. Last year our tax was \$55 per \$100,000 of equalized value. If we combine a debt retirement program (to be retired in 5 years) on the \$600,000 along with the operating budget our tax would be \$180/per year for \$100,000 of equalized value. At the end of the 5 years you would fall back to just your operating budget.

We have about \$160 million in assets and we must protect our assets which is our lakes.

We need to look at our long term goals.

We would have to look at this on an annual basis with regard to loan retirement for the next 5 years.

Steve expressed the privilege it has been to be a part of this. He thanked John Manki for all of his work and Lou Mirek coming on board, Cliff and his water sampling along with everyone else’s help.

10. ELECTION OF COMMISSIONER TO FILL EXPIRING TERM OF STEVE SWARD

Mark Hiller nominated Ted Ritter for President. It was seconded by Bob Nussbaum.

Ted Ritter was approved by voice vote.

Mark Hiller thanked Steve for his 12 years of service.

11. PUBLIC CONCERNS

Bob Nussbaum: What will be the mechanics of the loan – municipal bond (low interest) or a loan from the state (high interest).

Bob Nussbaum: He is concerned with the fact that we are retiring such a large amount of money in such a short time.

Steve Sward: His concern is retiring the loan in five years was to cut the interest expense. Membership or the board will decide this.

Bob Nussbaum: Agreed with the need to cut the interest expense and felt the municipal bond would be a good way to do that.

Steve Sward: Feels the payback period should match the benefit period. But the membership can decide that.

Erv Steimke: They just became aware of the fact that there will be half of the treatment now and the other half within the 5 years. We are not aware at this time if the money must be paid at the time of contract or at the time of treatment.

Ted Ritter: There is going to be a great deal of information exchange between the Board and Committee within the next year to come to a decision on how to fund this project. The Board will not be making the final decision on how this is funded. We will all have the opportunity to weigh in on this and come to a collective decision.

Bob Nussbaum: Is there some way to hook onto the aeration system that will help us maintain in East Bay and South Bay what we already have?

Steve Sward: We will look to Barr Engineering for their recommendations in November.

Bob Foley: West end of East Bay weeds situation.

Ted Ritter: Cliff Schmitt did cut them but they grew back but due to the fact that that water is so shallow. Cliff Schmitt will not request a permit from the DNR. We talked with the DNR in the Rhinelander office but they do not have a recommendation.

Ted Ritter: Before we can do any more chemical control or harvesting in 2009 we need a new 5 year plan for 2009. We have contracted with a consultant to start on this. He has been alerted to this problem area and other problem areas and advised to give special consideration as to what our options are.

Short term is to cut the lily pads before the pad comes to the surface. This cuts off the oxygen supply. This will have to be done all summer long. But this is 100 yds long. This will have to be discussed further.

12. ADJOURNMENT

Motion to adjourn by Carole Koldoff

Seconded by Barb Steinhilber

Meeting Adjourned at _____ am/pm.

Lou Mirek, Secretary