Volume XXV • Issue #1

Newsletter of the Balsam Lake Protection & Rehabilitation District

Summer 2019

Improving Balsam Lake's water quality-

Q & A regarding the proposed plan to improve water quality in East Balsam Lake using alum applications

Why the focus on East Balsam?

East Balsam is listed as an impaired body of water by the Wisconsin Department of Natural Resources for excess algae growth. Experience has shown this basin becomes very green and sometimes slimy with algae in mid-July, August and September. This condition makes the water undesirable and potentially unsafe for water activities. The Balsam Lake Protection and Rehabilitation Board of Commissioners is dedicated to improving the lake wherever possible. It is the Board's obligation to attempt to improve the water quality on this impaired body.

Why is Alum the best choice to improve the water quality?

Many other options were considered. The cost estimates of dredging ranged from \$15 million to \$45 million. Dredging was ruled out because of the cost and because of some concerns regarding the impacts After examining the results of aeration on Cedar Lake and other Wisconsin lakes it was determined that aeration would not be effective on East Balsam and could potentially make the water quality worse. Increasing the flow of water out of East Balsam was explored but there is no practical, cost effective option to make that happen.

Aluminum sulfate or alum was determined to be the best solution. Alum is added to the water and settles to the bottom. It removes the phosphorus that promotes algae growth from the water column and covers the lake bottom and prevents the release of phosphorus into the water. Alum has been shown safe for fish and other living things as long as the acidity of the lake is monitored closely during the application.

When will the proposed Alum applications happen?

The recommended times for the applications would be June of 2020, 2022, 2024, 2026.

Will there be any restrictions on lake use during or after the applications?

There will be no restrictions for swimming, fishing and boating. Because the application will involve spreading the alum just below the water surface, it will need time to settle to the lake bottom. We will ask that lake users stay a safe distance from the barge when application occurs.

What will it cost the lake property owners for the alum applications?

The BLPRD Board hopes to be able to obtain grants to help offset the cost of the alum applications. Other area lakes have been successful in obtaining grants so the Board believes we should be successful as well.

If the maximum dollar amount of \$200,000 in grant money is obtained for each of the four applications, the Board estimates the cost to property owners as:

Based on a property valuation of \$100,000, the cost over an eight year period 2021–2028 would be an average cost of \$24.27 per year, with a high of \$38 in 2023 and a low of \$19 in 2026. To determine your average cost per year, divide your property valuation by 100,000 and multiply the result by \$24.27. For example, if your property is valued at \$500,000, divide by $100,000 = 5 \times 24.27 = \text{your average cost per year}$ is \$121.35.

—continued on page 3

In this issue...

PAGE 2

Chairman's letter

PAGE 4

2019 Annual Meeting Agenda

Voting rules

PAGE 5

Harvesting Update

PAGE 6

2019-2020 Budget

PAGE 7

Shoreland Zoning News

Dredging Update

CHAIRMAN'S LETTER



Welcome back to the summer season on beautiful Balsam Lake. We have again been blessed with a hardy winter, significant snow cover and a late spring - did we have a spring? Accordingly we will not be spraying CLP in East Balsam and will continue to manage it with the harvester. More information on Curly leaf pondweed and aquatic invasive species is included in this issue.

EAST BALSAM The Board has developed a plan with the assistance of scientists and environmental consultants to address the elevated level of phosphorous and algae blooms in East Balsam. East Balsam represents approximately 25 percent of our lake in terms of total acreage and continues to be designated an impaired body of water by the DNR. Fortunately there have been developments in treatment methods of internal phosphorous loading that we are confident can be implemented in a cost effective manner that will be a important investment in protection and rehabilitation of our lake. More information on this project included in this issue.

HEALTHY LAKES 2019 Healthy Lakes native plantings, rain gardens and runoff diversion projects will continue to be partially funded through the District and DNR grant funding in 2019. We have approximately 10 slots available in 2019 on a first come first serve basis. Please contact Tom Kelly at 612-508-0879 should you have interest in participating in this program.

Contact us

Please contact the commissioners with any questions, comments or concerns you have. Commissioners meet on the third Saturday of the month, starting at 8:30 a.m. at Polk County Business Center, lower level conference room. You are welcome to attend the meetings.

Meeting Schedule

2019					
June 15	August 17	November 16			
July 20 Annual meeting	September 21	December 21			
Unity High School	October 19				

Tom and Mary Kelly and family

HARVESTING continues to be an effective method of managing CLP and watercraft access. More information follows in this issue.

CLEAN BOATS CLEAN WATERS We continue to invest in this program as we have added coverage hours at the boat landings as we hope to mitigate aquatic invasive species coming to our lake from watercraft that use other lakes.

LAKE BOTTOM RESTORATION/DREDGING We have concluded that we will not be able to acquire permits to dredge all three bays approved by the District. Raskin Bay has been designated a sensitive wildlife area and will not be permitted for dredging.

Thank you to my fellow Commissioners, their team members and all District members for your time and talent to protect and enhance our lake. Without your contributions, the programs we facilitate for the lake's well being would not be possible. •

- Tom Kelly

Balsam Lake Protection & Rehabilitation District Commissioners

Tom Kelly, Chairman

1849 Orchard Hill Mendota Heights MN 55118 612-508-0879 Email: tkelly56@comcast.net Term Expires 2019

Bill Mork, Vice Chairman

3585 Birchpond Road Eagan, MN 55112 763-699-7792 Email: bmork@wmmorkco.com Term Expires 2020

Dave Mariani, Secretary

1875 Pine Island Park Street Balsam Lake, WI 54810 Home: 651-492-3313 Email: dmmaria@msn.com (Appointed by Polk County)

Richard Miller

1831 110th Street Balsam Lake WI 54810 651-587-4191 E-mail: dmillerfinancial@msn.com Term Expires 2021

Andy Wilhoit

2249 Fieldstone Drive Mendota Heights MN 55120 651-402-5003 E-mail: Andy@Wilhoit.org Term Expires 2021

Rod Preble

815 Park Drive Balsam Lake, WI 54810 715-497-8913 Email: rod.preble@outlook.com Term Expires 2020

Steve Rediske

805 Park Drive Balsam Lake WI 54810 Home: 715-485-3780 Cell: 612-206-3165 Email: basicallybalsam@yahoo. com Term Expires 2019 (Appointed by the Village of Balsam Lake)

www.blprd.com

Alum application Q & A, continued from page 1

What will it cost property owners if you are not successful in obtaining grant money for applications 2, 3 and 4?

We are optimistic that grant money will be obtained for all applications but here is the cost assuming a \$200,000 grant is obtained for the first application only.

Based on a property valuation of \$100,000 the cost over an eight year period 2021-2028 would be an average cost of \$46.78 per year, with a high of \$72 in 2023 and a low of \$32 in 2021 and 2022. To determine your average cost per year, divide your property valuation by 100,000 and multiply the result by \$46.78. For example, if your property is valued at \$500,000, divide by 100,000 = 5 x \$46.78 = your average cost per year of \$233.89.

I don't live on East Balsam. Why should I have to pay extra to improve the water quality there?

No matter where your Balsam Lake property is located you have full access to use East Balsam for your water activities. Everyone, whether they own property on the lake or not, can use the entirety of Balsam Lake whenever they wish. We all should have a collective interest in improving the entire lake.

It is important when looking at any future improvements to Balsam Lake that we remember how we have done things in the past. When a contaminated Rice Creek threatened Little Balsam, Boston Bay and the main lake, the BLPRD took decisive action. A cow pasture that had Rice Creek running through it was purchased, the cows were moved out, the barn was razed, Rice Creek was cleaned up and the Rice Creek settling pond was constructed. Now the water quality in Little Balsam is some of the cleanest on the lake. Property owners on Little Balsam and Boston Bay were not asked to pay more. Everyone in the lake district contributed to this very successful endeavor.

In 2004, the BLPRD purchased Lot 77 in the Village of Balsam Lake. In 2005 the Peterson property on Stumps Bay was purchased. In 2011 the Soltau property on Stumps Bay was purchased. These purchases were strategic toward controlling development in sensitive areas on the lake. Property owners on Stumps Bay and these other sensitive areas were not asked to pay more. Everyone in the district contributed equally.

We all are aware of the expansion of the bridge next to the Mill Pond and the Thirsty Otter that allows large boats to now pass from the Mill Pond to the main lake. This project was funded by the BLPRD. We all contributed. Mill Pond property owners were not required to pay additionally.

We have an established precedent that we are all in this together. There are approximaely 850 properties in the lake district. If we all work together for the betterment of the entire lake and every part of the lake and we divide the costs across approximately 850 property owners, we make the cost of improvements attainable and affordable.

When will the vote take place?

The vote will be on July 20 at the annual meeting of the BLPRD. See page 4 for more information.

How can I get more information about this project?

Go to www.blprd.com. •

Learn more

A summary of the alum research studies and a presentation from our consultant, Cheryl Clemens, Harmony Environmental, can be found at our website www.blprd.com.

HAB Aquatic Solutions barge operator stops to explain the systems that apply aluminum sulfate during an alum treatment at Long Lake near Centuria, WI in June, 2017. The barge's tanks are filled from tanker trucks parked nearby.



Public Notice

BALSAM LAKE PROTECTION AND REHABILITATION DISTRICT

43rd ANNUAL MEETING will be held on July 20, 2019, at 8:30 a.m. Unity Middle School, 1908 150th Street, Balsam Lake, WI. Enter by the playground door.

Agenda

- 1) CALL TO ORDER:
- 2) COMMISIONERS AND GUESTS PRESENT
- 3) APPROVE AGENDA
- 4) APPROVE MINUTES OF JULY 17, 2018 ANNUAL MEETING
- 5) REPORTS
 - Opening Comments Tom Kelly
 - Water Quality East Balsam Water Quality Project (EBWQ), Cheryl Clemens, Harmony Environmental
- 6) TREASURER REPORT

Annual Report and 2019 YTD / 2020 Budget

- 7) Registered commissioner candidates eligible for 2019 election, vote for one:
 - Thomas Kelly
- 8) Healthy Lakes 101, Tom Kelly
- 9) Aquatic Plant Management Harvesting / CLP / AIS / Recreation / Navigation, **Rod Preble**
- 10) Clean Boats Clean Waters, Bill Mork
- 11) Sediment Remediation / Dredging, Tom Kelly and Rod Preble
- 12) OLD BUSINESS
 - Long Range Lake Management Plan Update, Tom Kelly
- 13) ELECTION RESULTS
- 14) NEW BUSINESS
- 15) ADJOURN

Unter, registration

At any annual meeting or special meeting of the Lake District where voting will take place, registration is required. The voter registration list is acquired from the Polk County Treasurer and the county real estate tax rolls.

Voting rules are specified by Wis. Stat. §33.01(9)(ar) and §33.30(3).

Notices of the meeting and agenda are posted several days before the meeting at the following locations:

Village of Balsam Lake 404 Main St Balsam Lake, WI

Jonzy Market 1043 185th Ave Balsam Lake, WI

Balsam Lake Post Office 308 Pearl St Balsam Lake, WI

To vote at annual meetings of the lake district, a voter must be a U.S. citizen over 18 years of age who is either:

- 1. An elector (a qualified voter who resides in the District);
- 2. A person who owns title to real property even if that person's name does not appear on the tax roll (i.e. spouse);
- 3. A person who is the official representative, officer or employee authorized to vote on behalf of a trust, foundation, corporation, association or other organization owning real property in the District.*

If a person is not named on the tax roll it is up to that person to provide evidence to the District that he/she is owner of property or a designated representative of an organizational property owner. Evidence may be in the form of

- a copy of a deed indicating ownership, or
- a letter on the stationery of an organization owning property which clearly authorizes the person to vote on behalf of that organization.

Each qualified voter is entitled to cast one vote at the annual meeting. Ownership of more than one parcel of real estate within the District does not entitle the owner to more than one vote. Commissioners appointed by the county or town/ village/city are eligible to vote at the annual meeting only if they qualify as lake district property owners or electors. No absentee ballots or proxies are permitted.

*Corporations, governmental bodies, trusts and other organizational owners are treated as single owners with one vote. When a property is recorded in a trust, corporation, association or other organization, then the members of that organization must designate an official representative to vote on their behalf. Trust members who reside in the District maintain their voting eligibility by virtue of being an elector, at an annual meeting. Trust members who reside outside the District are not electors and so must designate their representative.

East Balsam CLP Harvesting Update

The bright side of a long winter

by Rod Preble

For the second year in a row the BLPRD Board has made the decision not to spray Curly leaf pondweed in East Balsam. The long winter along with good snow cover on the lake has paid dividends in the form of saving us money to have the CLP beds sprayed in 2019.

Those of you on East Balsam may be wondering why you received notification of the BLPRD's intent to spray again this year even though we decided not to spray. The answer is: "timing." In order to meet the DNR permit and notification requirements, notices need to be sent to homeowners within a time frame prior to spraying which sometimes occurs even before the CLP survey is completed.

On May 5th of this year Matt Berg, Research Biologist, Endangered Resource Services, completed this year's CLP pretreatment survey.

"There is not much out there," Matt stated. "CLP is starting to fill in the deeper water areas greater than eight feet, but the harvesting in the shallows kept things essentially unchanged from the previous year." (See maps below that compare the May, 2018 survey and the May, 2019 survey.)

It has to be noted that because of water depth in the CLP bed on the north end of East Balsam, and the harvester's 6-ft. maximum cutting depth, we may see an uptick in the CLP in that bed sometime in the future. Annual monitoring is key, but for now, harvesting is the right decision.

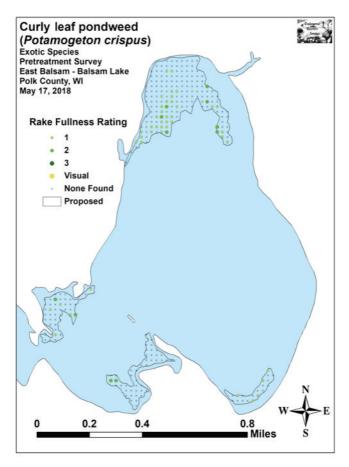
With the decision made not to spray CLP in East Balsam, those areas were included in our 2019 Harvesting Permit Application. We don't anticipate the inclusion of East Balsam CLP harvesting to impact our ability to manage CLP harvesting in the rest of the lake. We did it last year, we can do it this year.

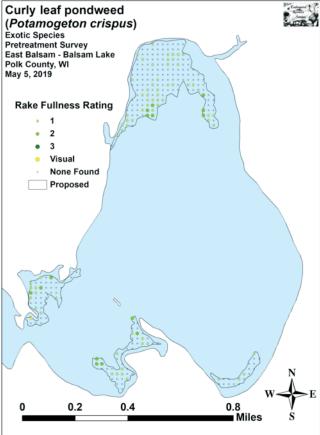
Our 2019 harvesting plan will be:

- Focus early harvesting to target CLP beds in West Basin and East Balsam, June;
- Harvest navigation lanes as allowed, approximately seven acres, late June–September;
- Harvest all CLP beds "second crop" in both East Balsam and West Basin, August-September.

See you on the water! •

Below: Curly leaf pondweed pretreatment surveys for May, 2018 and May, 2019.





BALSAM LAKE PROTECTION AND REHABILITATION DISTRICT: ACTUAL vs BUDGET and 2020 Proposed with EBWQ Project						
REVENUE	Actual Dec 2018	Actual May 2019	2019 Budget	2020 Proposed Budget		
TAXES	164,870	95,680	168,850	346,938		
INTEREST CHECKING/CD/SAV	565	412	250	800		
GRANTS AIS 2019 -2020	39,625	-		-		
GRANT CBCW EBWQ 2020	13,220	4,000		16,000 200,000		
GRANT HEALTHY LAKES 101	497	13,248	20,000	4,000		
GRANTS TOTAL	53,342	17,248	20,000	220,000		
LOTTERY CREDIT	1,630	2,271		1,500		
MISC	350	445 644	100.050	- E60 020		
TOTAL REVENUE COST OF OPERATIONS / APPROPRIATIONS	220,757	115,611	188,850	569,238		
BOARD - ADMINISTRATION	180					
Annual meeting expense	1,708			2000		
Administrative support	384	675		900		
Operations equipment	70			100		
Office supplies Safety deposit box	7			100		
Software	471	184		480		
TOTAL BOARD ADMINISTRATION	2,820	859	5,000	3,580		
COMMISSIONER EXPENSES						
Meetings	7,750		7,000	8,000		
Mileage Annual meeting 'Thank You'	3,849 407		4,000	4,000 400		
Convention expenses	225	_		300		
Books, subscriptions, reference manuals		750				
Commissioner Project activity expense	40.004			40.700		
Total COMMISSIONER EXPENSES	12,231	750	11,000	12,700		
DUES/SCHOLARSHIP POSTAGE	775 1,044	5	1,000 1,000	1,000 1,100		
PRINTING	9,339	3	9,250	10,000		
RENT	1,350	900	2,000	1,800		
TOTAL ADMINISTRATION EXPENSES	12,508	905	13,250	13,900		
AQUATIC PLANT MANAGEMENT		390				
Permits Herbicide Contractor	1,670 320	308	1,500 37,400	1,500 37,400		
Lake biologist survey	4,775		1,100	1,100		
HARVESTING OPERATIONS	5,037		6,000	6,420		
Total AQUATIC PLANT MANAGEMENT	12,192	308	46,000	46,420		
CLEAN BOATS CLEAN WATERS	44,334	4,748	45,000	48,150		
WATER RUNOFF PROGRAM WATER QUALITY PROJECTS	9,483 4,992	20 2,552	7,000 16,000	7,000 5,000		
EBWQ 2020	4,332	2,332	-	185,000		
LAKE BOTTOM RESTORATION	6,993		7,550			
TOTAL WATER QUALITY	65,802	7,320	75,550	245,150		
BCPL LOAN PAYMENT				000 000		
BCPL Loan Payment EBWQ EBWQ interest	_	-	_	200,000 2,888		
BCPL Loan #0201642.02 & .03	16,843	17,350	16,843	17,869		
INTEREST ON LOAN	2,755	2,250	2,755	1,731		
TOTAL BCPL	19,598	19,600	19,600	222,488		
RESTRICTED USE FUNDS (rebates)	-256					
LAKE MANAGEMENT SERVICES - Portable Toilets	2 61 5		4,500	4,000		
- Fortable foliets - Signage	3,615		4,500	1,000		
- CONSERVANCY				-		
VOBL DAM MAINTENANCE				-		
LONG RANGE APM PLAN EQUIPMENT MAINTENANCE & STORAGE	3,694	6	3,000	3,000		
DOCK REPLACEMENT	3,034	Ü	3,000	-		
TOTAL LAKE MANAGEMENT SERVICES	7,309	6	7,500	8,000		
CONTRACT SERVICES						
ACCOUNTING	1,301	1,571	1,200	3,000		
INSURANCE/BOND LEGAL	6,701	3,677 343	8,000 1,000	8,000 1,000		
OTHER CONTRACT SERVICES	4,148	U -1 U	1,000	2,500		
- Includes Website maintenance	675	182_	1,000	1,000		
TOTAL OTHER CONTACT SERVICES	12,825	5,773	11,200	15,500		
TOTAL OPERATING COSTS	145,029	35,521	189,100	567,738		
BALANCE	75,729	80,090				

BALSAM LAKE PROTECTION AND REHABILITATION DISTRICT: ACTUAL vs BUDGET 2019 and 2020 Proposed, continued

BALSAM LAKE PROTECTION FUND	Actual Dec 2018	Actual May 2018
Balance Forward Transferred from 2018 Operating Account	111,029 71,701 182,730	183,162
LISTED CAPITAL & MAINTENANCE PROJ	Year Approved	Balance of Authorized as of 01/01/19
RICE CREEK SEDIMENTATION AIS RAPID RESPONSE PLAN *DREDGING MACHINE TOTAL	2006 2011 2015	50,575 20,00 95,880 166,455
		Balance Remaining
BCPL Loan EBWQ 2020	385,000	185,000
BCPL Loan #02016142.01		-
BCPL Loan #02016142.02	17,281	17,281
BCPL Loan #02016142.03	40,362	40,362
TOTAL		242,643

Shoreland Zoning News

Polk County has adopted a new version of the Polk County Shoreland Protection Zoning Ordinance. Some key changes in the ordinance include:

- · Accessory buildings can be up to 35 ft. in height;
- Town and private road setbacks can be reduced without a variance if written approval from the Town is received.

Please Remember:

- · A land use permit is required to remove trees or vegetation within 35 ft. of the water ordinary high water
- A land use permit is required for all new construction and expansions of existing structures. A structure means a temporary or permanent principal structure or any accessory structure including a garage, shed, boathouse, sidewalk, stairway, walkway, patio, deck, retaining wall, porch, or fire pit.
- Property owners are allowed to create a viewing corridor up to 35 percent of their lot width with a permit. (100-ft. lot X .35=35-ft. wide viewing corridor)
- Every property is allowed up to 15 percent impervious surface without mitigation, but mitigation is required for over 15 percent.
- Each parcel can have a developed pedestrian access up to 5 ft. in width to access the water.
- Boathouses are allowed at 10 ft. from the ordinary high water mark, and can be up to 14 ft. by 26 ft. in size.
- Bunkhouses can be permitted with conditions.
- · All structures are allowed maintenance and repair without a permit such as replacing shingles, windows, doors, and siding.
- Some nonconforming structures may be expanded if they qualify.

Please visit the Polk County Zoning Office at 100 Polk County Plaza Suite 130, Balsam Lake, WI or call 715-485-9279, before you begin your project so they can assist you in obtaining the necessary permits.

DREDGING UPDATE-

Project comes to a close

After a significant amount of time, effort and numerous meetings with professional consultants, engineers, and Wisconsin DNR, the BLPRD Board has decided at this time, not to pursue dredging permits for the three approved bays.

Due to the lack of scientific studies in regards to the effect of sediment and water quality in shallow bays we feel that our application to dredge these three bays would not be approved.

Instead we will focus our efforts on other current and future water quality projects.

-Rod Preble



Balsam Lake Protection & Rehabilitation District P.O. Box 202 Balsam Lake, WI 54810

PRSRT STD U.S. POSTAGE BALSAM LAKE, WI 54810 PERMIT NO. 202

Dear Homeowner,

It is important to recognize that the largest operating expense on the BLPRD budget is for monitoring our boat landings to prevent the introduction of aquatic invasive species, such as zebra mussels and Eurasian water milfoil that cause economic or environmental harm or negatively impact outdoor recreation experiences.

The rapid spread of invasives, which has increased by 160 percent both in Minnesota and Wisconsin over the last five years is staggering. This rapid expansion is not due to birds or turtles or other wildlife, but by humans transporting their boats from lake to lake.

Balsam Lake fortunately - or unfortunately - holds over 43 fishing tournaments every year. So the issue arises, who bears the financial responsibility should a new aquatic invasive species enter Balsam Lake? The extent of the expense as well as the loss of property values is unknown, but both numbers may be significant.

We need to continue every effort to help prevent the introduction of AIS into our lake. Should the cost of this effort not be shared by everyone utilizing the lake?

Balsam Lake is a natural resource not unlike a state park. A daily fee is charged for entering a state park, why not for the use and enjoyment of a lake? Several lakes in Wisconsin charge a daily boat launch fee, typically \$5 per day (the fee cannot be more than what is charged to use a State park).

Municipalities, lake management districts and private access providers are allowed to charge reasonable launch fees under NR 1.91 Wisconsin Administrative Code. The proceeds must be used for the maintenance and operation of the boat landings.

Over 5,000 boats enter our lake on an annual basis. It seems a launching fee of \$5 is reasonable for the use and enjoyment of such a wonderful resource while helping fund prevention of the introduction of new aquatic invasive species. •



Terry Morton, our lead CBCW monitor talks with a boater at the Village boat landing.



Clean, Drain, Dry... every waterbody, every time. Before leaving the water access:

CLEAN off visible aquatic plants, animals and mud from boat, trailer and all equipment.

DRAIN motor, bilge, livewell and any other water-containing devices.

DRY everything for at least five days before reuse or disinfect.

NEVER MOVE fish or bait from one body of water to another.

stopaquatichitchhikers.org