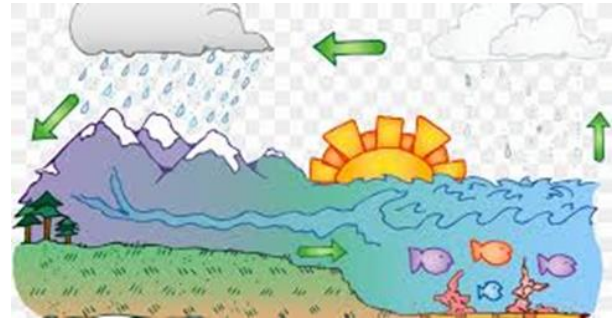




In order for as many people as safely possible to join us, our BELIA Annual Meeting has been moved to Saturday, June 19th 10AM at Lion's Park. Covid protocols in place at that time will be followed. Due to these concerns, we are foregoing the usual picnic but coffee and light snacks will be offered.

President's Corner - Gordy Westerlind

Greetings Fellow BELIA Members,
WHEW—what a year we have all been through! Here is hoping that you and your family survived the year unscathed and are healthy. We are not quite out of the woods just yet, but there are many reasons to be optimistic going forward. This past year, both summer and winter seasons, I believe Eagle Lake was busier than any time in the past fifteen years that my family and I have lived on the lake. I expect that to continue in 2021.



I have a number of items I would like to bring to your attention in this newsletter. I will start by mentioning our 2021 BELIA Annual Meeting. As you may recall, we did not hold an Annual Meeting in 2020 because of COVID concerns. At this time, we are planning to hold a 2021 Annual Meeting, however, it will be slightly later than normal. The Annual Meeting is scheduled for Saturday, June 19 at 10:00 am at Big Lake Lions Park Pavilion. Even though our meeting format may differ slightly from previous years, the Board looks forward to seeing you again and sharing information with you. In addition to our normal reports, a new item that will be on the agenda this year is approval of a number of BELIA bylaw changes recommended by the Board. You will be provided with more information on these recommended changes prior to the Annual Meeting.

You may recall that in 2020 we cancelled both of our major fundraising events—Wine and Beer Tasting and Pulled Pork Cook-off. Financially that was a significant hit to the lake association, however, on the bright side, the Events Committee came up with several innovative and fun fundraising events. In addition, member donations to fund lake improvement projects were slightly higher than previous years. Thank you, members, for your generosity and Events Committee for your resourcefulness.

This year membership renewals and donations are significantly less than previous years. We again ask for your help to continue the lake improvement projects that we are considering for 2021 and beyond. Please take the time to renew your 2021 membership and consider an additional donation to BELIA. Your continued support will be greatly appreciated.

The final item I would like to bring to your attention relates to the **Board of Directors**. BELIA bylaws authorize up to thirteen board members. Currently, for a variety of reasons, we are several board members short of the authorized number. If you have an interest in serving on the board, please contact one of the current board members listed on the back of this mailing for more information on what is involved in serving on the board. In my opinion, it is a very rewarding experience.

Enough for now. Hope to see you at the Annual Meeting.

Take care. Be safe. Gordy

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2021 Annual Newsletter



**Board of
Director
Applicants
Needed**

We have openings on our Big Eagle Lake Board and volunteers are needed! We meet about once a month during the warm months. If you have an interest, please contact your local representative or Lori Andreen, BELIA Secretary, at bigeaglelakeboard@gmail.com for more information.

Treasurer's Report – Jeff Johnson

BELIA Treasurer's Report (Annual) Year Ending, December 31st., 2020

Checking Account Balance as of January 1 st ., 2020	\$38,198.07
Deposits –	\$22,373.60
Includes Grants by Sherburne County Soil/Water Conservation	
Includes Proceeds from HalloWine Fundraiser	
Includes Proceeds from Little Caesar's Pizza Fundraiser	
Includes Proceeds from Concessions on Ice Fundraiser	
Includes members 2020 dues payments and "extra" contributions.	
Withdrawals -	\$34,065.84
Includes \$615.00 AIS Consulting 2020 Weed Survey	
Includes \$15,147.00 Aquatic Solutions 2020 Weed Treatment	
Includes \$15,883.50 WSB Lake Management Fees (Complete)	
Includes \$733.00 Errors and Omissions Liability Insurance	
Includes expenses associated with fundraisers	
Includes misc. expense for general operations	
Checking Account Balance as of December 31 st ., 2020	\$26,505.83

There were 103 *paid-up* members at the end of year, 2020.

There was \$3535.00 in members' dues and \$6,155.77 in "extra" contributions collected in 2020

Major Project Summary

Lake Management Plan	WSB
1/13/20	= \$657.25
1/27/20	= \$464.75
2/14/20	= \$1,500.50
3/28/20	= \$894.00
4/27/20	= \$6,454.50
5/21/20	= \$1,245.00
6/26/20	= \$4,667.50
	\$15,883.50

Aquatic Solutions (AIS Herbicide Treatment)	5/18/20	\$15,147.00
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**A LOOK
at the
BUDGET**

The 2020 Annual Renewal with the Secretary of State is due in July. Submitted and confirmation received 4/13/21.

The 2020 990 Federal Tax return is due in May. Submitted with confirmation received 2/22/21

The 2020 filing with the Attorney General is due in July. Will be submitted in May 2021

Respectfully submitted by,
Jeff Johnson, Interim Treasurer

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Water Quality Committee Report – Bryan Adams

Big Eagle Lake Water Quality Committee Report for 2021



Big Eagle Lake, for a number of years, has experienced algae blooms and other water quality issues. Throughout 2019 and early 2020, the Big Eagle Lake Improvement Association (BELIA), Sherburne Soil and Water Conservation District (SWCD), and WSB Engineering worked together to collect and assess water quality data for Big Eagle Lake and its tributaries to determine if Big Eagle Lake is impaired by nutrients (in this case phosphorous), assess the source of the nutrients, and identify potential Best Management Practices (BMP) to increase the water quality of Big Eagle Lake. This study is very detailed and very scientific with the target audience of MPCA (MN Pollution Control Agency) in order to secure future grant dollars to fund the BMP outlined in this study. The results of this WSB study is reflected in the table below.

The MPCA, on an approximate 10-year cycle, reviews the lakes in the Mississippi River-St Cloud watershed which includes Big Eagle Lake for water quality and quantity of game fish. This study will need to classify Big Eagle Lake as impaired for State grants to fund the BMPs. This two-year study has been completed but the final report has been slow to be released due to covid. The initial indications of this study is that our lake **will be classified as impaired**, but to what degree will be determined when the scientific peer review is completed in the near future.

Summary of WSB Study Results					
Load Source	Existing Load pounds /year	Range of Load Reductions in Pounds from BMP's	BMP from Study	Mid Range of Costs	Cost per Pounds Removed
Central Subwatershed	144.4	25.3	1& 2 Infiltration Basin	\$ 143,750	\$ 12,254
West Subwatershed	68.2	17.2	3 Wetland Restoration	\$ 160,000	\$ 4,923
South (Direct) Watershed	24.8	21.9	4 Rain Gardens	\$ 101,000	\$ 9,100
Northwest Subwatershed	25.6	12.5 to 25	5 Ag Filter Strips	\$ 10,000	\$ 8,333
Northeast Subwatershed	1168.9	62 to 124	9 Wetland Restoration	\$ 362,000	\$ 2,923
Atmospheric	123.4	0			
Septic Systems	18.8	0			
Sediment Release	1140	912 to 969	Alum Treatment	\$ 800,000	\$ 826
Carp	362	259	Carp Management	\$ 60,000	\$ 232
Total Phosphorous Load	3076.1				
Possible Load Reductions		1309 to 1457			

The results of the WSB study in the table above concludes, in order to meet water quality standards, the overall phosphorous load will need to be reduced by 1172 pounds/year. The three areas that produce the most phosphorous are the northeast sub watershed, sediment at the lake bottom, and carp. These three are the most cost effective while the first two are also the most expensive.



Addressing the watershed BMPs provide the greatest challenge to reducing the phosphorous because we do not control the land. The cost / benefit is high and the results are variable. The Northeast watershed is slightly easier to address for the affected land is in MDNR (MN Department of Natural Resources) control. SWCD has had conversations (*continued...*)

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(Big Eagle Lake Water Quality, continued...)

with the forestry division of MDNR and they are receptive to possible BMP we may propose. WSB is revising their proposal to recommend possible BMP for the Northeast watershed. SWCD and BELIA are reviewing possible grant opportunities.

The sediment release issue is the easiest to solve with alum treatment but it is the most expensive. Alum is aluminum sulfate. With anoxic condition, when low oxygen conditions are in the water, phosphorous is released. In this case, water depths below 12' become oxygen deprived and phosphorous is then released. Alum treatment in areas deeper than 12' will sequester the phosphorous and make it unavailable as a nutrient source. The alum treatment will require a large grant and from a practical perspective, the watershed and carp issues will need to be addressed first. If we desire to extend the life of the alum treatment beyond the estimated 11-year range, we will need to address the northeast watershed issue. As a side note, there probably is not a lot of fish below 12' in the summer due to low oxygen levels.

From previous studies as well as this study, carp continue to be an issue for Big Eagle Lake by rooting up the bottom of the lake thereby releasing phosphorous. The WSB carp survey indicates an abundance of large carp but not smaller carp. Because of the lack of small carp, one could conclude that the carp are not reproducing and the population should decrease over time. The MPCA watershed study reflected some very small carp and no large carp and a very large and healthy bluegill population which feed on carp eggs. The BMP is to continue to bow fish the carp until we resolve the different results from these two studies. WSB is revising their proposal to further study this carp issue and we continue to look for funding opportunities.

In conclusion, we now know the sources of phosphorous that compromise our lake. We are now identifying and pursuing appropriate BMPs or action along with the required funding to move forward. Unfortunately, this will take place over a number of years, therefore immediate results will not occur. We all need to be mindful of another complication. As we move forward with improving the water quality and particularly clarity of Big Eagle Lake where the sunlight penetrates deeper, the opportunity of increased aquatic growth will result.

AIS (Aquatic Invasive Species) Treatments for 2021



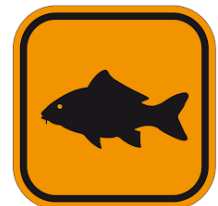
Aquatic Solutions of MN, with assistance from BELIA Board members, completed the 2021 herbicide treatment for Curly Leaf Pondweed, a non-native Aquatic Invasive Species (AIS). This year 25.7 acres on the north end of the lake and 21 acres on the south end were treated. The optimal treatment areas were determined based on an independent, third-party survey conducted in early May. This herbicide treatment cost your lake association \$15,500, treating the maximum 46.7 acres allowed by the MN DNR. In early June we will conduct another independent vegetation survey. This survey will be focused on detection of Eurasian-water Milfoil (EWM). EWM is another AIS known to exist in

Eagle Lake and that the DNR allows us to treat with the proper permit. Based on the survey results, the location of EWM growth and funds available, we may conduct a limited scope EWM treatment this year. BELIA depends on your membership and your donations. Thank you so much for your support!



Question: What is that boat looking for that slowly drives and so close to shore and shines 4-6 floodlights on our properties?

Answer: They are bow fishermen looking for Common Carp, one of the most damaging aquatic invasive species due to its wide distribution and severe impacts in shallow lakes and wetlands. Their feeding disrupts shallowly rooted plants muddying the water and they release phosphorus that increases algae abundance. Carp-induced declines in water quality causes declines of aquatic plants needed by waterfowl and fish.



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How to treat the Aquatic Vegetation on your shoreline.

BELIA is allowed to treat aquatic *invasive* species, but not native species, and are limited by DNR regulations to waters 150 feet or more from shore. If you have issues with the aquatic vegetation growing along your shoreline, interfering with access, swimming, or other water recreation activities - you can do something about it.

You, as a homeowner, can treat any and all vegetation growing along your shoreline but there are limits. For more information, please check out these links:

- <http://www.dnr.state.mn.us/apm/index.html>
- <http://www.dnr.state.mn.us/shorelandmgmt/apg/problemplants.html>

For a DNR Permit to treat your lakeshore:

- <http://www.dnr.state.mn.us/shorelandmgmt/apg/permits.html>

Licensed aquatic herbicide distributors in our area:

Aquatic Solutions: <https://aquaticsolutionsmn.com>

Lake Restoration: <http://www.lakerestoration.com>



Remember, it's the law...

CLEAN watercraft, trailer, motor, and equipment.
REMOVE visible plants, mussels, other animals, and mud before leaving any water access.
DRAIN water from boat, bilge, motor, and live well be removing drain plug and opening all water draining devices away from the boat ramp. Regulations require this when leaving accesses in many states and provinces.
DRY everything AT LEAST five days before going to other waters and landings or CLEAN, DRAIN, AND DRY



For more information go to:

www.wildlifeforever.org/invasive-species

<http://www.dnr.state.mn.us/invasives/index.html>

<http://www.sherburneswcd.org>

recreation equipment with high pressure and/or hot water (120 degrees or higher).

...Dumping aquatic vegetation into our lake is illegal!

What you can do to support your lake and the BELIA:

- **Maintain your annual Membership:** This is the largest source of our income. Send in your membership payment on the enclosed application form. Or, Renew or sign up (use form to sign up) on our website: belia.org/get-involved.
- **Make an extra donation with your membership:** We so appreciate donations above and beyond your annual dues.
- **Amazon.smile.com:** Designate BELIA as your charity and a donation to the lake association by our members will be received quarterly.
- **Join us** for Community and support our Fundraising Events.
- **Volunteer!** We need more folks to help with our events and fundraisers. Join our fun and resourceful Events Team as we come up with ideas for events and fundraisers, or simply volunteer an hour or so of your time. Questions? Please contact Lori Andreen at bigeaglelakeboard@gmail.com.



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Best Wishes to Kris and Dave Biser!

Dave and Kris are moving on to their beautiful home in Costa Rica. Kris has not only served as a Board Member, she has been a key figure in our efforts to raise money for the lake, coming up with and spending countless hours organizing for our Beer and Wine Fall Fundraiser, Poker Run, and Pulled Pork Cook-Off, and donating a week at their Costa Rica home for our Wine and Beer Raffle for multiple years. **Best wishes and THANK YOU to Kris and Dave!**

Volunteers Needed for BELIA Events!

Our Events Team does wonders creating exciting events each year to foster a sense of community and raise funds for Big Eagle Lake. We need more volunteers to join us to help with planning or simply to serve for an hour or two with our events (see Events page). Please think about joining us, it's a great way to get to know a new neighbor and have some fun! Sign up at the Annual Meeting or email Lori at bigeaglelakeboard@gmail.com. And we thank you!



Thank you...

- To all of our AIS volunteers who have inspected boats coming into the lake! Ken & Lori Andreen, Joan Fenton, J. Craig Johnson, Ed Peitso, Jeff Johnson, John Smullen, Debbie Gilyard, Colleen Cooper, and Paul Ellinger. Ken volunteered & worked 37 1/2 hours out of the total 54 1/2 hours.
- To our Lake Management Team who sampled the lake for our Nutrient Study: Bryan Adams, Mark Kurtz, Dan Boyle, Ed Peitso, Paul Ellinger, Mike Donnelly, Ken Andreen, Jim Swanson, and Gordy Westerlind.
- To the BELIA Events Team for their tireless energy and enthusiasm planning and putting on our Events, both for fun and as fundraisers each year. Kris Biser, Lori Andreen, Marcie Swanson, Marie Johnson, Lori Neisess, Kim DeVries, Sandy McClurg, Kristin Vigoren, Don and Denise Fisher, Sue Jones, Sarah Phillips, Marilee and Daniel Sanborn, Mary Myers Roach, Raquel Wallin, Diane Loftness, and Liz Waste.
- To those of you who support BELIA faithfully each year with your Membership and encouragements.

AIS Inspectors to return to Big Eagle Lake

Both volunteer and paid inspectors will be at the Public Access from time to time watching for AIS and educating folks preventing the spread of AIS from lake to lake. We are especially on the lookout for starry stonewort, a filamentous algae that grows so thick boats cannot drive through, and the spiny water flea which have shown up in Minnesota lakes. Thank you for cleaning, draining, and drying all of your equipment including life jackets, tackle, trailers, etc. If you have an interest in volunteering to protect our lake, please contact John Smullen at jpsmullen@gmail.com.



2021 'Ice Out' Contest Winner

The Ice went off Big Eagle Lake on March 28th. Congratulations to Bill DeVries who won \$135 for his guesstimate of March 28th. Thank you to all who participated!

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Upcoming EVENTS



**Saturdays, May 22nd
and October 9th**

BELIA partners with Connexus Energy to sponsor the clean-up of County Road 75 for the Sherburne County 'Adopt-a-Highway' program. Twice a year we cover County Road 75 from the Boat Access to County Road 5. We need your help! Bring work-gloves if you need them, sometimes tall boots are helpful. Connexus Energy supplies us with plastic garbage bags and vests. It is always a nice time and the road looks so nice when we are done. It takes about an hour or so depending on how many come... Thanks a bunch!

**Fun is Brewing at the
2021 Music in the Park!**

Thursdays 7-8:30 PM

June 3 – July 8th

Lakeside Park, Big Lake

Lupulin Brewing has asked BELIA

to serve as the sponsor and recipient of profits for Big Lake's 'Music in the Park' this summer. Lupulin will pour the beer and serve as the local brewery (uniform, etc.), BELIA will receive the estimated \$1000-\$1500 in profits, and the City of Big Lake will have satisfied patrons: a win-win for all parties. So come out to enjoy Music on the Park, a home brew, and support Big Eagle Lake. Hope to see you there! See dates on our Quick Guide Page.



Spud Fest Time! June 24-27th

Your BELIA Board will be serving at the **Spud Fest Ball Fields on Saturday, June 26th from 1:30 – 4:30.**

We will be wearing our Pulled Pork Cook-Off t-shirts and hope to raise awareness of our upcoming Event. Come' and say 'Hi!'



**Annual Meeting
Saturday, June 19th 10 AM
Lion's Park**

Join us as we learn more about the **WSB Engineering Study of our lake quality and our options for the future.**

4th of July Boat Parade 1 PM



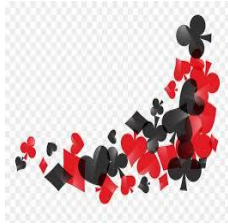
We have been asked many times if we could have a Boat Parade and this year, with added liability insurance, it's a go. More details to follow, maybe a decorating contest, who knows! Meet at the Public Access at 1 PM and we'll cruise around the lake, celebrating our Nation. Watch for more info to follow!

Poker Run

Saturday, July 24th 2-?

What could be more fun than meeting up with new and old friends as we travel by water, progressive style, to the homes of five of your lake neighbors where you will be treated to fine dining. At each home you will receive one poker card, and at the end of the evening the person with the top poker hand wins the 'pot'. *Cost is \$10 per person (\$5 to defer the cost of food and \$5 for the 'poker pot'.)

If you have joined us in the past, possibly think of hosting! We always love to have new people host. Questions? Lori at bigeaglelakeboard@gmail.com.



Wine and Beer Tasting and Silent Auction!

**Friday, October 1st 6 –9 PM
At The Buff**

This is our 6th Annual, and biggest, fundraising event of the year. (It's still the 6th as we were not able to hold this Event in 2020.) Vendors from multiple avenues bring samples of beer and wine for your enjoyment and offer a Discount on purchases. Our Silent Auction is amazing and we thank George Wallin and our Events Team for all their hard work soliciting donations, organizing, packaging. Our horse race continues to be a totally fun event!

If you have a basket or an item or service you would like to donate, we would love to hear from you. No donation is too big or too small!



We are still looking for an item as a Big-Ticket Raffle item. Any ideas?



**Ladies Nite BINGO!
Friday, November 5th
6:30 PM
At The Buff**

That's right, the hunters are heading out and it's time for the ladies to party! Join us at the Buff or via Zoom as we BINGO together for great prizes! Hope to see you there!

Questions? Sign up?

Go to www.belia.org for more information.



Wine and 'Weeds' Cruise

Save the date!

Saturday, August 21st

(Time and Rain date TBD)

What IS that aquatic species growing under the water at my place? Is it supposed to be there?

Join us for an educational evening as we cruise around Big Eagle Lake. Dan Cibulka of the SWCD will be joining us for this educational adventure. There will be a

potential cost to defer the expense for our host pontoons. More information and sign up to follow.



Pulled Pork Festival and Cook-Off

August 14th

Lupulin Brewing of Big Lake

Judging 1:30,

Public Sampling 2-4 PM

Join us for some really great cookin' and hometown fun as our 'Smokers' compete with each other for their 'Best' pulled pork! 'Smokers' and 'Tasters' alike are needed.

Prizes! First Place \$200
Second Place \$100
Third Place \$75

