

BLAKE LAKE BUGLE

Future District Meetings:

Spring Meeting 2015: May 16
Annual Meeting 2015: August 15

Invasive Species
Prevention & Clean
Boats, Clean Waters
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Current dam condition Sept. 1, 2014

UPDATE : Reconstruction of the Big Blake Lake Dam

What happened? Why did the dam break?

In late April three things happened to create “the perfect storm”. Days of heavy, soaking rains saturated the soil and strong winds during “ice-out” pushed ice chunks into the old logging dam. Rip-rapped boulders and the old logs constituted the dam and it gave way to the elements.

New dam in 2015

The Lake District Board has been very busy figuring out all that needs to be done to replace the dam as quickly as possible.

The Sherrard family estate has owned the dam. They are working closely with the District to transfer ownership of the dam (and needed adjoining property) to the District. Also, there was some concern that the DNR may require us to completely remove what is left of the existing dam at some point this year. The folks from the DNR said that they did not feel it would need to be removed — as long as it poses no danger. The current plan is to remove the old dam ‘after’ the new dam is in place. The District received approval to place rip-rap where the dam breached this past Spring to prevent additional erosion. The work was professionally done by Marv Pass (see photo above). This is not intended to repair the existing dam structure nor is expected to help retain any additional water in the lake. *Continued on next page.*



BLPR District Leadership

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The *Blake Lake Bugle* is a publication of the Big Blake Lake Protection and Rehabilitation District. The Bugle is published seasonally for friends and members of the district. To receive lake news, send your email address to Peggy at plauritsen@pldg.com or mail to the address below.

DAM UPDATE Continued

On July 18th, members of the board and APM Coordinator Jim Maxwell, met at the dam site along with members of the Sherrard family, the DNR, a Polk County surveyor and our contracted engineer — Larry Gotham. All parties agreed on the placement of the reconstructed dam. This would be downstream of the existing structure which will allow us to complete construction of the new dam without lowering the current lake levels any further. The final survey is almost complete.

We have a preliminary project plan pulled together. We are looking to have all paperwork, engineering work and approvals completed by the Spring of 2015. The current estimate is May 1st, 2015 and we are seeing if we can move that date up any further. Once everything has been approved, contractors identified and construction begins, our engineering team is estimating 30 days to complete the construction of the dam.

New Dam: “Rip-Rap Rock Chute Dam”

Overview:

- This type of dam is simple, economical and can be built without dewatering
- Virtually Maintenance Free
- Rip-Rap Rock Chute Dam can be built in about thirty days after all the red tape
- Red tape takes about ten-twelve months (survey map, deed transfer, draft and final agreement, plans to WDNR, bidding/negotiations, build)
- Preliminary Estimate \$100k - \$150k



Above: This is a typical rip-rap rock chute dam for a high head. The steel sheet pile can be seen under the bridge. This dam will look very natural and in keeping with our environment. Low maintenance bodes well in considering the longevity of this dam. Construction costs are low while maintaining a high quality structure.

Photo by Sam Weber



DAM UPDATE Continued

Dam Costs Assessment: calculate what you own

How many parcels?
Do any parcels have lake access / lakeshore?
If so, how many feet of shoreline do you own?
For example:
1 parcel, shoreline, 100'
1 parcel, backlot
1 parcel, backlot w/access, 6' (easement is not considered access)



<p>Riparian v non-Riparian 84% / 16% split</p> <p>193 parcels x \$434 = \$83,762</p> <p>75 parcels x \$217 = \$16,275</p> <p>Riparian = \$434 ea non-Riparian = \$217ea</p> <p>per Parcel based on \$100,000 dam <small>Riparian means you have deeded access to the lake or lakeshore property</small></p>	<p>Unique: Flat Fee v Non: Flat Fee 91% / 9% split</p> <p>“Unique” Owners own at least one property with lake access “Non” owners have no property with lake access</p> <p>176 Unique Owners x \$518 = \$91,168 34 Non x \$260 = \$8,840</p> <p>per Owner based on \$100,000 dam</p>
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With input from the annual meeting, and members at large, the District Board will determine the method of assessment.

Otter Sighting — Keep Your Distance

This family of river otters with a baby was spotted on a dock and boat lift on the west side of the lake in the narrows on September 7. Be careful around otters. Keep your distance. They are fun to watch, but are capable of aggressive behavior. Males can be 25 lbs., females 19 lbs.



Invasive Species Prevention: Clean Boats, Clean Waters Volunteers Active!

Wow, over 52 local residents and volunteers signed up this season to be a part of the Clean Boats, Clean Waters (CBCW) statewide program for our lake! That is a 20% increase over last year. We put flyers in bait shops, educate boaters and conduct free boat checks May through September 30 at east and west boat landings. Volunteer inspectors work to assure that boaters do not accidentally spread Eurasian water-milfoil, zebra mussels, and other aquatic invasive species (AIS). Thank you to all who volunteered again this year!



Join Us! If you would like to volunteer for next year please contact Peggy Lauritsen at plauritsen@pldg.com or 612-940-2006.

Here's what CBCW volunteers have done this season:

AIS Campaigns:

- Participated in Spring "WDNR Drain Campaign", a statewide initiative to make sure anglers know about Wisconsin's draining laws.
- Participated in the 6th Annual Landing Blitz, a statewide effort over July 4 to educate boaters and conduct free boat checks. We help boaters understand Wisconsin's invasive species laws.

Boat Checks:

- By the end of September, completed 400 hours, inspected 60+ boats and contacted 110+ people.

Prevention Steps and Increased Visibility:

- Placed three articles in the Inter-county Leader, July 2 and 9 and August 13. We potentially reached 40,500 people!
- Set up informative AIS displays and distributed value-added AIS literature to property owners at two District meetings per season.

Training & Education:

- Three volunteers attended 3 days of training at the Wisconsin Lakes Partnership Convention: Tom and Diane Borden and Peggy Lauritsen.
- Spring AIS training session with Katelin Holm/Water Quality Specialist, Polk County Land and Water Resources Department. Volunteers learned how to identify invasives and reviewed basic boat inspection tips.
- Volunteers attended training for "Citizen Lake Monitoring Network -Aquatic Invasive Species" (Gail Rustad, Marge Filkins and Vicky Dorner).



Some of the 52 CBCW volunteers, pictured left to right: Judy Hall, Katelin Holm/Water Quality Specialist, Polk County Land and Water Resources Department, Mike Rogge, Naomi Anderson, Tom Borden, Diane Borden, Sue Ogren, Marge Filkins, Jim Filkins and Peggy Lauritsen. Not pictured, Kathy Maraden. **(Bottom)** Left to right: Max Bay, Peggy Lauritsen and Carla Hagen.

BIG BLAKE LAKE PROTECTION AND REHABILITATION DISTRICT

Call to Order at 9:05 by Sam Weber.

Welcome and Introductions

Board Members Present: Sam Weber, Tom Borden, Jim Filkins, Joan Maxwell, Polk Co Designee Cedric Solland.

Board Members Absent: Adam Elliott, Ron Ogren

Approval of meeting minutes (handout)

Motion to accept/approve minutes from 2013 Annual meeting by Stephanie Hinrichs; Second by Sue Ogren. Motion carries.

Approval of Treasurer's report (handout)

Motion to approve Treasurer's report by Char Dunst; Second by Stephanie Hinrichs. Motion carries

Introduction of Guests and Presentations

Jeremy Williamson, Polk Co LWRD re: Core Sediment Sampling

Jeremy Williamson presented an update on the findings for the core sampling collected in September 2013. Jeremy has been doing studies on our lake since 2006. He is currently doing top and bottom water chemistry, algae and zooplankton sampling and reconstructing the history of Blake Lake through the core sampling.

They took two core samples and have 195cm of mud, essentially. From this core, they are extracting a lot of geo-chemical data looking at what phosphorus is bound to, finding out how much erosion has occurred in the entire watershed, etc. They date the core, calibrate it, then pull out the diatoms, zooplankton fossils, fish flies, pigments, and all sorts of things to measure and observe.

Blake Lake is really interesting because it has changed significantly over time. We have a low sedimentation rate. They took 2 meters of "mud" and they were able to go back to pre-settlement within 40cm... back to around the 1300s. Our geo-chemical analysis so far seems to indicate that our lake really began changing in the 1970s. In looking back to where we've been, to where our lake has been historically, we will be able to more accurately develop an aquatic plant management plan that is realistic and is based on evidence from where our lake has been in the past.

At the end of this core sampling data analysis, Blake Lake will develop a plan that will outline where we are going with respect to aquatic plant management. This will involve forming a committee to look at the data and present a plan to the District. This will also involve continued citizen lake monitoring participants. Clean Boats Clean Waters will also play a huge role in preventing the spread of aquatic invasive species and protecting our lake water and ecosystem.

Old Business

Slow-no-wake Zone (Tom Borden)

Commissioner Tom Borden updated the District that most of the paperwork has been approved by

WDNR and we are making progress toward gaining final approval for buoys to mark the slow-no-wake zone through the Narrows on Big Blake Lake. We expect to have full approval by next Spring for the 2015 boating season.

Email List

The District would like to have an email address for every District member in order to communicate in a timely fashion. An email list sign-up sheet was circulated during this meeting; anyone who wishes to add their email address to our District list-serve for District info, CBCW info, and dam updates please give your email address to Peggy Lauritsen: plauritsen@pldg.com

Standing Committee/Reports

Clean Boats Clean Waters (Peggy Lauritsen). 52 Volunteers have already completed 76 percent of our seasonal goal of 400 hours of CBCW monitoring per landing. We still have 45 days left to complete our goal.

Through the Drain Campaign, the Landing Blitz, and AIS flyers and brochures, our CBCW team is increasing awareness among our Lake District members and visiting boaters that AIS is a serious issue on area lakes. This year we handed out free AIS towels and ice packs to educate boaters on WDNR's statewide initiative to teach anglers to "Drain and Ice" - drain all lake water from your boat, your live-well, your bait buckets; ice your catch - this will help stop the spread of aquatic invasive species.

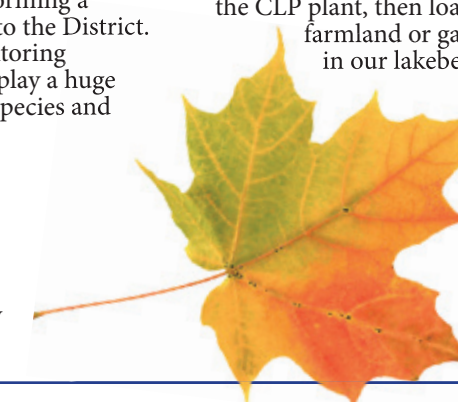
Three CBCW volunteers attended a 9-hour training through PCALR for Citizen Lake Monitoring Network; thank you Gail Rustad, Marge Filkins, and Vicky Dorner for attending this training.

Polk Co LWRD expert Katelin Holm/ Water Quality Specialist held a training here at Big Blake Lake to help us identify invasive species and go over the new inspection forms for CBCW. Big thanks to attendees for this training session: Judy Hall, Mike Rogge, Naomi Anderson, Tom Borden, Diane Borden, Sue Ogren, Marge Filkins, Jim Filkins, Peggy Lauritsen, and Kathy Maraden.

APM Harvey Report (Jim Maxwell). Our APM Coordinator Jim Maxwell informed us that 30 loads of CLP (invasive Curly-Leaf Pondweed) and 1 load of Coontail have been harvested this season (so far). Due to the decreasing density of CLP, it takes more hours of active harvesting to get an entire load of weeds. This is great news for our harvesting efforts as it is active proof that we are making a difference in our invasive weed population. Jim explained that as we continue to harvest CLP before it drops its seeds (turions), we have better odds of long-term reduction because new seeds are harvested while they are still attached to the CLP plant, then loaded onto a trailer and tilled into someone's farmland or garden thereby ending their cycle of growth in our lakebed.

EPP Grant Update (Sam Weber)

The EPP Grant (Education, Prevention, and Planning) is a 3 yr, \$49k grant designed to educate District members about the lake and about aquatic invasive species (AIS), to prevent the spread of AIS *Continued on page 6*



Continued from page 5

through programs like CBCW and CLMN along with Bait Dealer Initiatives and the distribution of flyers at the boat landings, and to plan for the future of our lake by developing a comprehensive Aquatic Plant Management (APM) Plan.

Each Spring and Fall Polk Co LWRD conducts a full point intercept survey at 276 gps coordinates on our lake plus every other week they collect water samples, plant samples, and related water quality data such as water temperature, etc. at those same sites. Samples are sent to the State Lab of Hygiene (SLOH) where further analysis is conducted and transmitted back to Polk Co LWRD.

An executive summary will be available to all District members at the end of this grant cycle in 2016. Please consider becoming part of the APM Committee to help develop our comprehensive APM Plan beginning next year.

New Business

Polk County updates (Ken Sample or designee C. Solland)

No Polk Co updates other than our opportunity to greet Cedric Solland as our Big Blake Lake designee. Cedric will serve as a liaison between our lake district and the county. Welcome Cedric.

Georgetown updates (Ron Ogren): No updates.

WAL Convention Delegates (April 23-25, 2015; Stevens Point)

Annual Business

VOTE: Annual Budget: (Treasurer: Jim Filkins) Jim Maxwell/Vince Teuber motion to approve the annual budget of \$20,000. Motion carries unanimously.

VOTE: Commissioner Election: 3-year terms currently held by Sam Rivers Weber and Joan Maxwell. Voting held by private ballot with Joan Maxwell, Sam Weber, and Peggy Lauritsen as nominees. Sam Weber and Peggy Lauritsen were elected to these positions for the next 3 years.

DAM Discussion

The BBL P&R District Board presented a PowerPoint explaining the procedures for reconstruction of the Dam. Through a series of meetings with the Sherrard family, the BBL P&R District, WDNR, and our Engineer, we've developed a scope and sequence of events; a timeline, as it were, to reconstruct the Dam that went out on or around April 28th, 2014.

A Rip-Rap Rock Chute Dam is our best choice because it is economical, simple, and virtually maintenance free. The Board also looked at Concrete Dams, and Concrete Drop Box Dams, both of which require de-watering prior to construction, which would cost at least \$100,000 more than a Rip-Rap Rock Chute Dam.

The "red tape" will take about 10-12 months to complete with property surveys, transferring deeds, approval of project, drafts, and final approval by the DNR then bidding from Dam builders. Once construction starts, it'll take about 30 days to complete the Dam. We are hoping to have this fully completed by next summer.

The preliminary figure we've been given by the engineer is between \$100k-150k.

Therefore, the board is seeking approval from the District to reconstruct the Dam, to assess the District for the costs of this project, and to borrow funds to get things rolling on this with a cap of \$175k. If Dam costs go above \$175k, the District will hold a special meeting to discuss the project costs and seek approval for additional funding. We do not anticipate this happening, and feel comfortable with the \$175k borrowing approval at this time.

VOTE: Funding for Dam Reconstruction: Approved

Motion approving the Dam Reconstruction project by Sue Ogren/Ford Elliott. Motion carried unanimously.

VOTE: Borrowing Funds for Dam Reconstruction:

Approved unanimously. Three methods of assessment were presented to the District:

- 1) Riparian v Non-Riparian
- 2) Unique Flat Fee v non-Unique Flat Fee
- 3) Flat Fee for all plus Riparian cost per foot of shoreline

*Riparian means you have deeded access to the lake or you own lakeshore property. The Board will determine the method of assessment; thank you for your input.

Announcements - Save the Dates

- 1) **Spring Meeting:** May 16, 2015 (3rd Saturday in May)
- 2) **2015 Annual Meeting:** August 15 (3rd Saturday in August)
- 3) **2015 Pontoon Parade:** July 4, 4:00 p.m.

Adjourn: Sue Ogren/Gail Rustad, unanimous. Adjourned 11:10.

78 District Members attendees; 6 non-District attendees.

Minutes Submitted by: Sam Weber, Co-Chair

Common Acronyms:

APM:	Aquatic Plant Management
AIS:	Aquatic Invasive Species
BBLP&RD:	Big Blake Lake Protection & Rehabilitation District
CBCW:	Clean Boats Clean Waters
CLMN:	Citizen's Lake Monitoring Network
EPP:	Education, Prevention, & Planning
LWRD:	Polk Co. Land & Water Resources Department
PCALR:	Polk Co. Association of Lakes and Rivers
SWIMS:	Surface Water Integrated Monitoring System
WAL:	Wisconsin Area Lakes (now: WI Lakes Partnership)
WDNR:	Wisconsin Department of Natural Resources



BIG BLAKE LAKE PROTECTION AND REHABILITATION DISTRICT

Call to Order: Tom Borden, 9:00 AM

Motion to approve minutes: Jim Thorn/Sue Ogren. Unanimous.

Treasurer's Report: Jim Filkins presented the Treasurer's report and spoke about the need to approve a 50K Reserve account for Harvey as a Capital Expense Acct. Something that never was officially approved in the past. Sue Ogren motioned to approve capital exp acct and Peggy Lauritsen seconded, motion carried. Ogren/Lauritsen motion to approve Treasurer's report carries.

Presentation:

Jeremy Williamson: Core Sediment Sampling:

Jeremy and Katelin from Polk Co LWRD did point intercept surveys on the lake this summer and spoke about gathering extensive data and entering into the mapping program. Curly leaf way behind this year. Native plants are growing where curly leaf used to be abundant, and that's a good thing. Taking chemistry samples at inlet and outlet and using a flow meter to gain critical information. Also is interested in doing sediment core samples - working with science museum - doing Geo chemical analysis also and looking at historical land use, going back 150 years or so. Lessening curly leaf makes us eligible for more grants.

Old Business:

Slow - No-wake:

DNR needed comments and feedback from residents on the lake who have been impacted by the land erosion and lack of a slow wake zone.

Jack Belisle who doesn't live in the narrows commented on the boaters. Gerry Smith remarked about possibly having an on-line survey for our residents to give feedback regarding the need for a slow-no-wake zone. He thought it might be a danger to boaters to hit the buoy with their boat. He was told that it is the boaters responsibility if he does. This was a quote from Mark Little @ DNR. Gale Rustad lives in the narrows and has seen rip-rap totally washed away and seen people spin their watercraft in narrows. Peggy Lauritsen has seen a lot of traffic right by their dock. She commented that in her line of work they do surveys on-line often and if you get a 30% response on the survey is good. Ford Elliott says that 200 feet North of narrows gets hammered with wake. Says buoys are in the water at Balsam. On our lake we would be placing two buoys at each end. They are made of covered foam. Adam Elliott had a question regarding clarity on what kind of buoy. Sue Ogren says boaters are still coming too close to property. Suggested reminding boaters. Jerry Belisle has seen boaters going between his float and his shoreline. Vincent Tueber asked about the number of feet from shore and other boaters. Gail Rustad says people are asking "Where does the no wake zone start and end?" Says they need to see the signs.

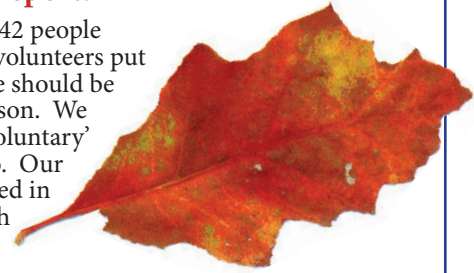
Trash can vs. Signage at landings:

Tom Borden reported that trash cans rent for \$55 a month and two would be required if we go that route. It was decided - no trash barrels. Signage is better to encourage people to take home their trash and dispose of it properly.

Email Spreadsheets: Vicky Dorner is continuing to work on the email spreadsheet for District contacts.

Standing Committee report:

CBCW: Peggy Lauritsen - 42 people signed up this year. Some volunteers put literature at Bait Shops. We should be at landings 400 hours a season. We are not hiring kids to do 'voluntary' hours but we might have to. Our Landing Blitz was mentioned in the Amery Free Press which has a 5000 circulation.



APM: Jim Maxwell says Harvey is running good this year. Took out 6 loads of coontail compared to 85 last year.

On 6/30/2013 Jim Maxwell and Jim Filkins met with two fellows from the DNR and GLIFWC and received permission to expand cutting at the Belisle and Foley properties and near Lyle Sunde's property. Areas that were not permitted in the past.

Large mouth bass limits were discussed and DNR Fisheries agent Aaron Cole encouraged us to keep everything the same. Vicky Dorner would like Aaron as a guest at a future meeting.

The \$3010 GPS system that was purchased last fall allows the Harvey driver to punch in the coordinates and not cover the same ground he just went over. Fixed head on Harvey by rearranging small motors; runs quieter now.

EPP Grant (AIS): Sam Weber reports that as we go to the next level of study we may qualify for a new grant. The Education, Prevention, and Planning Grant will involve more lake citizens for monitoring and CBCW activities and next summer there will be a Pontoon Classroom.

Core Sampling Grant Approval:

The total for District's commitment to the core grant is \$8,000 over two years. Motioned to approve made by Jim Thorn, Ford Elliott seconded. Motion carried.

New Business:

Annual budget: Jim Filkins reports that insurance has gone up significantly. The board is actively looking for alternatives. Budget remains at \$20,000 per year. Vince Tueber/Ford Elliott motion to approve carries unanimously.

WAL Convention: Stevens Point hosts it this year. Ford Elliott strongly recommended that a board member attend. Tom Borden and Peggy Lauritsen volunteered to go this Spring (2014).

4th of July Parade: Pontoon Parade Friday July 4th at 4pm.

Spring Meeting 2014: May 17th (third Sat in May)

Annual meeting: August 16, 2014 (third Sat in August).

Adam Elliott volunteered to be a commissioner; Elliott/Filkins motion carried.

Adjourn: Ford Elliott/Vicky Dorner. Adjourned 10:15
Minutes submitted by: Joan Maxwell, Secretary



Paleolimnology of Blake Lake Using Sediment

Paleolimnology is the study of ancient lakes from their sediments and fossils. Jeremy Williamson, Water Quality Specialist, Polk Co. LWRD collected core sediment samples in September, 2013. Since 2006, he has been studying water chemistry, algae and zooplankton to reconstruct the history of the lake. This core data analysis will be the foundation of an aquatic plant management plan for the future.

Read more on page 5. See August 16 District Meeting minutes.

Contacts

Waterfront Property, Polk Co., WI

Alterations to shoreline? Cutting Trees? Building, remodeling, boathouses, driveways, garages, fire numbers?

Polk County Zoning:
(715) 485-9111
<http://www.co.polk.wi.us/>

Burning permits and restrictions? WDNR or town, village or city:

1-888-947-2876
<http://dnr.wi.gov/topic/forestfire/restrictions.html>

More resources at:

Polk County Association of Lakes and Rivers (PCALR)
<http://pcalr.org/our-lakes-and-rivers/>



1988 S. Baker Road
Balsam Lake, WI 54810

BLAKE LAKE
BUGLE

2015 Pontoon Parade: July 4, 4:00 p.m.
2015 Annual Meeting: August 15 (3rd Saturday in August)
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SAVE THESE DATES