

# Black Lake Association

## Minutes of Board Meeting

September 12, 2022

<b>Present</b>	Brett Trepanier, Roger Bergstedt, Cindy Trepanier, Sharon Dulak, Ron Dulak, Erin McLean, Roger Selvig, David Turzewski
<b>Absent</b>	John Roby
<b>Call to Order</b>	Brett Trepanier, president, called the meeting to order at 7:00 p.m. at the Grant Township Hall. In addition to the Board, 11 people were present. The Pledge of Allegiance was recited.
<b>Rules of Meeting</b>	Questions and input were solicited for each report. Additional comments and questions were solicited at the end of the meeting.
<b>Secretary's and Treasurer's Reports</b>	Reading of the minutes from August 8, 2022, accepted with minor revisions. Treasurer's report approved as read subject to audit.
<b>Program re Shoreline Survey Proposal</b>	<p>Dennis Wiand, ZeroGravity Aerial Graphics, and Ron Reimink, Freshwater Solutions, presented background, examples, explanation, and answers to questions about a proposal to collect environmental data for a shoreline survey using drones. The resulting deliverables would be a video and an analytical report based on the data collected. Drones are used to survey both at a low, close-up level of the shoreline and also from a high level that includes the lake where there are "aquatic gardens" or weed beds. The video data and analysis can be used for early detection and rapid eradication of invasive species.</p> <p>Slides from a similar presentation made to the Michigan Lakes and Stream Association in May 2022 are available to download at <a href="https://drive.google.com/drive/folders/1De4jLOTVcntF7titvqj9Ef7AOszBOlaG">https://drive.google.com/drive/folders/1De4jLOTVcntF7titvqj9Ef7AOszBOlaG</a>.</p> <p>Notes re comments, questions, and discussion are attached.</p> <p><b>Action items:</b> Sharon to request more formal, detailed proposal. Additional discussion of proposal to be added to October agenda.</p>
<b>Reports and Updates</b>	
<b>Membership</b>	Sharon Dulak reported that 9 of the 40 beaches are still outstanding. 435 memberships in.
<b>Fish</b>	<p>DNR still has \$1700 left of the money that the BLA had donated previously for fish food for the rearing ponds, but Erin is working on how to handle proposed contribution.</p> <p>The Northern Inland Lakes Fishery Advisory Committee meeting December 12 in Indian River will include discussion about the proposed changes to pike regulations and possible stocking of muskie.</p>
<b>Township Updates</b>	<p><i>Bearinger:</i> <i>N. Allis:</i> <i>Grant:</i> <i>Waverly:</i></p>

<b>Swimmers' Itch</b>	
<b>Water Quality/ Monitoring</b>	Roger Bergstedt to put together some information about Eurasian Milfoil and difference between that and native Milfoil.
<b>Boat Washes</b>	Over for season
<b>DNR Launch Presentation</b>	At site of Black River Marina Sept 20, 3-6:30 open house for public input re plans. Copies of plans will be available.
<b>Dam/Water Level</b>	<p>Recent call with Nelson Turcotte owner of the Alverno Dam, including BLA, EGLE, FERC, DNREGLE pushing for Oct 1-15 drawdown of water beginning in 2023. Proposed because of possibility of stranded organisms--mussels and turtles, but EGLE expecting Nelson to go along shore and move the turtles. Nelson says that Oct 1 is too early. So does BLA Board.</p> <p>Jim Tucker, who manages operations at the dam, distributed copies of a summary of the Alverno/Black River—401 Certification Amendment. Copy attached.</p> <p>The license amendment will not be granted until the amendment process is completed. The agreement that the dam cannot meet the court order that is currently in place has been reached.</p>
<b>Buoys</b>	Will be in place just until the end of Sept.
<b>HABs/EGLE</b>	DHA notified BLPS only, who posted on their FB page, which is a private group, which does not include all residents. Brett and Sharon are following up.
<b>Next meeting</b>	Monday, October 10, 2022, 7:00 p.m.
<b>Adjournment</b>	Meeting adjourned 9:05 pm

## **Aerial Shoreline Surveys and Other Innovative Applications of Drone Technology for Lake Management**

*Dennis Wiand, ZeroGravity Aerial Graphics*

*Lee Reimink, Freshwater Solutions*

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### **Discussion of Proposed Shoreline Survey**

Following is a summary of the discussion, questions, and comments related to the presentation:

Comment about how shoreline survey would demonstrate commitment to support proposal for watershed management plan. EGLE has accepted the shoreline survey as a qualifier.

Questions re who owns the video and who can access or publish it. The creator—ZeroGravity Aerial owns the video and restricts the use of it. It cannot be published without the permission of the videographer, the BLA, and the property owner. Structures on properties are not included in the video, so individual properties are not identifiable. E.g, if the county requests the video to compare with older images of a specific property, Wiand—the videographer—owns the video and cannot release it based on the contract conditions under which it was made.

All properties would be included unless someone objected. There will be someone on the water to talk to anyone with questions or objections.

Will there be an individual report for each property owner similar to what was sent to all property owners when Tip of the Mitt conducted the last shoreline survey collecting data by people in kayaks? No. Analysis is by areas rather than lots. However, BLA could arrange to show individual property owners their part of the video and locate where their property lies in zones identified in the analysis. Or BLA could set up a sign in so that property owners could see just their part of the video. That would not come from ZeroGravity Aerial but would have to be developed by BLA.

Timeline is roughly that if BLA commissions ZeroGravity soon, the survey would be conducted next summer, not before mid-June. Timing of the data collection would depend on data requested by BLA for analysis. For example, there is a short window to identify cladophora. Various invasives, overflows could potentially be identified, sanding, rock seawalls, steel seawalls, etc., will be surveyed as requested.

Drone survey should take about six days. You need mostly clear days and calmer water to video at the higher level; any day for the lower level.

The analysis takes more time and would not be available until later.

Pricing. Cost of current proposal left with board is \$10,890.

Questions: What will we do with survey and data? How can we use it? What do we get and how can we distribute it? Survey with drone looks great, but do we have the technology skills and personnel to handle and distribute the results? Presentation referred to our “lake biologist.” Similar concerns voiced by several people about ability to use and distribute results. One deliverable from the 2017 survey was an individual letter to every property owner on the lake with information about each specific property and a link to the

complete report without revealing anyone else's data. Association could notify those with suspect septic systems so that they could repair or replace. However, the county cannot enforce.

It's a good idea but how are we going to use it? Intent is to improve shoreline. It's a tool to solve a problem.

Who will educate property owners?

Awareness of some of the problems has increased. We did a shoreline survey in 2017, although it wasn't aerial. We do have that basis already for some comparison. People are thinking about water quality, water level, etc., but we need more current info to give them.

Can we measure the outcomes and results in terms of changes to the shoreline? We want to know how much change has really occurred. All we can do is provide the information; we can't enforce change. We won't know that change is attributable to the survey.

First, we need to know if we have a problem. Cost of survey is roughly a dollar an acre for our 10,000 acre lake, although the survey is of shoreline and weedbed areas only. It would be nice to be able to compare our lake with others.

Deliverables are all the video taken at shore level and from air and the analysis of the findings. BLA could create a file that would open placemarks on Google Earth.

Could do a mail merge. Targeted letters possible. Educational plan for improvement. Example from ZeroGravity dealt with a much smaller lake, where improvement of 3 properties was the measurable goal.

Provides "baseline" for comparison with later studies to show erosion, ice damage, invasives, cladophora, etc.

Use of data and technology required for distribution and education would be responsibility of BLA.

How soon do we have to notify ZeroGravity if we decide to do the survey next spring?

Decision postponed until next meeting. Board to request more formal, detailed proposal for discussion and consideration.

Dave also wants to follow up with Katie at TotM re watershed plan and how this would fit in. We don't need to duplicate efforts. They didn't get the grant from EGLE this year.

Roger B to put something together re Eurasian milfoil

**SUMMARY OF ALVERNO BLACK – 401 CERT AMENDMENT**

- The License Amendment Request (LAR) was filed with FERC on December 7, 2021, following input from local stakeholder groups and state resource agencies.
- We filed the draft amendment request for the 401 Water Quality Certification (401 Cert) with Michigan Department of Environment, Great Lakes, and Energy (EGLE – formerly MDEQ) on December 29, 2021. Per the regulations, they are allowed 1 year before they must issue a final determination on the request/new 401 Cert.
- We received the draft 401 Cert from EGLE 3 weeks ago, they sent the first draft to Black River Hydro LP only, for 30 days, so that we may discuss any disagreements before it goes to its Public Notice period, where all interested parties, including individuals from the public, may provide comment on it.
- We have met with EGLE and the DNR to discuss some of the issues we have with this draft 401 Cert. We also met with a few members of the BLA last week to give a general update on the situation. After speaking with the agencies, we realized we must have a meeting with the Counties to discuss the FEMA flood mapping and water levels for Alverno.
- Our main issues with the 401 Cert are:
  - o They want us to drawdown from summer levels to 611.3 for the winter, from October 1 – 15<sup>th</sup> each year. This is obviously very early, much earlier than we have in the past. Traditionally the drawdown period began November 1<sup>st</sup> and extended to November 30<sup>th</sup>. The reason for the earlier proposed drawdown is for the protection of stranded small organisms like turtles, frogs, mussels, etc. so they aren't stranded above the freezing line of the water for the winter, apparently the earlier drawdown will help them move to deeper areas faster. This is obviously a big issue for recreation and also for power production.
  - o DNR and EGLE also want us to implement a "stranded organism rescue plan" where we monitor and move those small organisms to the deeper water – the details of this plan are unknown at this time. DNR says they want it to be simple, a matter of boating around and tossing any exposed creatures back into the water, but we don't exactly know the details of this work, it is not in writing. **We believe this work should be done by DNR/EGLE?**
  - o During a summer rain event, they want us to drop the headpond to 611.3 if the flows exceed 800cfs or 611.6 if the flows exceed 600cfs. Moderate rain events may have us operating up and down causing a big problem for residents on the river with their boats, it sounds like the agencies expect us to notify river residents each time, which creates more work.
- We are continuing to work with engineering consultant Ken Edwards and environmental consultant Ron Bruch to better understand the biological effects of this proposed operation plan, the earlier vs later drawdown, potential production losses, and more. We are also working with our legal counsel to determine where the state agencies may be out of bounds with their operational requests in a water quality certification.
- In the coming weeks as we continue to work with the agencies in hopefully resolving these issues, EGLE will soon issue the draft 401 Cert for public comment. At that point, it is extremely important that you make your concerns heard – filing a letter with your local DNR and EGLE representative. If you need assistance with this or need the contact information for the DNR and EGLE staff please let us know.