



P.O. Box 202, Balsam, Lake, WI 54810

BALSAM LAKE PROTECTION AND REHABILITATION DISTRICT

**Regular Meeting April 19, 2014
Polk Business Center Meeting Room**

MINUTES

CALL TO ORDER: The meeting was called to order at 8:30 a.m. by Ray Sloss.

COMMISSIONERS PRESENT: Caroline Rediske, Carl Holmgren, Ray Sloss, Dave Wagner, and Loren Johnson.

COMMISSIONERS ABSENT: Ed McGlynn (connected by telephone).

OTHERS PRESENT: Mindi Anderson, Milt Stanze, Phil & Thera Burt, Tom Miller, and Rob Preble.

APPROVE AGENDA: A motion was made by Loren Johnson and seconded by Caroline Rediske to approve the agenda. Approved.

APPROVE MINUTES: A motion was made by Howard Seim and seconded by Loren Johnson to approve the minutes from March 15th, 2014. Approved. A motion was made by Dave Wagner and seconded by Caroline Rediske to approve the minutes from April 12th, 2014.

PUBLIC COMMENTS:

- None

ANNOUNCEMENTS:

- Dave Merrill from Ayres Corporation will present East Balsam Study findings.
- WDNR Permit paperwork for CLP Treatment is being prepared.

TREASURER'S REPORT:

- Carl reported that as of April 19th, 2014 we had a Bank Balance of \$85,697.76 (includes Checking, Protection Fund Checking, and Savings) and payment of Claims totaling \$9,881.00 for the period March 16th thru April 19th, 2014.

A motion was made by Howard Seim and seconded by Loren Johnson to approve the Treasurer report and pay claims as presented. Approved.

COMMITTEE REPORTS:

- **AQUATIC PLANT CONTROL:** (Loren Johnson)
 - Everything is going along as planned.
 - Haven't done the update to the 5 year plan, will be working on that with Amy
 - When the spraying gets done, everyone can ride with and see how it works.
 - Per DNR they would like grab samples right after they spray.
 - Follow-up will be done after the spraying. Would like Kevin Wagner to do it again if it works with his schedule, if he can't we will need a backup plan.
- **CLEAN BOATS CLEAN WATER:** (Carl)
 - April 29th will be training at Unity school with help from LAWRD Staff. (10:30-11:30)
 - 20 students have expressed interest.
 - We will schedule various times covering the 4 public landings as in past years.
 - Landing Blitz is July 4th and will distribute ice packs.
- **DOCKSIDE NEWSLETTER:** (Ray)
 - April 1st they went out
- **PUBLIC APPOINTMENTS:**
 - Balsam Lake Village:** (Caroline)
 - Gearing up for Governor's opener.
 - Spring clean ups are under way.
 - Main Street revitalization need help to pull it all together.
 - Approved to downsize the dam funding from \$10,000 to \$5,000 in 2015 with a cap of \$100,000.
 - Consider a Dam contract upgrade on how the dam operates between the BLPRD and Village. Noting the water control currently is accomplished using wood boards.
 - Josh Hallberg was elected to county board, he also bought the DN Campground
 - Polk County:** (Carl)
 - 15 board members are regrouping
 - Carl hasn't been reassigned yet.
 - William Johnson was re-elected as and working on committee structure.
- **BLPRD PUBLIC INFORMATION:** (Ray)
 - Will put an article in the newspaper for Aquatic Herbicide treatment
- **SEDIMENTATION PROJECT:**
 - **Little Balsam:**
 - Core sample Little Balsam
 - Depending on money, we postpone until 2015

- Lake mapping, we have a year, look at doing East Balsam or at least a good chunk of East Balsam
 - Consider action on Raskin Bay
 - Dave noted the \$1,850 annual fee for the service. Use to watch the “tough” spots in lake.
 - Need to look at where to store all the data that we collect. There is a link with company, but maybe look at putting it on a jump drive or something similar.
- **Sedimentation Basin (1):** None
- **WATERFRONT RUNOFF PROGRAM (WRP):**
 - Have had a couple of people interested.
 - **NIGHT SKY:** Dave Wagner was contacted by an individual on the lake that would like to talk more about this.
- **WEBSITE:**
 - Updated recently
 - Ray will check to make sure that all meeting minutes are on there.
- **WATERSHED PROTECTION**
Water Quality: None
- **CONSERVANCIES:**
 - None.
- **VOLUNTEER ACTIVITIES:**
 - **Secchi Disk Measurement:** Milt Stanze will still be doing it, along with the possibility of Dick Miller.
 - **Water Temperature:** None.
 - **Chemical Balance:** None.
- **BLPRD EXECUTIVE:**
 - None
- **Water Diversion Project: Presentation by Dave Merrill – Ayres Claire-Ayres)**
 - East Balsam Lake Water Quality Study.
 - Feasibility of Engineered Solutions for Summer Algae Blooms.
- ASSUMPTIONS**
 - BARR 2011 and USGS 1992 are valid sources of hydrology and water quality.
- TIME FRAME**
 - East Balsam is not fully mixed for dissolved oxygen during the summer months.
- ISSUES**
 - Shallow
 - High Retention time
 - Separate from the lake
 - Little to no flow
 - Anoxic conditions near bottom
 - Soil phosphorus loading
- OPTIONS DISCUSSED:**
 - 1) Dredging

- 2) Flushing by Weir
- 3) Flushing by pumping
- 4) Aeration
- 5) Alum capping

DREDGING

- Dredging is the removal of the top sediment layer by mechanical or hydraulic means.
- Removal of the bottom soil layer includes the life sustaining soil of the lake.
- It would cost anywhere from \$18 to \$36 million.

FLUSHING BY WEIR

- Flushing is recognized technique to improve water quality.
- We could use Harder creek, Otter creek, and lower Rice creek water diverted from its natural alignment to move south under Highway I.
- Culvert would need to be constructed under existing Highway I to pass the redirected flow.
- Flow during the summer is not a reliable source.
- Cost considered not feasible

FLUSHING BY PUMP AND PIPE

- It would require taking from The Stumps to the northern edges of East Balsam where the flow would be able to interact with a larger portion of the lake before exiting through Big Narrows into Balsam Lake.
- This would require removal of the entire lake within 6 days.
- Construction of inlets and outlets will cause significant suction and jetting velocities at the entrance and exit.
- Would require cordoning off areas of Stumps bay and northern East Balsam from human and boat access.
- The high velocities surrounding the inlet and outlet may overpower fish near the suction flow and cause erosion in the lake bottom near the inlet and outlets.
- This very costly. (\$50 Million)

AERATION

- This pumps and perforated hoses/pipes to force air into the bottom layers of the lake.
- It would increase the oxygen concentrations in the anoxic layer of the lake during the summer months.
- It is feasible option to reduce blue-green algae growth.
- Another aeration method is forced mixing through mechanical lift devices.
- Depending on the type of algae present in East Balsam aeration or forced mixing may be a viable alternative.
- Would need to do more research on this.

ALUM CAPPING

- Placing alum into a lake.
- Not very effective in shallow lakes with significant external phosphorus loading.

RECOMMENDATIONS

- It is recommended that none of the potential solutions be implemented as engineered solutions to East Balsam Lake water quality issues.
- Aeration and Alum capping could be investigated further by a limnologist.

OLD BUSINESS:

- **Culvert Replacement Project (Bridge Project):**
 - Received check from Village for \$10,000.00 to pay towards the retainage amount.
- **Long Term Work Plan Discussion: (Noted comments)**
 - Tabled until the next meeting when more of the board is present.
- **WISCONSIN LAKES CONVENTION**
 - Howard will not be going.
 - Make sure you wear your white shirt to the dinner.
- **WORK PLAN DISCUSSION**
 - Tabled until next meeting when more of the board is present.

NEW BUSINESS:

- **2014 ANNUAL MEETING**
 - Dan Harrington to come
 - Carl will fill out reservation for the facility and needed equipment as used in the past.
 - Ray will obtain voting booths.
 - Dave Wagner and Loren Johnson terms expire July 2014. (Note: Any elector requesting to be a candidate must submit written nomination papers to the secretary at least 45 days prior to the annual meeting. That date is June 4th, 2014 per the BLPRD By-Laws.)
- **2015 BUDGET**

Note: We will be working on this at the May and June meetings. Everyone should list items involved with and estimated amounts.

Review New Action Items:

- **Loren:** Getting a bid together for Clean Lakes Inc.
- **Carl:**
- **Ed:**
- **Ray:**
- **Howard:**
- **Caroline:**
- **Dave:**

FUTURE AGENDA:

- Work on 2015 budget

ADJOURN: There being no further business, a motion was made by Caroline Rediske and seconded by Loren Johnson to adjourn the meeting at 11:00 a.m. Approved.

Respectfully submitted:
Carl Holmgren/Secretary

Next meeting: May 17th, 2014 at 8:30 a.m. at the Polk Business Center