

Bare Hill Pond Watershed Management Committee

Meeting Notes

Date: 25 April 2022

Place: Online Zoom meeting

Members Present: Bruce Leicher (Chair), Kerry Shrives, Peter Von Loesecke, Ben Baron, Brian McClain

Prospective Members Present: Rainer Park, Joe Pettirossi

Members Absent: Morey Kraus (Alternate Member), Megan Glew, Pablo Carbonnel

Others Present: Wendy Gendron, Lee Hicks

Bruce Leicher opened the meeting at 7:39 pm.

Secretary's Report

Minutes for March 14, 2022, approved as submitted.

Treasurer's Report

National Grid bill and remaining funds reviewed. Discussion of potential repairs to the pump house. Several fascia boards and paint are necessary to purchase. Committee members to undertake work. Provisional date 5/21 (rain date 5/22).

Next Steps re Algal Bloom Options (Discussion with Wendy Gendron)

Review of the conditions that allow for algal blooms (see notes from the January 24, 2022 Board meeting).

If you can control phosphorus, you can control algal growth. Due to the availability of testing data we've noticed that the area that goes anoxic (without oxygen) has been increasing over time. Sediment releases more phosphorus leading to blooms. Warmer weather leads to longer periods of plant growth, warms the water, and more extreme water stormwater runoff to be more severe. Sampling has shown that phosphorus in the sediment is present but not overwhelming. It is possible that past flushing of the pond is reducing the levels.

Discussion of options to try and slow or remediate, including

- a) Dredging - very costly, many short-term adverse impacts.
- b) Oxygenation - costly, works best when there is a layer that is sequestered and the oxygen you add stays in this layer. Unlikely that the Pond has enough depth to make this effective/cause too much mixing and circulation issues. More suited for smaller bodies of water.
- c) Phosphorus inactivation via a coagulating agent (Alum or Phoslock) - costly, but could be spread out over multiple years to be affordable. Would need to do it early in the season. ~\$100,000 for a one-time treatment. Variability has been high in terms of success and longevity. Monitoring to avoid adverse effects such as fishkills. Potentially provide more long-term results. Possibility of state grant funding due to Great Pond status that would supply a portion of the total cost, the remainder to be provided by the town as a match that can be in-kind, volunteer hours, etc.
- d) Selective withdrawal - have already made the capital investment to provide capability for this method. Produce a very low hypolimnetic withdrawal to flush out the water at the 12ft zone instead of run-over. It might pull off higher phosphorus and low oxygen water. Inexpensive trial to determine if it can make real change. Monitor to see how much time to make an impact on the sediment. Only remove what would flow over the dam anyway, but pull from the bottom. Sample water of what is being pumped to make sure it's not too high in phosphorus levels for what the wetlands can absorb.

Motion was made and approved to authorize entering in the following agreements with Wendy Gendron / ARC as outlined:

- 1) 2022 spring in-lake water quality monitoring for a fixed fee of \$5,408
- 2) 2022 aquatic plant survey for a fixed fee of \$2,805
- 3) 2022 summer-fall in-lake water quality monitoring for a fixed fee of \$7,624

Drawdown Monitoring Plans

Ben Baron transitioning frog counts with Brian McClain.

Participation in Earth Day Event (Saturday, April 30)

Discuss member availability.

Letter of Support for Bowers Culvert Study and Repair

Motion moved and supported for sending a letter in support of the study as the existing culvert does not currently have the capacity to absorb what is running downstream from the Pond.

Other Business

Introduction of prospective members.

9:22 pm meeting ended

Next Meeting: Planned for May 23, 2022