Lake Committee Meeting
Notes
April 13, 2021

In Attendance: Victoria Nicholson, James Nicholson, Dave Chalifaux, Jay Cassella, Anthony Grandazzo

The meeting began with an acknowledgement of Victoria's resignation as chairperson, and thanking her for her efforts and work leading the group. Jay facilitated tonight's meeting, and will continue to act as temporary chair for an interim period.

The primary discussion points centered on determining the goals of the committee. Each member was queried, and the consensus was that our primary goal is to craft a long-range plan with the dual focus of dealing with the decreasing depth of the lake, while simultaneously concentrating on weed control. Based upon professional reports, weed control and muck control go hand in hand, and one should not be pursued in isolation. A couple of committee members did not totally agree with this perspective.

Materials were reviewed, including the following:

- An informational piece on Nanobubble Aeration
- A 2017 memo summarizing a conversation with a representative from SOLitude regarding hydro-raking.
- A depth chart produced by CAES (CT Agricultural Experimental Station) with a comparison of 2005 and 2018 depths.
- Subsequent to the meeting, Jay converted the CAES chart noted above from a longitudinal/latitudinal format to a more traditional map of the lake which clearly demonstrates decreasing depth.

In addition, historic materials produced by The Marine and Freshwater Research Service detailing studies of our lake in 1956 and 2006 were briefly reviewed.

Nanobubble Aeration: While a Nanobubble Aeration system could be a viable strategy, a rough estimate of cost to purchase s system could be $50,000-$60,000. Nanobubble systems are a relatively new technology, and we don't know if single or multiple units would be required to service our lake. There is also the possibility of having SOLitude provide this service for us on an intermittent basic, which would eliminate the need for an outright purchase. However, at this point, we have no idea as to the cost of such a contract for services. One clear advantage that a Nanobubble system has is that there is no need for removal and storage of muck.

Hydro-rake Harvester system: This is another method of dealing with both the accumulation of muck and the growth of aquatic plants. A harvester would cost approximately $85,000 to purchase. That cost does not include the cost and issues of muck removal and storage of materials removed. Jay indicated that Moodus Reservoir has just purchased a hydro-rake for use this upcoming season, and we think that there will be value in monitoring their experiences.

Following a long discussion, the bottom line conclusion of the committee is the need for additional information and professional guidance in order to fully understand the best route to take in managing our lake for both the present and the future. Either of the above noted strategies would require significant capital investment, which would have to be raised over time, most likely through an increase in taxes. For the present, we plan to ask the BOM to set aside an undetermined amount of money annually in a special reserve earmarked for future lake improvement.

Over the course of recent years, there have been three companies involved in helping to advise and manage our lake:

- CAES – CT Agricultural and Experimental Station
- SOLitude
- Pond and Lake Connection

While we believe that any and all of the above organizations can continue to be helpful to us in making decisions, the committee recommends that our primary resource be CAES

Aside from the issues of muck and weed management, we also discussed concerns related to the proliferation of Hydrilla (an invasive weed) that has become widespread in the Connecticut River. The discussion centered upon the need to control and limit the use of canoes, kayaks and other watercraft that have potentially been in the CT River from entering our Lake and therefore introducing Hydrilla into our waters. While this issue was identified, I don't believe any strategy was developed to deal with the concern.

Submitted by,

Anthony Grandazzo