Sherbrooke Lake Stewardship Committee Meeting

October 5, 2017 at 7 p.m. Chester Municipal Office

Meeting Notes

Those in attendance: Committee members Terry Matheson, Garth Bangay and Blake McDonald. Staff resources Chad Haughn, Director of Recreation and Parks for the Municipality of the District of Chester, Shanna Fredericks, Assistant Director, Bluenose Coastal Action Foundation and Trudy Payne, Director of Recreation Services, Municipality of the District of Lunenburg.

Regrets: Matt Whynott and Robin McAdam.

Shanna presented the raw data of the water samples taken in July, August and some for September. The Committee was informed that Shanna had made a presentation to the Municipality of the District of Lunenburg Council on July 18th to explain why we would not be able to establish a baseline this year. All Councillors from Chester were invited to attend to hear the same information. Councillor Tina Connors attended. It was explained that water testing did not begin until July, thus two of the crucial months of May and June were missed. It was still felt to be important to take samples during July, August, September and October as valuable information could still be obtained and would be helpful to the Committee when developing the water quality monitoring program for the Lake. Shanna also explained that a true baseline would require three years of testing. The question was posed by Municipal Council about development of the public access site. Shanna stated that the low impact development as proposed could move forward. It was noted that other developments around the lake could be happening that would impact the water quality. The full presentation and discussion can be found at www.modl.ca and clicking on the minutes for the July 18th meeting.

The Committee was provided with a copy of a "Guide to Writing a Water Quality Monitoring Program" and was asked to review questions one and two to discuss at the meeting. The Guide provides seven steps and it is the intention for the Committee to go through these steps to guide in developing a water quality monitoring program for Sherbrooke Lake.

Step 1: Program Design Considerations

1. Existing Information

Under the heading sources of pollution which are deemed to be human induced: acidification, litter/debris, nutrients, bacteria sedimentation, hydro carbons, Forties Road agriculture, malfunctioning septic tanks, dog and deer feces were identified. Under natural variation dissolved oxygen was identified.

Concerning the government bodies under the municipal umbrella the Districts of Chester and Lunenburg were identified. At the Provincial level it was felt the Department of Environment and Natural Resources would play a role. At the Federal level Department of Fisheries and Environment Canada could be involved.

The Not-for Profits identified under Stewardship groups included Bluenose Coastal Action Foundation, LaHave River Salmon Association, Homeowners/Road Associations, the United Church Camp and the Acadia First Nations community.

There was some further discussion concerning sub watersheds and looking at the bedrock to help us determine where we want to sample.

It was identified that on the Forties Road there is some agriculture activity that may be contributing bacteria and nutrients to the lake.

It was suggested we have several wetlands.

An action from the discussion was to Develop a watershed map of the lake. Shanna will create a paper copy and send to the committee.

It was mentioned that Kill Dog cove is heavily populated. The question was raised as to what kind of readings would you get particularly around bacteria and nutrients, at this location. This may be a future sample site. DFO may have equipment we could use. Saint Mary's Community-Based Environmental Monitoring Network lends equipment as well.

The first question on page four is:

1. What waterbod(ies) do you want to monitor?

   Sherbrooke Lake and all the inlet and outlet streams.

2. Are there known issues in your watershed? In the specific water body that you will be focusing on? What are they? **Cottage development; limited planning controls, algae blooms, forestry, agriculture, invasive species, acidification, declining dissolved oxygen.**
3. Does any previously existing water quality data or reports indicate water quality issues? What are they? **Coastal Action – 10 years of data/trend analysis – lack of reports; trend analysis; series of reports from Barrie Clarke – we do have a lot of data, a few reports and trend analysis on two sites.**

The next set of questions focused on the Purpose. The questions posed includes:

1. Why are you interested in monitoring the body of water?

With the development of the property acquired by the Municipality of the District of Lunenburg, we will be, in the near future, increasing human induced impacts on the lake's water quality by consciously having a public access site; overall growth and development on the lake; the biggest lake in the LaHave watershed (also a headwater lake), destination for Atlantic salmon, inform and make better decisions in the future (i.e. land use; where development should take place); to help protect the habitat (eagles, loons, snapping turtles).

2. Is this study for restoration purposes, community education purposes, etc.? Be specific.

Education purposes - impact of a development project, impact of public access, human impacts, long term monitoring of the activity, establishing a baseline and maintain the health of the lake, for conservation and protection, allow us to make informed decisions based on science (scientifically valid data) statistically relevant change, trophic status.

Other outcomes include periodically testing for metals? Is there iron? Also, shoreline erosion monitoring.

3. List the questions you would like to address with this study. For example, is the pH increasing over time? Has the water quality deteriorated over time?

Is there a change in nutrients; chlorophyll *a*, pH, dissolved oxygen? Is this lake heading one way or the other over time?

Native wildlife, sediment sampling. What are the invasive species? Erosion?

Waterfowl monitoring – people feeding a no no. Do not plant grass at the public access site.

4. How long should this project continue in order to answer these questions or achieve the program's goals? **At least three years but would recommend longer if the Municipalities are willing to support.**

The meeting was then adjourned at 9 p.m. and members were tasked with reviewing Step 2, 3 and possibly 4 and come prepared to discuss at the next meeting.

The next meeting was set for Thursday, November 2, 2017 at 7 p.m. at the Bluenose Coastal Action Foundation office located in Lunenburg (37 Tannery Road).