Lake Water Quality Study Group Meeting April 5, 2023

APPROVED: 5/3/23

AGENDA: LAKE WATER QUALITY MATERIALS REVIEW

- Newfound Lake 2019 Sampling Highlights
 - Black Brook Sub-watershed
 - Fowler River Sub-watershed
- ATTENDING: Carroll Brown, Jr. (Conservation Commission Chair), Richard Batchelder (Conservation Commission Vice-Chair), Rebecca Hanson (Newfound Lake Region Association NLRA), Mary Gebhart, Kane Lorah, and Christina Goodwin (Town Administrator)
- ABSENT:Elizabeth Miller (Conservation Commission), Janet Cote (Conservation Commission), Ken
Milender, and Jeff Chartier, (Water & Sewer Superintendent),

Mr. Brown called the meeting to order by roll call and quorum present at 5:05 pm.

LAKE WATER QUALITY MATERIALS REVIEW:

Mr. Brown asked Ms. Goodwin to display the Newfound Lake 2019 Sampling Highlights updates beginning with Black Brook.

Ms. Hanson spoke about the sampling findings as indicated by the measurements data. The Turbidity, Dissolved Oxygen and Total Phosphorus readings were considered excellent, and the Specific Conductivity was considered fair.

The group discussed the findings with Mr. Brown citing the original Shackett subdivision plan and the current neighborhood development and potential for any other future development. He stated that most of the homes in his neighborhood are fairly new with development beginning in 1989 or later, and the Bear Brook neighborhood would be older. He stated that a part of the road was steep, and it was heavily salted in winter. Ms. Hanson talked about changes to reduce salt application in and around the Newfound Watershed. She felt this was ongoing work with the NLRA and was anticipated to be a main issue for the area in the future. There was more discussion of road salt runoff around the lake.

Mr. Brown asked if it was ok to look at the averages for Black Brook. Ms. Hanson stated that it was more important to look at what is happening at the outlet. Mr. Brown stated that there is a slight increase and Ms. Hanson indicated that aside from the PH, all water quality indicators are elevated at the downstream site. Mr. Batchelder asked if all the testing sites were showing increases like the Black Brook sites and Ms. Hanson stated she had not yet looked deeper into making comparisons. There was some discussion about whether a septic system was at West Shore Marine. Mr. Brown stated he recalled that no leach field was allowed there so wondered what might be going on there for facilities for employees.

Ms. Hanson stated that there were not any alarming trends indicated at the testing sites. There was some discussion of where and how increased phosphorus might be happening. Mr. Batchelder asked about Hemlock Brook. Ms. Hanson stated that for places like Hemlock Brook, the NLRA is hopeful that their trained volunteers can capture additional data during a 2-inch storm.

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LAKE WATER QUALITY MATERIALS REVIEW: continued

Ms. Goodwin will add the updated NLRA information to the Lake Water Quality Study Group web page.

The group moved on to the Fowler River Sub-watershed table and findings. Ms. Hanson explained the data. Ms. Hanson indicated that the site closest to the Lake showed an increase in phosphorus. These testing sites were discussed in more detail. Mr. Brown asked about the location of farms in relation to the testing sites. Sites H20 and H21 showed increases in phosphorus. Mr. Brown asked about the river contribution to the Lake and its contribution to groundwater. Ms. Hanson stated it would change seasonally. Mr. Brown stated that Superintendent Chartier was going to give some test readings for the wells.

Mr. Batchelder asked how soon, once a septic system fails, does it impact groundwater or appear in run off. Ms. Hanson stated it would be hard to measure. Mr. Brown stated that it is usually not visible until the failure shows with flow above ground. It was his opinion that a failed system more than 500 hundred feet away would most likely have no impact to the Lake. Ms. Hanson stated it is those systems that are not evident in failure that may have the most impact on groundwater.

Mr. Batchelder stated that in the summer the boats that raft at the sandbar at the outlet of the Fowler River might have a bigger impact on the lake. There was some more discussion about the impact of this activity on the town's wells. Human bacteria impacts were a concern for the NLRA at the sandbar. Locating porta-potties at the boat launch was one of the solutions pursued. The Town uses these at the Town beaches. Ms. Gebhart asked about relocation of the one now seasonally placed at the Big Catch. Ms. Goodwin stated that the locations for these are determined by setback regulations for public beaches. Mr. Brown stated that this should be checked into further to see if one could be allowed in the middle area of Avery-Crouse Beach.

Mr. Lorah stated that there was evident deterioration of Newfound Lake water quality over the last 20 years. Mr. Brown thought this was an important statement and that the group should talk more about this at the next meeting.

Mr. Brown stated that the agenda for the next meeting will be a review of the following documents.

- Sewer Service to the Lake USDA Environmental Assessment
- Newfound Lake Watershed Assessment 2013

MINUTES:

The meeting minutes for March 1, 2023, were reviewed and accepted as written.

NEXT MEETING: May 3, 2023 – 5 pm

ADJOURNMENT: With no further discussion, the meeting adjourned at 6:02 pm.

Respectfully submitted,

Janet Cote Land Use Associate