

Wolfeboro Waters Meeting with Lakes Associations
March 21, 2023
Wolfeboro Library
Meeting Minutes

Present: Keith Simpson, Julie Brown, Kathy Sciarappa, Warren Muir, Andra Dekkers, Libby Peard, Steve Wingate, Frank Marcoux, Linda Murray, Pat Tarpey, Larry Gil, Alan Hardeman, Abby Adams.

1. The meeting was called to order at 1:03pm
2. Introductions were made for the 2nd meeting of associations across our lakes.
3. Warren indicated letter sent to DES was well received.
4. Wolfeboro Bay Watershed management plan was kicked off by at the end of February by LWA. This plan will make Wolfeboro eligible for 319 monies. No additional data will be collected by the engineering firm for this plan. Wolfeboro Waters wants to try and provide data to inform the plan. Data needed from across the lakes includes:
 - **Sediment samples.** Core samples are needed to determine the concentrations of P in the sediment. Warren explained how core samples were taken in shallow water in Winter Harbor. Pat recommended we contact Lisa Doner at Plymouth State who has done a lot of core sampling. Julie indicated core sampling was done in Wentworth in 2010 to show the Legacy P. This data was used to determine the health of the lake. Core samples were done at the deep sites. Mirror Lake has also done core sample measurements. Emilie Clark has agreed to be the coordinator for this effort. Warren recommended getting a couple of samples from each water body over the summer at sites where blooms were previously seen. Kathy asked for a protocol so all would be collecting samples in the same way. Emilie will provide a protocol and co-ordinate this effort. Bigelow will do the analyses of all samples.
 - Warren has a flow meter borrowed from UNH. Priority is to get flow measurements on inputs to Lake Winnepesaukee. A coordinator for flow measurements is needed.
 - Concerned about run off near his property, Warren was able to get LIDAR data (lasar radar) from the state LIDAR database Warren recommended getting this for all water bodies.
 - Warren took 10 samples from 10 different sites and sent to Bigelow for e-DNA, PCR and full genomes. 75% or more had Pico (cyanobium). Pico is not something that has been well studied. Samples from all water bodies for further analysis and comparison is needed.

- **PCR testing** of samples from all lakes will be done this summer. Andra presented requests for getting samples. (see handout). We are requesting 1-2 samples per month from each water body for 3-6 months. Asking for one additional 2L bottle (integrated sample) and one medium sized P (corrosive) bottle for Nitrogen testing. WW will pay for all Nitrogen testing. Andra will provide a protocol. Details for collection etc. are included on the attached handout.
- **Fluorometry** – on Warren Muir’s porch – 2 fluorometers will be available if you want to determine the type of cyanobacteria seen in a bloom. Clear square bottles are available for sampling. Warren will train in fluorometry.
- Benthic cyanobacteria has not been greatly studied. NHDES and UNH are willing to do analysis of these samples. Samples can be taken in little brown bottles – refrigerated and sent to Bob Craycraft or Amanda McQuaid (UNH) or deliver to lab in Concord to Kate Langley Hastings.

Summaries from Associations:

1. **Wentworth Association** --Julie Brown indicated the annual water summit will be held on May 13 open from 9-noon at Wolfeboro Town Hall in the Great Room and is open to the public. The topic is “Why watershed Management? Why does it matter?” A representative from Forespell will be the keynote speaker. There will be a workshop on septic system management as well.
2. Julie Brown – recap of 2022 – data is in from 2021; waiting for 2022 data. Sargent’s pond P numbers are concerning – it is an aging waterbody. While P levels are high, they are not much different from historical data. Crescent and Wentworth are oligotrophic and have had cyanobacteria blooms. Gleotrichia is present at end of summer. Warren indicated Bigelow performed a more detailed analyses of gleo sample from Wentworth and found there was no gene to produce microcystin. Amy Smagula is going to do an online training on May 3rd for weed watchers. Julie will send information for viewing to all.
3. In Wolfeboro, if a bloom is suspected, call dispatch and NHDES. Bree posts alerts and observations on LWA website.
4. **Mirror Lake** – Larry Gil. Mirror Lake has people who will go out and do observations of blooms. Have not had any official advisories. Larry asks his lake hosts to walk the shoreline to observe for blooms. The last advisory was 2019. This past year they got results from VLAP looking at one major tributary coming into Mirror Lake. Results indicated an increase in salt in lake. Chloride may be changing the density patterns in the lakes and it may be related to cyanobacteria outbreaks. This year they will look at some intermediate streams. Chloride and salt are very high. They are in process of deciding if they need to revise the management plan and what the focus will be. They have data from 1958 that is used as a benchmark. Kathy added there were 12 recommendations in the original plan and they have completed 11 of them. They wanted to set up community septic stations and that has not been accomplished.
5. **Rust Pond** – Warren recommended getting before and after samples before a major project begins.

6. **LWA** – Lots going on. Projects include a cyanobacteria monitoring program on Paugus Bay. Will try to do a watershed management update for Paugus Bay. They have a flurometer and sample 2 deep sites and the intake pipe – will expand this as well. Bree is finalizing map for all sampling points. Click on site and 10 years of data comes up with results.
7. Warren recommended a fall meeting for this group to provide updates.
8. The meeting was adjourned at 3pm