

October 21, 2019

Board of Directors,

The activities and plans of the Water Quality Committee are summarized below:

Activities:

- Jim Smith's sampling of LHP and the Carters River have shown interesting results in the progression of both total phosphorus and nitrate from the LHP spring down to the mouth of the Carters River. Data charts are included in this report below. Both nutrients have low concentrations in the LHP spring samples which increase in the average LHP sample and again in the Carters River sample. We will sample in future months to see if this trend continues. Tentatively, we conclude that both the LHP and Carters River areas provide additional phosphorus and nitrate to our water. We will add the nitrate from the SMAST analyzed samples when received.
- Filtered and unfiltered samples were taken at the LHP spring for phosphorus in August to try to understand why the previous month's phosphorus at this location was so high. There was not significant difference between the filtered and unfiltered sample phosphorus. We will continue to take monthly LHP spring samples for phosphorus analysis to see if low phosphorus numbers continue. For the present, we conclude that the high (0.022 mg/L) phosphorus level in June was an artifact.
- An October zooplankton sampling was done on GHP with Meghna.
- An October water sampling was done by myself, Kim Tower, Jerry Levine, Jack and Denise Kedian, Bob McDonald and our new Rising Tide interns, Mary Haley and Samantha Sawler. We took additional samples in GHP for nitrate and total phosphorus that were sent to Envirotech: 1) sample at the slough from Raymond property where it enters GHP (horse, cranberry bog contamination?), 2) sample in GHP where Carters River enters and 3) sample in GHP just before entering the Herring River. The latter two samples were taken to see the progression of nutrient concentration from the "top to the bottom" of GHP. These values increased significantly in Bartlett Pond, strongly implicating septic as a source of the nutrients that caused its cyanobacteria blooms .
- I have been working with both interns for the last month to continue looking at water quality data with the idea of developing a presentation aimed at raising awareness of our watershed constituents regarding water quality. As ideas gel, Lee will be consulted.

Meetings:

- Lee, Paula and I met with David Gould and Chad Hunter of Plymouth DMEA to discuss safety issues. Reported in minutes sent to BOD.
- Lee, Brian, Jack and I met to outline questions needing answers before contracting for a Water Quality Plan. Reported in minutes sent to BOD.
- Geri and I met with Melissa Ferretti, chair of the Herring Pond Wampanoag to see if Melissa was willing to give a presentation at one of HPWA's general meetings in the future. She was definitely willing to talk about the Wampanoag history in the watershed.
- I met with Peggy Burke talk about areas of interest for future work for her at HPWA. Peggy will be doing some research on what would be involved in pursuing some of her interests.
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Plans:

- The BOD will continue to discuss the Water Quality Plan issue and gather information in anticipation of trying to finance a WMP this spring.
- Tom Oertel has not yet arranged a meeting with a resident on Island Pond to assess their interest in a closer relationship with HPWA.
- I have some action points to clean up from the first two meetings above. A second meeting of Lee, Brian, Jack and I will be scheduled to talk about the Water Quality Plan.

