

Approved Minutes

Meeting of the New Durham and Alton Cyanobacteria Mitigation Steering Committee

Held over zoom

Thursday October 15, 2020 at 6PM

Present by Roll Call: Fred Quimby, Mark Sullivan, David Swens Swenson, Gene Young, Bill Mannion, Bill Meyer, Bob Craycraft, Jason Smith

Absent: Ray Howard, Reuben Wentworth, David Neils

Guests: Casey Buell, Maureen Knepp, Mike Gelinas, Scott Kinmond, Mike Harrington

Fred called the meeting to order around 6:12PM and read a message from Governor Sununu concerning the Executive Order allowing town committees to meet by Zoom.

The Minutes from December 19, 2019 were reviewed and a motion for them to be accepted as written was made by Bill Meyer and seconded by Bill Mannion. The vote by roll call was 8 for and 0 against.

Bob Craycraft showed the committee a power point presentation illustrating the results from testing the River (9 sites monthly) and the ponds (5 deep sites in Merrymeeting River and Mill Pond over the summer months). The results of 2020 were also compared with those from 2018 and 2019. The presentation began by showing the sampling sites and the area monthly rainfall for the past three years demonstrating the high variability between months and years. Bob followed with several graphs that illustrated total phosphorus concentrations and stressed that the graphs depicted total phosphorus concentrations as opposed to phosphorus loading values that would require additional calculations. The 9 River sites surveyed demonstrated a general pattern of increasing concentrations of total phosphorus (TP) from the high flow winter/spring runoff periods to the low flow summer months. The low flow summer phosphorus concentrations also exhibited a general decrease in TP concentration from the first site below the hatchery until the River discharges into Lake Winnepesaukee. TP Concentrations at each site from 2018, 2019, and 2020 were compared over three different months, generally the differences seen at a site between years reflects the degree of rainfall (more rain, lower concentration). Changes in surface TP concentration at each of 5 deep sites for the months of June, July, August, September and October demonstrate generally increasing TP concentration with advancing summer until October (when the concentration went down at 4 of 5 sites)- this consistent with the drought this summer. Bob discussed the concept of temperature stratification and oxygen depletion at deep sites and illustrated the concept by comparing Mill Pond to Wentworth Pond (strong stratification in Wentworth and just a little in Mill Pond). And finally, the results comparing TP concentrations at the surface to the bottom of deep sites showed profound internal loading of phosphorus at Marsh Pond, significant but much less internal loading at Wentworth Pond and no loading at Mill Pond.

Fred Quimby next reviewed the recently obtained Mill Pond Subwatershed Supplemental WMP containing a Lake Loading Response Model Analysis of the subwatershed and a watershed Survey and engineering report. The report clearing shows that of all the potential TP sources only Stormwater runoff and septic systems are responsible for substantial amount of TP in Mill Pond. Of the runoff sources, over 85% of the total water load and phosphorus load comes from overland flow around the pond itself (shoreline) and the MP-1 stormwater distribution system encompassing School Street, Church Street, Pine Street and Rt.140. This is by far the largest distribution system in town flowing into

Mill Pond. Recommendation were made to improve the infiltration of stormwater and phosphorus in all areas and the costs for remediations was pretty reasonable for all (varied from \$1000 to \$7000.).

Fred then reviewed the Future of Water Quality Testing with emphasis on the Mill Pond watershed. David Neils has offered to place continuously monitoring oxygen meters in Mill Pond this year and will provide the committee with a new protocol for measuring the phosphorus contributions from ground water. David doesn't believe, based on our data, that anoxia induced internal loading is a problem at Mill Pond.

Jason Smith briefly reviewed his attempts to secure funds for the development and construction of a treatment facility at Powder Mill Hatchery. The department applied for 4.3 million dollars through the State capital budget process. Our initial hearing was in December but the Governor is not scheduled to unveil his budget until February 15th. The department also submitted a preapplication for the Clean Water State Revolving Funds through NH DES. I am unsure of the timetable for approval. The request was for about \$500,000. To complete the design. The design must be approved by NH DES prior to applying for a construction loan.

Fred then very briefly discussed the land acquired in the Merrymeeting Watershed and placed into conservation including the current efforts to add another 1000 acres to this conserved land. He reviewed the present status of the s319 grant funding and engineering. He reported that the State Legislative Shoreline Septic System Commission will be reporting their results in November 2020. The NH Legislative Wakeboarding Commission has recently reported their findings and recommendations which received a vote of 7 for and 7 against. The recent release of the Final Permit from the EPA on the Powder Mill Hatchery was announced. The need to recalibrate two stream gauges, Marsh outlet and Coffin Brook, under very low flow conditions at a cost of \$600.00. And he commented on the remaining \$2400.00 left in the WMP budget.

While a slide illustrating the future of the CMSC was shown , Fred decided not to address this issue at this time especially since another meeting to address the EPA Final Permit was on the horizon.

Respectfully submitted,

Fred Quimby, chair

10/21/20