

Lost Lake Watershed Advisory Committee (LLWAC)

Town of Groton, Groton, MA 01450 978-448-1111

Meeting Notes* - December 11, 2014

At Town Hall

*These notes are intended as an informational report only and not considered “minutes” because there was no quorum of members.

Present: Mark Deuger, Tom Orcutt (Groton Water Dept. - present for 30 minutes), Arthur Prest (Finance Comm.)

Visitor: Martha Morgan, Water Programs director for the Nashua River Watershed Association (NRWA)

Recorder: Stephen Legge

Meeting began at 7:00 PM.

Martha Morgan, invited guest, participated in a question/answer/discussion session with members of the committee. She passed out a marketing circular sponsored by the NRWA titled, “Save Fish – Don’t Flush”, referring to improper disposal of prescription drugs and other medications into our wastewater systems.

The following summarizes important points made, and issues raised during the meeting.

Martha Morgan: Why no “package” sewage treatment plant for Lost Lake?

Tom Orcutt: Woodward & Curran looked at this in a past study. It is very costly to own a treatment plant. Other issues were how many of such plants should there be and where would they be located. Much money could be saved by transferring waste out of town to Ayer or Pepperell. In that study it was found that the average age of septic systems in the area was 52 years.

Martha Morgan: Any tight tanks? Could this idea be a partial solution?

Mark Deuger: There are very few tight tanks in town. Unfortunately the “tightness of such systems depends greatly on the owner’s honesty and diligence with regard to keeping up maintenance and sticking to procedures.

Tom Orcutt: The town was concerned about data being old and out of date. Town Meeting Article defeated in 2012 for a piped out sewage transfer system (to Ayer) for the area. High costs to owners a major reason for defeat.

Note: in some of this discussion, references were made to “319s” and “604Bs”. These refer to the Federal Clean Water Act, Sections 319 (Non-point Source Pollution Abatement) and 604B (assessments of water done by the EPA). 319s require a 40% community match, which can in some cases be donated labor or CPC funds (for Groton).

Martha Morgan: If the committee wishes to go for a 319 grant in the coming year, it must be submitted by early May. Martins Pond Brook is presently off the list for grant funds because it was upgraded to a rating of 2 from a 5. It gets no further attention from the EPA.

Art Prest & Martha Morgan: Efforts could be made to design and implement a testing program for Martins Pond Brook, the lake and other tributaries for phosphates, dissolved oxygen, temperature and other things. Data should be collected in a consistent fashion for several years to get a good look at what is happening in the watershed now.

Mark Deuger: The Town of Harvard is spending \$600,000 on their programs at Bare Hill Pond. They have (or are building) storm water detention structures with phosphate-hungry plants built into the structures.

Martha Morgan: There are a lot of impervious surfaces and steep slopes running down to the lake down to Lost Lake. You need rain gardens, bioswales and bioretention areas with plants etc. in strategic locations to help reduce stormwater runoff, and phosphate loading to water bodies.

Martha Morgan & Art Prest: Martha believes 604B assessment grant applications are due in December. The NRWA has gotten many grants over the years but none have been 319s or 604Bs. Martha is willing to assist the committee with getting started with grant writing efforts.

Martha Morgan: Wonders if because nitrates in the lake are very low, it could be concluded that septic systems are not a major contributor to problems.

Art Prest: Ira Grossman (Nashoba BOH) agrees with this idea - he says he knows where the really bad systems are.

Martha Morgan: Storm water is a major culprit for conveying phosphates into water bodies.

Art Prest: Filamentous algae is a tell-tale for high levels of phosphates. There is none in Knops Pond, but a fair amount at the inlet to Lost Lake from Martins Pond Brook. This correlates to levels of measured phosphates.

Martha Morgan: Martins Pond Brook drains the town's golf course and Lawrence Academy's properties. Phosphorus in sediments can be bound from earlier phosphate loadings; may continue to release phosphates for many years to come, even when current loading ceases.

Mark Deuger: Is there a data logger of some sort that can automatically record water quality data over a 6-month to 1-year period? No one had an answer.

Art Prest asked Legge to remind him later to inventory water quality measuring equipment belonging to the committee or readily available from other known resources.

Martha Morgan: Michelle Ruby, at Lawrence Academy, has done benthic macro-invertebrate studies in various places around town (Martins Pond Brook).

Martha Morgan: Has two thoughts for the committee - 1) Get a 604B grant to start a program going for water quality measurement; accumulate meaningful data; set up stream teams to measure phosphates at least 4x/year. 2) Follow through on storm water issues; design low cost ways to intercept storm water and get it back into the ground.

Martha Morgan: Another idea, talk to Ed Himlan, located in Leominster and Executive Director of the Massachusetts Watershed Coalition (MWC). The NRWA is a member of the MWC. Himlan was formerly Executive Director of the NRWA in the 1980s. Martha said that Ed estimates the weight of phosphates in runoff water using assessors' data, topography, rainfall and analyses of road runoff.

Mark Deuger: We should consider putting in some kind of bio-remediation for Martins Pond Brook to lower phosphates dumping out at the end into Lost Lake.

Martha Morgan: Have you walked the brook (MP) to see what source areas look like?

Tom Orcutt: There is a beaver dam on the brook in the vicinity of Otter Lane.

Martha Morgan: When questioned about "quiet" water bodies getting attention from the NRWA, Martha replied that The Pepperell Pond impoundment on the Nashua and the Mine Falls area are the only places getting attention; all else is considered "moving water".

Martha Morgan: When questioned about testing protocols for NRWA programs, Martha replied that a Webster Lake group in Webster, MA and the Bare Hill Pond group in Harvard both have good QA protocols and test procedures that would be relevant to Lost Lake Watershed issues.

Art Prest & Mark Deuger: Bare Hill Pond has had success reducing phosphates with storm water control measures. They also have developed a very sophisticated draw-down strategy, designed to get best results reducing weed growth.

The meeting ended at 8:50 PM.

**** The next meeting will be held on Thursday, January 8th, 2015 ****