Lost Lake Sewer Committee Minutes November 14, 2013

Present: Dr. Horowitz, Board of Health; Thomas D. Orcutt, Water/Sewer Superintendent; John G. Petropoulos, Selectman; Jay Prager, Finance Committee, Michael Rosa, At Large

Meeting was called to order at 6:30

CEI was present to review their report on testing conducted in the late summer of 2013. A video of the presentation and discussion is available at http://vimeo.com/79997463 A copy of the report can be found on the Lost Lake Sewer Advisory Committee webpage at this link:

 $\frac{http://www.townofgroton.org//DesktopModules/Bring2mind/DMX/Download.aspx?PortalId=0\&EntryId=16817$

or by request from the Town Manager.

Among the items specifically reviewed:

0:37 CEI discussed the impact of testing methodology on phosphorus measurement

0:44 Mr. Prager: discussed the 'Gazintas and Gasoutas' of nutrients in the lake.

0:47 Mr. Prager: asks how much of the phosphorous contribution from wastewater disposal would be captured from the propose sewer system (are other homes outside of the proposed district contributing too?). CEI indicates that eutriphication is inevitable and there is no telling how much of an impact the sewer would have.

50:00 CEI discussed the need for long term data to say that it is worse for sure. People around the lake will tell you it is worse. Mr. Petropoulos reminds that people's observations based on weeds is subjective and weeds may be caused by many things.

52:00 Mr. Prager responds to CEI's statement that things had gotten worse. "I noted that we saw a reduction in phosphorus." "You stated that phosphorus has gotten worse but there is nothing to back it up." CEI: We stand by that statement. We spent a lot of time, we did the best we could JP: Mr. Prager responded that the data does not support the statement. Mr. Petropoulos asked that CEI summarize the evidence that phosphorus has increased in the lake. CEI: "When we started this we had a scope of things defined by another company. It had things that we would not ordinarily do and this was one of them. (pore water)" "I still question why we did this analysis. But we did and it is doneMr. Petropoulos noted that: "The point of hiring you was to give us a trajectory. This (data) suggests that the trajectory is good. You say that it is not. I am asking you where you get

- that from?" CEI "You just spent \$80k on Sonar. That doesn't suggest that things are honky dory" "That suggests eutriphication."
- 1:02 Discussion about private well testing brought up the question: "Are the 7 wells tested representative of the overall condition?" Jay P asks if we would hear about it if 30% of all real estate transactions were compromised because of bad well tests.
- 1:08 Discussion about incremental contribution as Martin's Pond Brook got closer to the lake.
- 1:17 Discussion about how phosphorous that goes into the lake stays in the lake and how it can be locked in with Alum (CEI's experience with this has been good "like magic")
- 1:19 Discussion about the "useful life of septic systems and how an aging system could affect the lake" CEI suggested that systems were allowing increasing amounts of nutrients into the soil as they age. Mr. Petropolos asks "If it never functioned in the first place how could they get worse?" CEI: "Systems that are properly designed should treat Nitrates"
- 1:31 CEI "Nobody really knows what these pore water samples really mean....they are little wells that pull water out, supposedly, from near the septic systems." Jack: "are the levels of Phosphorous in the Pore Water samples at levels you would expect for a lake?" CEI "There is not enough data to say" There are no thresholds for pore water samples. "We really don't have any thresholds to know what it means." "I am wondering why we did this."
- 1:34 discussion on how rainfall may have affected '88 results vs '13 results
- 1:37 CEI explains Desktop Modeling. CEI: similar to '89. Just tweaked a few assumptions. Used some concentration data from '89. There is not enough data to come up with "in-lake" concentration data to be meaningful.
- Jay Prager challenges CEI to explain how they can conclude that things are getting worse even though the data does that it is getting better.
- 1:44 A member of the audience (Employee of DEP?) says that we do not need the data to predict that the lake is going to be hurt by this concentration of septic systems around a shallow lake.
- 1:50 CEI states that if we do nothing the lake will be eutrophic in our lifetime. Inaction will have serious consequences for the lake. Mr. Petropoulos was impressed by this statement and suggested that it meant that we should have something tangible that we could observe if that was the case. Mr. Orcutt stated that we are already seeing it with the weeds. CEI indicates that there is a tipping point. They do not know what it is but it can sometimes come very quickly and it is ugly. You can end up with swill.

1:55 CEI is asked how the treatment for the weeds could have affected the test results. CEI states that it could affect the analytic results but they do not know how. Could make them higher could make them lower we just do not know. Should not have affected tributary, or pore water or well results. Lake water should not be getting into the pore water testing. Mark Duger indicated that in general lake water should not affect pore water but you may have a few examples where this would be the case if there are spots where ground water is not coming in to the lake and instead lake water is moving out into the surrounding ground.

2:14:00 weighted flows suggest that nutrients along martins pond brook grow as groundwater gets closer to the lake

2:18:00 CEI states that they came into this objectively.

2:34:00 CEI discusses the expected lifetime of a manmade lake and the acceleration that wastewater can cause to the death of a lake.

Mr. Orcutt left at 9:10

2:37:00 CEI discusses how we could prioritize initiatives to reduce pollutants by analyzing different areas of the lake and what the major contributors were by area in terms of 'cost per pound'.

Meeting Minutes from September 12 were approved unanimously with Mr. Orcutt absent.

Meeting Minutes from November 7 were reviewed and approved conditionally on modification of 2 spelling items and minor corrections to text.

The next meeting was set for December 12 at 6:30

Action Items

None

Meeting adjourned at 9:30