

# January 7, 2013 Planning Board Minutes

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North Yarmouth Planning Board

Monday, January 7, 2013

## Meeting Minutes

6:30 PM @ Downstairs Meeting Room, Municipal Building

Clark Whittier, John Carpenter, Steve Morrison, Paul Turina, Peter Lindsay (Chair)

### 1. Presentation – Groundwater Quality report from Sevee & Maher Engineers, Inc.

Peter gave an overview of the reason why this report was put together. In particular as the community discusses economic development, the question on groundwater quality, issues and questions have arisen potentially impacting planning discussions. Are the aquifer boundaries accurate and the like is being asked. (see page 1 of the report)

John Sevee of Sevee & Maher Engineers gave an overview. He stated that a hydrogeologic study was requested and outlined the categories reviewed including soils, geologic setting etc.

The geologic setting of the area is sandy, a thin layer of soil. In this report, it is referred to as "drift." Sand and gravel deposits are in a large area (outlined in yellow on figure 2). There is shallow clay as well (outlined in purple on figure 2). In the sand and gravel areas, the water flows a great deal. Over 50% of water that is recharged in the center of town are in the clay areas. This is an important location given the quality of water. He outlined Walnut Hill as a good example of this type of location. The value of this aquifer is very important given the flow and quality. Most of the information available indicates that the boundaries as outlined are accurate.

He gave an outline of the groundwater protection overlay (outlined in red on figure 2). At present there are no additional studies on this area based on sound hydrogeologic practices.

Village Center District: A good portion of this district is covered by the groundwater protection overlay. John stated that he believes North Yarmouth's ordinance is well written and protects the aquifer well. Any enhancements of this district will imply more waste water protection and increased use of septic systems impacts. He gave an outline of the septic system process. Nitrates often remain after this process and too high an amount is not good for water quality. The 10 mg

M/L standard is such as to protect infants in particular. Typical figures at leach fields are 40 mg M/L (See pages 5-7 of the report). It is believed that microbes in the soil degrade the nitrates, but there is not sufficient research in this area. It is believed that it becomes diluted. Through a specific formula, the figures help determine minimum lot sizes. In the Village Center District (VCD),  $\frac{3}{4}$  to 1 acre lots would be acceptable and the current ordinance supports this.

He also discussed some of the criteria that a Planning Board would review in their approval process.

Paul Napolitano asked about pre-septic treatments as a condition of approval on a project. John Sevee stated that there are peat treatment systems but haven't been used a lot since the '90's. There are also attachments that can be added. One of his concerns is that people in general do not take care of them. With large engineered systems, pre-treatment is more structured and the Planning Board has more authority in making certain that the developer is maintaining the systems. The negative aspect to a large, engineered system is an increased cost to the developer and the project overall.

Dan Bisson asked about other contaminants to consider. John outlined some contaminants in domestic waste water such as nitrates, arsenic (depending on the soils where they may be evacuated as they can naturally develop), bacteria, and possibly, medicines.

Mark Girard of the Board of Selectmen asked about the natural discharge of the water flow. He asked if the ordinance outlines that a piece of land can be used to assist in the discharge. John stated that it could be done and if the buildings were clustered then the infrastructure costs could be controlled.

Darla Hamlin of the Board of Selectmen asked if the cluster housing concept is used in Maine. John said it is not used a lot. Peter stated that the zoning allows cluster housing in the Farm and Forest District.

John Carpenter asked about the groundwater protection overlay in relation to the Yarmouth Water District Wells. Paul Turina stated that the reasoning for this was based on the Yarmouth and Portland Water Districts' previous research

David Perkins asked about the school being closed and potentially being used as senior housing. Given the existing systems that exist with the school, this doesn't pose an issue. John stated no, but to not develop a commercial enterprise with this building. David also commented on the potential for Cassidy Pit. John Sevee stated that the water there appears to flow to the north. He expressed concerns on a report suggesting putting fill there. The type and quality of fill needs to be considered. (See recommendation #7 of the report).

Andy Walsh asked about water levels and are there any changes in the water makeup. John Sevee stated that water levels are monitored. There are some normal deflections in pumping but the aquifer is not being drained. Nitrates have increased (historically that has been the case.). There was a discussion the figures on the monitoring wells and the extraction wells providing the most

accurate information. Peter stated that the Yarmouth Water District and planning on installing more monitoring well and the Town should be working with them to help find the best location for these.

Al Alhers asked if there are any legal requirements obligating North Yarmouth to protect the wells. John Sevee stated that it can be a civil case but there is no legal requirement.

Paul Turina asked about the risks for drilled wells vis a vis development at the top of a hill. There was a discussion on the differences between recharge and discharge of the bedrock in relation to the well location.

Andy Walsh asked about the depth and thickness of the aquifer.

Peter reminded the group about the recommendations provided in the report.

Paul suggested that the Board of Selectmen ask the Water District about finding out and helping them in their additional well monitoring locations.

Paul Turina moved and Clark Whittier seconded to adjourn the meeting.

The meeting ended at 7:40pm