

Nitrogen Impacts On Muddy Creek Weigh Heavy On Marini Development

by William F. Galvin

HARWICH --- Development of the nearly 17-acre Marini property, which sits off Church Street along the western bank above the headwaters of Muddy Creek (Monomoy River), has town officials looking closely at the need for curtailing nitrogen from homes proposed there.

The board of health has made it clear they would like to see a cluster development and wastewater treatment plant installed to reduce nitrogen impacts to that river, which feeds into Pleasant Bay.

A recently completed Massachusetts Estuaries Project (MEP) study released six weeks ago cited the need to remove 36.3 percent of the nitrogen from the watershed to return Pleasant Bay to full health.

Chairman of the the town's Water Quality Task Force, Frank Sampson, told the board of health last week the bottom line is almost 100 percent of newly generated nitrogen from development needs to be removed before it reaches the river.

Preserving the Marini property as open space has been an initiative of both the town and the commonwealth in recent years given the poor health of the river. Town meeting, on the recommendation of the real estate and open space committee, approved \$1.6 million to acquire the property with an understanding the Harwich Conservation Trust would participate in the purchase and receive a conservation restriction. The commonwealth also committed \$500,000 through its Self Help Grant Program toward the purchase.

The town of Harwich also received financial assistance from the state, federal and the Harwich Conservation Trust to purchase the former 42-acre Shea property along the west bank at the mouth of Muddy Creek.

But the town could not reach an agreement on price with the Marini family. The land was particularly attractive to the town because of its 760 feet of frontage on the river. The land is located in the Pleasant Bay Area of Critical Environmental Concern and several assessments have pointed to the need to address nitrogen loading on the river.

The Marini family has decided to subdivide the property into 12 lots and sell them off individually. Representatives have been before the health

board on a couple of occasions seeking approval of a septage plan for the development. The subdivision is scheduled to go before the planning board later this month.

Laura Schofield of Schofield Engineering told the health board the land is entirely in the watershed of Pleasant Bay, and within a zone of contribution to a public well. She also said there is a bordering vegetative wetland and coastal bank and the conservation commission has approved delineation in compliance with the riverfront act to keep development outside these areas.

She also reported they have done test holes for individual septic systems and the soil conditions are uniform throughout the area. The site is also serviced by town water, the consultant said. Schofield produced nitrogen calculations for septic system there, each being below 10 parts per million. Then she gave numbers using individual innovative and alternative systems. Those numbers dropped again, in most instances below five ppm.

The consultant said a third option is to install a treatment plant for the entire site. Estimated costs are \$450,000. But she said this gets tricky because of the phased-in nature of this development.

Sampson said they were looking for an environmental impact review and he called this presentation a start. But, he also said in a month or so total daily maximum limits of nitrogen would be established through the MEP for Muddy Creek.

“The bottom line is we’re faced with removing almost 100 percent of existing nitrogen from Muddy Creek with the town of Chatham,” Sampson said. “It implies 100 percent of new nitrogen.”

Sampson said this area will be subject to public sewerage in the future to export water from the watershed. He said a solution is to have this project designed as a cluster development with a commonly shared wastewater treatment plant. Sampson said it is technically feasible to have homes phased into the system.

“We’re faced with unusual and creative thinking here,” Sampson said. “Muddy Creek in terms of the level of nitrogen and what it can handle is the worst sub-embayment in the Pleasant Bay watershed.”

Health Department Director Paula Champagne cited work done at Sea Port Village in the Allen Harbor watershed several years ago. Working with the developer, William Marsh, she said they negotiated a cluster development and wastewater treatment plant. After following the project for several years, they worked out a manageable operation for the plant. New regulations have been worked out based on that success, Champagne said.

Attorney William Riley said it appears there are obligations the town must address relative to the nitrogen loading criteria. He questioned whether

they should even be before the board because the proponents had not been invited to participate in this discussion.

Riley said he'd be happy to recommend to his client they put dry sewage piping in the subdivision. He also said this development would put in less nitrogen per household based on existing homes surrounding the creek.

"You're attempting to solve the burden of nitrogen in this creek with my clients and it's unreasonable and unfair," Riley said. "The Marini family is willing to work with the town toward a reasonable solution to this problem."

If the town is going to be sewerage this area, it is unfair to ask the Marini's to put in an expensive system that will become junk, Riley said. He also said it is unfair to compare the Marini project to one done by a developer such as Marsh. Marsh builds houses while the Marini's seek only to sell the lots. He pointed the Marini's have owned this property for 40 years.

The attorney said the \$38,000 assessment per lot would be a 10 percent impact on the sale of each lot and it would be much easier to absorb by assessing that cost through the purchase of a home as was the case at Sea Port Village.

Riley said his client's project meets Title V and all of the planning board regulations and they can file it with that board for approval. But, they'd rather work with the town and assist in sharing the burden.

"You need permission from us to do so," health board member Dr. Albert Hurst said.

"We need to be in compliance with the current board of health regulations," Riley responded.

Sampson said across the river in Chatham you'd be required to put in a cluster development with three or more lots. Sampson urged the proponents not to waste money on an innovative system for individual homes. He also said it could be 15 to 20 years before Harwich installs a public system in this area. If a system is in place on this land the homeowners would not be assessed that public cost, he said.

"The Marini family feels they should be governed by regulations on this side of the river," Riley replied.

The water quality task force chairman said the state department of environmental protection would allow a plant to be located in common areas of a cluster development so no lots are lost. He also cautioned the attorney DEP has the power to further constrain development because the land is located in a zone of contribution to a public drinking well.

With town officials and project proponents agreeing there would be no consensus on that evening, Riley agreed to meet with Sampson and Board of

Health Chairman Dr. Stanley Kocot before the July 18 meeting to discuss these issues and seek to work out a compromise.

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