

Wastewater Study Aims At Restoring Health Of Harbors

by William F. Galvin

HARWICH – The town is getting serious about addressing the impacts of nitrogen in its harbor basins. Working with its consultants, the town will spend \$452,000 over the next two years to identify sources of pollution and the infrastructure necessary to reduce deleterious impacts to its waterways.

“The symptoms of the problem have been known for years,” Frank Sampson told 50 residents and town officials in attendance at a kickoff meeting with Camp Dresser McKee, Inc.(CDM), the town’s consulting engineers, last Thursday. “Nitrogen’s turning our harbors green, into a primordial pool.”

Excessive nitrogen in saltwater embayments could have an impact on the future of the town’s economy, he said. Deterioration of the town’s beaches and waterways will have a value impact on tourism.

Sampson, chairman of the town’s water quality task force, cited the visible impacts from excessive nitrogen in Allen Harbor, in where the waters are green from the growth of algae and there is death-creating detritus muck in the harbor bottom, killing the breeding grounds for all kinds of fish.

The impacts of nitrogen are also known in Muddy Creek, a tributary to Pleasant Bay, where 75 to 85 percent of the watershed is wastewater derived, Sampson said. He said nitrogen levels are 75 to 100 percent over acceptable levels and “no treatment in the world will get it back to zero.”

Ponds and freshwater systems have a great capacity for removing nitrogen, Sampson said, and the study will look at the benefits of converting Muddy Creek from a saltwater to freshwater system and whether permitting can be obtained to do so. He said Harwich will work closely with Chatham on that.

There is no question Harwich faces challenges unique to itself, David Young, Vice President of CMD, told the group. He cited the explosion in population in the town over the past 50 years and the need for growth controls and planned growth to protect water supplies, groundwater quality and its embayments.

He cited the Massachusetts Estuaries Project underway in Harwich,

which will identify total maximum daily limits of nitrogen. Those numbers will soon be available for Pleasant Bay.

Why is an expensive study necessary? Young asked rhetorically. To make sure the town is out in front of the curve and has a plan to address nitrogen impacts in a progressive manner, he said. The study will identify where the town might need off-site treatment solutions. Such as village centers. The study would identify what the alternatives are.

Young said the study will look at the full water cycle. He said people flush their toilet and it's "out of sight and out of mind." The study will look at rain and snow recharge and groundwater flow, filtration, soil types and how water reacts.

The study will examine five embayments in Harwich, including Pleasant Bay, which is part of the MEP study in conjunction with Chatham, Orleans and Brewster. It will also look at the Herring River, Allen, Wychmere and Saquatucket harbors.

The study will look at watersheds and how they feed into harbors, and at homes and impacts from septic systems. The first phase of the study will review available data, take public input, conduct a needs assessment and develop wastewater strategy. The second phase includes evaluating feasible alternatives and developing an implementation plan.

The consultants said they will be concentrating on the watersheds that feed into the Nantucket Sound side harbors, the commercial growth district in East Harwich and the watershed associated with Pleasant Bay. Young said the difficult process will be finding effluent disposal sites.

"It's the receptors, the harbors we're concerned about," Sampson said. "The drinking water is in quite good shape. The town has done a good job of protecting drinking water from nitrogen."

Questions were asked about the need for regional participation. Sampson said each town can control its destiny by addressing the watersheds and estuaries within town limits. He said there are efforts to obtain funding through a county collaborative.

"You won't see one large pipe running down Route 6 to a large treatment plant," Sampson said. "Development is far too separated."

Cost was another concern. Sampson said Capewide it could cost \$2 to \$3 billion and he said estimates cost for Chatham, which has a lot of sensitive estuaries, could reach \$200 to \$300 million.

"We don't have any intentions or plans to do town-wide sewerage," Selectman Larry Cole said.

But the town does want to take a slow, measured approach. Sampson

said the town does not want to be back in a decade doing it again, but rather to address needs with a phased approach.

“You don’t build a six-bedroom house today,” Sampson said. “You built a Cape and add bedrooms as the kids come along.”

The town is looking for volunteers to serve on a citizen’s advisory committee to help publicize the process and assist with formulating components of the plan. There has to date not been a great deal of interest from residents.

The process is also designed to invite the public into deliberations. At least eight public meeting will be held to define progress and collect input over the two-year study. The next meeting has been scheduled for Nov. 15 at the community center.