



Buzzards Bay Project
National Estuary Program

Brenda Eckstrom, Chairman
Wareham Board of Selectmen
54 Marion Rd
Wareham, MA 02571

September 6, 2007

Re: New nitrogen management bylaws for Wareham

Ms. Eckstrom:

As you know, the Buzzards Bay National Estuary Program developed a Nitrogen Standards General Bylaw for the Town of Wareham, at the request of the Board of Selectmen and Sewer Commissioners. Wareham residents did not pass this bylaw at their spring 2007 Town Meeting. On July 12, 2007, during a meeting with Wareham town officials, I discussed other potential nitrogen management solutions for Wareham, and potential follow-up strategies in light of fact that this bylaw did not pass, and in light of the expected imminent release, by the Massachusetts Department of Environmental Protection, of the Massachusetts Estuaries Project report for the Wareham River estuary.

Several strategies were discussed at this meeting, including establishing performance standards for the construction of new cranberry bogs, the need for the Board of Health to adopt reporting and operation and maintenance requirements for alternative septic systems, and several potential rewrites of the spring nitrogen standards bylaw so it principally addressed new construction or new development above a certain size thresholds. One suggestion was that the bylaw should provide more exemptions for existing homes and septic systems. Town officials participating in the meeting were also interested in seeing a comprehensive "nitrogen neutral" or "zero net nitrogen" bylaw to address large development projects within the community.

During this meeting, I noted that the Massachusetts' DEP's Massachusetts Estuaries Project (MEP) would release its report for the Wareham River Estuary complex this summer, and that it was advisable for the town to wait for the release of that report before they take further action. It now appears that this report will likely not be released until after town meeting.



Despite the fact that the MEP report is not yet available, and in light of the fact that reports for the town's other estuaries may not be available for several years, it is still possible for the town to take actions that would support a wide range of potential future nitrogen management strategies.

Below is a summary of the outcomes and requested actions from the July meeting.

1) Board of Health Regulations for nitrogen removal septic systems

Some nitrogen removal onsite wastewater systems have already been installed in Wareham to meet nitrogen performance standards mandated by the Planning Board through Special Permits. At the request of the Board of Health I can provide draft regulations to effectively track and ensure the performance of these systems. Adoption of these regulations does not require a town meeting vote, and can be adopted by the Board of Health after a public hearing.

2) Cranberry Bog Construction Bylaw

Both Wareham town officials and residents have expressed a desire to better manage the release of nutrients and pesticides from cranberry bogs. As I noted at previous meetings with town officials, existing cranberry bogs (in fact any land in agriculture production) is largely exempt from local bylaws and zoning. However, land not in agricultural production does not have such an agricultural exemption. Based on your request we prepared the attached Cranberry Bog Construction Performance Standards general bylaw. This bylaw will require that bogs be constructed according to guidelines prepared by the UMass Cranberry Experiment station to minimize the release of fertilizer and pesticides to the environment (fact sheet attached).

3) Updated general bylaw

Based on your guidance, we modified the Spring 2007 bylaw to create more homeowner exemptions. First, if a homeowner's system fails, they will no longer be required to install a nitrogen removal system if they do not meet the bedrooms per acre standard. Second, dwelling expansions are exempt from needing to install an alternative system to meet the performance standard unless the Board of Health requires a replacement of the septic system because it fails to meet state health regulations. Only when a septic system must be replaced at the time of sale of the property would a nitrogen removal system be required for an existing home instead of a conventional onsite wastewater treatment system.

Other changes to the bylaw include changing the standard to three bedrooms per acre, and providing more flexibility to the Board of Health in defining types of innovative onsite wastewater treatment systems that meet the bylaw requirements.

4) Comprehensive Net Zero Nitrogen Bylaw

Such a bylaw will involve changes to several sections of the towns zoning bylaws, including sections relating to special permits, site plan review, and possibly Planning Board subdivision regulations, and any potential new transfer of development rights bylaws. Key decisions need to be made as to the most appropriate special permit granting authority for such a bylaw (Board of Selectmen, Sewer Commissioners, or Planning

Board). Because of the complicated nature of these changes, we will request a series of meetings with the town this fall and winter to resolve a number of issues with the goal of developing an article for the Spring 2008 town meeting.

I hope to meet with you soon to further discuss potential nitrogen management strategies for Wareham.

Sincerely,

Joseph E. Costa, PhD
Executive Director

cc Board of Health
Planning Board
Conservation Commission