



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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PUBLIC MEETING – May 30, 2007
Massachusetts Estuaries Project
Phinneys Harbor System, Town of Bourne
Draft Total Maximum Daily Load (TMDL) For Total Nitrogen
Buzzards Bay Watershed

The Massachusetts Department of Environmental Protection (MassDEP) announces the availability, for public comment, of the Draft Total Maximum Daily Load (TMDL) for Total Nitrogen in the Phinneys Harbor system in Bourne. This draft TMDL Report, number MA 95-TMDL-2, is required by the EPA Federal Clean Water Act section 303d. This TMDL, and the Technical Report on which it is based, has been prepared as part of the Massachusetts Estuaries Project, a collaborative effort of the MassDEP, the University of Massachusetts School for Marine Science and Technology, the Cape Cod Commission, the U.S. Environmental Protection Agency, the Executive Office of Energy and Environmental Affairs, as well as municipalities and watershed associations in southeastern Massachusetts, to identify and address nitrogen pollution in 89 estuaries in southeastern Massachusetts.

A TMDL establishes the maximum amount of a pollutant that a water body can accept and still meet water quality standards. The TMDL serves as the regulatory and technical basis for developing integrated water resource management plans designed to restore the water quality of impaired water bodies. Three water body segments in the Phinneys Harbor system are listed on the 2004 Massachusetts Integrated List of Waters (Category 5) as impaired for nutrients and/or pathogens.

MassDEP has prepared the Draft TMDL report for controlling excess nutrients (nitrogen), the primary cause of eutrophication that can lead to: loss of eelgrass beds (which are critical habitats for macro-invertebrates and fish), undesirable increases in macro algae (which are much less beneficial than eelgrass), periodic extreme decreases in dissolved oxygen concentrations that threaten aquatic life, reductions in the diversity of benthic animal communities, and periodic algae blooms. The primary "locally controllable" source of nitrogen in this embayment is sanitary wastewater from septic systems. Stormwater runoff, leaching lawn fertilizers, discharges from agricultural land uses, and atmospheric deposition, also contribute varying quantities of nitrogen to the Phinneys Harbor system. The goal is to achieve state water quality standards for Class SA and SB waters as defined in Massachusetts Surface Water Quality Standards, 314 CMR 4.00. The water quality standards of particular interest are

for dissolved oxygen, nutrients, aesthetics, excess plant biomass, and nuisance aquatic vegetation. Standards for Class SA and SB waters provide numerical and narrative criteria to meet designated uses, including the support of habitat for fish and other aquatic wildlife.

A copy of this Draft TMDL and a further explanation of the TMDL Program are available on MassDEP's website at: <http://www.mass.gov/dep/water/resources/esttmdls.htm>. The Massachusetts Estuaries Project Final Technical Report for Phinneys Harbor, on which the TMDL was based, is available at <http://www.oceanscience.net/estuaries/reports.htm>.

The Massachusetts Department of Environmental Protection (MassDEP) will hold a public meeting on Wednesday, May 30, 2007 from 7:00 pm – 9:00 pm in the Veteran's Memorial Community Center, 239 Main Street, Buzzards Bay in the Selectmen's meeting room to discuss and respond to any public comments on the report.

MassDEP will consider all comments and the Draft TMDL Report will be revised as appropriate prior to submittal to EPA Region 1 for approval. All public comments, which should refer to report number MA 95-TMDL-2, must be received in writing or in electronic format by 5:00 p.m. on Friday, June 29, 2007 and addressed to:

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