



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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PUBLIC MEETING – October 9, 2007
Massachusetts Estuaries Project
Nantucket and Polpis Harbors, Town of Nantucket
Draft Total Maximum Daily Load (TMDL) For Total Nitrogen

The Massachusetts Department of Environmental Protection (MassDEP) announces the availability, for public comment, of the Draft Total Maximum Daily Loads (TMDL) for Total Nitrogen in coastal water bodies in the Nantucket and Polpis Harbors. This Draft TMDL Report, number MA 97-TMDL-2, is required by the EPA Federal Clean Water Act section 303d. This TMDL and the Technical Report on which it is based have 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 & 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 Comprehensive Wastewater Management Plans designed to restore the water quality of impaired water bodies. All of the embayments covered in this report are listed on the 2004 Massachusetts Integrated List of Waters (Category 5) as impaired by nutrients and 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 these embayments is runoff and sanitary wastewater from septic systems. Leaching lawn fertilizers, discharges from agricultural land uses, nutrient-rich sediments, and atmospheric deposition, also contribute varying quantities of nitrogen to coastal rivers, ponds, and harbors. The goal is to achieve state water quality standards for Class SA 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 waters provide numerical and narrative criteria to meet designated uses, including the support of habitat for fish and other aquatic wildlife.

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057.

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

The Massachusetts Department of Environmental Protection (MassDEP) will hold a public meeting on Tuesday, October 9, 2007 from 6:00 pm – 8:00 pm in the Cafeteria of the Nantucket High School, 10 Surfside Rd, in Nantucket, 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 97-TMDL-2, must be received in writing or in electronic format by 5:00 p.m. on Friday, November 2, 2007 and addressed to:

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Attn: Michael Ackerman

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