



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

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PUBLIC MEETING – November 17, 2011
Massachusetts Estuaries Project
Madaket Harbor/Long Pond, Town of Nantucket, MA
Draft Total Maximum Daily Load (TMDL) For Total Nitrogen
Nantucket 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 for Madaket Harbor/Long Pond in Nantucket, Massachusetts. This draft TMDL Report, (*Report # 97-TMDL-5 Control # 283.0*) 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 70 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. Portions of the Madaket Harbor/Long Pond embayment system (Hither Creek and Long Pond) are listed on the 2008 Massachusetts Integrated List of Waters (Category 5) as impaired for nutrients. Madaket Harbor and Long Pond are also listed as impaired for pathogens. The Massachusetts Estuaries Project Technical Report provides data that also demonstrate that Madaket Harbor/Long Pond is impaired because of nutrients, low dissolved oxygen levels, elevated chlorophyll *a* levels, eelgrass loss and impaired benthic fauna habitat.

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 to Madaket Harbor/Long Pond is sanitary wastewater from septic systems. Other controllable

sources of nitrogen to this system include stormwater runoff, leaching lawn fertilizers and leachate from the Town of Nantucket landfill. 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.

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/tmdls.htm#islands>. The Massachusetts Estuaries Project Final Technical Report for Madaket Harbor/Long Pond 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 Thursday, November 17 at 5:00 pm in the Nantucket Public Safety Facility, 4 Fairgrounds Way, Nantucket in the Community 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 97-TMDL-5, must be received in writing or in electronic format by 5:00 p.m. on Friday, December 16, 2011 and addressed to:

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