

## COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

## DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Resource Protection, 627 Main Street 2nd Floor, Worcester, MA 01608

ROBERT W. GOLLEDGE, Jr. Secretary

ARLEEN O'DONNELL Commissioner

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## PUBLIC MEETING - January 31, 2008

Massachusetts Estuaries Project
Draft Total Maximum Daily Load (TMDL) For Total Nitrogen
For Three, re-evaluated southern Chatham estuary systems,
Cape Cod Watershed

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 three, reevaluated, coastal water bodies in the Chatham southern estuary system, with watersheds in the Town of Chatham. The embayments include the Stage Harbor/Oyster Pond, Sulphur Springs/Bucks Creek, and Taylors Pond/Mill Creek systems. This Draft TMDL Report, number MA 96-TMDL-3, 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 a maximum amount of pollution 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. Oyster Pond, Oyster Pond River, Stage Harbor and Mill Pond are listed on the 2006 Massachusetts Integrated List of Waters (Category 5) as impaired for nutrients. Sulphur Springs (Harding Beach Pd), Bucks Creek, Mill Creek, and Taylors Pond are listed for pathogens, but research by the MEP indicate that they are also impaired by nutrients.

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 sanitary wastewater from septic systems. Stormwater runoff, leaching lawn fertilizers, and atmospheric deposition, also contribute varying quantities of nitrogen to Chatham's coastal rivers, ponds, and harbors. 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.

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A copy of this Draft TMDL and a further explanation of the TMDL Program are available on MassDEP's website at: <a href="http://www.mass.gov/dep/water/resources/esttmdls.htm">http://www.mass.gov/dep/water/resources/esttmdls.htm</a>. The Massachusetts Estuaries Project Final Technical Report "Linked Watershed-Embayment Model to Re-evaluate Critical Nitrogen Loading Thresholds for Stage Harbor/Oyster pond, Sulphur Springs/Bucks Creek and Taylors Pond/Mill Creek", on which the southern Chatham estuaries TMDL is based, is available at <a href="http://www.oceanscience.net/estuaries/reports.htm">http://www.oceanscience.net/estuaries/reports.htm</a>.

The Massachusetts Department of Environmental Protection (MassDEP) will hold a public meeting on January 31, 2008 from 7:00 pm – 9:00 pm in the Town Hall, 549 Main Street, Chatham, 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 96-TMDL-3, must be received in writing or in electronic format by 5:00 p.m. on Friday, February 22, 2008 and addressed to:

Massachusetts Department of Environmental Protection Division of Watershed Management, 627 Main St., 2nd Floor Worcester, MA, 01608 Attn: Steven Halterman

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