



# The Three Bays Monitor

Vol. 23 December 2006

A Publication of Three Bays Preservation, Inc.

## Massachusetts Estuaries Project Report for the Three Bays Watershed is ready for public comment after seven years of comprehensive research. Please attend the public hearing!

For the past half-century, increasing numbers of people have gravitated to reside in coastal watersheds in Massachusetts and along the US Eastern seaboard, which has resulted in increased pollutant loads to coastal embayments.

Specifically, our Three Bays embayment system is at risk of eutrophication from enhanced nitrogen loads entering the watershed. Septic system nitrogen loads generally represent 85%-90% of the controllable load to the Three Bays embayment system. The result of this is degraded water quality and an adversely impacted ecosystem. Subsequently, there are no remaining eelgrass beds within the Three Bays system, and the losses are associated with nitrogen enrichment. This unfortunate state is consistent with other estuaries in southeastern Massachusetts.

The report presents the results of implementing the Massachusetts Estuaries Project's Linked Watershed-Embayment Approach to the Three Bays embayment. The project's thresholds analysis provides site-specific nitrogen reduction guidelines for the Three Bays embayment system.

Analysis was performed to assist the town of Barnstable with up coming nitrogen management decisions associated with the towns' wastewater planning efforts, as well as with wetlands restoration, anadromous fish runs, shellfishery, open space, and harbor maintenance programs. The scientific data in the report has led the town of Barnstable to recognize the severity of the problem of eutrophication and the need for watershed nutrient management. The town is currently developing a Comprehensive Wastewater

Management Plan for the eastern part of town which it plans to rapidly implement. The next step is a nutrient management plan for the entire town.

### Public Hearing Information:

**Wednesday, December 13, 2006  
7:00-9:00 PM  
Barnstable Town Hall  
Town Council Hearing Room  
2nd Floor  
367 Main Street, Hyannis MA**

**Please visit [www.3bays.org](http://www.3bays.org)  
to view the  
report in its entirety.**

## Annual Appeal Underway

Just a reminder that our Annual Appeal is underway. Letters have been sent from board president Bill Gahagan urging you to consider a gift to Three Bays Preservation this holiday season.

It's hard to believe, given the organization's significant accomplishments, that Three Bays Preservation is still in its infancy. Founded in 1997 by a few local homeowners concerned about the deterioration of the bays, we have grown into a vibrant, professional environmental leader with more than 450 members.

We remain committed to educating the community about the threats to our beloved estuaries and undertaking the important infrastructure work of maintaining the integrity of Dead Neck

and improving the channels' flushing and navigability. We also continue to be outspoken advocates for the protection of our watersheds and drinking water.

Membership renewals for 2007 can be included along with your annual fund donation. Please remember that our annual appeal funds the majority of the operating budget for our water quality monitoring program and staffing for our summer rangers to patrol Dead Neck. If you have any questions about the annual fund, please call the Three Bays Preservation office at 508-420-0780.

The weather grows cold now. Swimsuits are put away, and boats rest on blocks. Our thoughts turn inland. But as you make out your holiday gift list, we respectfully ask that you remember past summers and

look forward to those yet to come. After all, environmental protection is a year-round job.





Three Bays Preservation, Inc.  
864 Main Street  
P.O. Box 215  
Osterville, MA 02655

NON-PROFIT  
PRSR STD  
U.S. POSTAGE PAID  
SO. YARMOUTH, MA  
02664  
PERMIT 30

## Water Quality Monitor Volunteer Appreciation Event



More than 30 water-quality monitoring volunteers attended the annual volunteer recognition event on November 3, 2006 at the Three Bays Preservation office. The event honors the work performed by water testers throughout the town of Barnstable. The guest speaker was Dr. Brian Howes, director of the Coastal Systems Program at the University of Massachusetts, Dartmouth.

“We are very grateful for the dedication of these volunteers” said Dr. Howes, “Without their efforts, we could not

afford to collect the quality scientific data that we do.”

Twenty-one volunteers from Three Bays Preservation collected samples at 25 sites throughout the Three Bays estuary, and 20 additional volunteers from the Town of Barnstable collected samples at 32 other test sites in the town. Water samples are collected simultaneously at each test site, with the goal of encountering consistent weather and tide conditions at all locations. These water samples are transported to the lab at the School for Marine Science and Technology at the University of Massachusetts, Dartmouth, where they are tested for nitrogen, phosphorus, salinity, temperature and dissolved oxygen, among other tests.

The data derived from the water samples collected by these volunteers over the past seven years has been instrumental in the creation of the Massachusetts Estuaries Report, which will be

presented on December 13 at the public hearing in Hyannis (see page 1 for more information). The data in the report will be instrumental in determining the Total Maximum Daily Loads (TMDL’s), which is a calculation of the maximum amount of pollution that a water body can accept and still meet the state’s Water Quality Standards for public health and healthy ecosystems. The federal Clean Water Act requires all states to identify water bodies that do not meet state standards and develop TMDL’s for them.

“We are pleased to recognize our water quality monitoring volunteers, who are very passionate about the work they perform” said Lindsey Counsell, executive director of Three Bays Preservation. “These dedicated individuals are often up before the sun to collect water samples. They are truly dedicated to the improvement of the water quality in our estuaries.”

### Happy Holidays from the Three Bays Preservation, Inc. Staff

Lindsey B. Counsell, Executive Director  
Peggy Rowland, Director of Outreach and Development  
Judy Heller, Program Manager  
864 Main Street, PO Box 215  
Osterville, MA 02655

Phone: 508-420-0780 Fax: 508-420-4489  
email: [info@3bays.org](mailto:info@3bays.org) [www.3bays.org](http://www.3bays.org)



Volunteer Deke Silva, checks water clarity with a secchi disk in Dam Pond, summer 2006.