

MAINE HEALTHY BEACHES PROGRAM



2006 REPORT



INTRODUCTION

The Maine Healthy Beaches Program was launched in 2002, funded by a grant from the U.S. Environmental Protection Agency (EPA). Under the federal Beaches Environmental Assessment and Coastal Health Act of 2000, Maine receives about \$250,000 annually for assessment and notification in support of public health. The Maine Healthy Beaches (MHB) Program is a partnership among municipalities, University of Maine Cooperative Extension/Sea Grant, state agencies, and nonprofits.

Public coastal swim beaches are monitored for indicator bacteria during the beach season, which is from Memorial Day to Labor Day, using EPA-approved quality control and quality assurance methods. Municipalities, state parks, and volunteer groups monitor water quality and provide public notification of unhealthy conditions. An online database provides beach managers, town and state park officials, and MHB program staff with immediate access to water monitoring data, allowing them to make decisions about posting advisories more efficiently. The public may view the status and data for each beach at www.MaineHealthyBeaches.org.

MHB PROGRAM ACCOMPLISHMENTS IN 2006

- Monitored water quality for 43 beaches in 21 towns and state parks
- Recruited 3 new beaches in Ogunquit, Scarborough, and Wells
- Trained approximately 100 beach monitors and conducted 30 follow-up observational/field trainings for quality assurance
- Collected and analyzed 1,623 samples
- Facilitated collaborative problem solving meetings with towns (Kennebunkport, Kennebunk, Biddeford, South Portland, and Ogunquit) in southern Maine experiencing chronic elevated bacteria levels and pollution problems
- Hosted a public forum addressing pollution concerns, regional planning, and collaboration for southern Maine communities
- Conducted an intensive five-month evaluation of the MHB Program, including: interagency cooperation; marketing and outreach; and technical review
- Based on the recommendations from MHB review, implemented changes for field and laboratory components
- Organized EPA Award Ceremony held in York
- Developed & implemented volunteer training modules
- Developed work plan for studies to identify pollution sources and sanitary survey work
- Completed two Sanitary Shoreline Surveys for South Portland and Biddeford
- Responded to a high volume of media requests and questions from the public regarding the MHB program and beach water quality
- Updated and developed new MHB resources, which may be found at www.MaineHealthyBeaches.org



Towns/state parks included in the 2006 MHB program are: Crescent Beach State Park, Ferry Beach State Park, Scarborough Beach State Park, Popham Beach State Park, Reid State Park, Wells National Estuarine Research Reserve, Portland, Scarborough, South Portland, Lincolnville, Camden, Bristol, Wells, Saco, Old Orchard Beach, Biddeford, Kennebunk, Kennebunkport, Ogunquit, York, and Kittery.

BEACH WATER QUALITY ASSESSMENT AND NOTIFICATION

Currently, towns/state parks participating in the Maine Healthy Beaches Program are responsible for monitoring their beaches weekly, utilizing either town/state park staff or local volunteers. Monitoring beyond the routine weekly schedule is intensified when the bacteria standard is exceeded or when sites exhibit chronically high enterococci bacteria levels. Additional water samples may be collected in freshwater inputs, such as rivers and streams, which may be affecting beach water quality.



The town/state park personnel, along with MHB Program staff, select the monitoring sites for each beach based on recommended criteria from EPA: sites where people swim (and in 2 to 3 feet of water, which changes according to the tide stage), at sources of freshwater inputs to the beach, and at sites with conditions that could affect water quality at that beach.

Parameters being monitored are: air and water temperature, salinity, *Enterococcus* bacteria, tidal stage, rainfall, and weather conditions. In addition, field observations of conditions that might affect beach water quality are recorded.

The beach manager or designated data manager inputs the monitoring field data into the online Maine Coast Data database. The public can access these data by clicking on the “beach status” pages on the MHB Web site, www.MaineHealthyBeaches.org.

When sample results exceed the bacteria level criteria, an automatic e-mail alert is generated to beach managers, local officials designated by the town/state park, and MHB Program staff and partners. Immediate re-sampling by the town/state park is recommended.

Once local beach managers receive notification of results exceeding the bacteria level threshold, they decide (often in consultation with MHB staff and agency partners) whether to post an advisory or, in some cases, to close the beach to recreational water activities. The beach is posted at public access points and in the Maine Coast Data database. A decision to post the beach is dependent on the water quality history, and risk factors impacting the area.



SURVEYS AND STUDIES

In 2006, the MHB program completed Sanitary Shoreline/Watershed surveys in South Portland and Biddeford. The survey work essentially raises awareness about the link between land use practices, offshore activities, and healthy water. The resulting report documents actual/potential sources of contamination and makes recommendations to address identified issues. The towns utilize these survey reports and recommendations to determine their next steps and to find potential partners to assist in remediation efforts. These collaborative efforts may improve future water quality and protect public health on Maine’s beaches.

Special studies—including intensive water quality monitoring in the tributaries affecting the beach, tracking water currents to determine flow to beach areas (2005), and using optical brightener methods to try to determine sources—were conducted last year in Kennebunkport. Preliminary studies are planned for Kennebunk and Ogunquit in 2007. These special studies are conducted to identify pollution sources and to work with towns to develop remediation and beach management strategies supporting public health.





SOUTHERN MAINE BEACHES FORUM

The goal of the April 3, 2006, Southern Maine Beaches Forum was to bring York and Cumberland County coastal communities together to improve understanding of the regional nature of beach water quality and to develop proactive regional municipal approaches to control pollution and prevent beach closures.

Objectives were to:

- Provide clear information and an opportunity for dialogue on municipal and state responsibilities for water quality monitoring and pollution source identification, and on actions needed to protect beach water quality.
- Develop specific action strategies for individual beaches based upon regional collaboration among municipalities and the state.
- Provide town officials with specific actions they can implement in their towns, and tools to work regionally to identify and eliminate sources of pollution leading to beach advisories/closures.

As a result of the forum, towns were able to hold public workshops on maintaining beach water quality, develop plans to better inform citizens and town officials on aspects of the MHB Program, and continue to pursue remediation of pollution sources. Moreover, towns began to network with adjoining towns on shared pollution issues, worked to engage their local conservation commissions in discussing and developing plans to keep their beaches healthy, and held discussions at selectmen's meetings to solve pet waste issues on beaches with high bacteria counts.

SEASON SUMMARY

The Maine Healthy Beaches program experienced 147 advisories and closures on 44 beaches in 2006. In the 2005 season, there were 86 advisories and closures on 43 beaches. Factors potentially contributing to the 2006 increase include: heavier rainfall than last season, severe flooding in coastal areas, an increase in the number of beaches monitored and samples collected, and improved notification of beach advisories/closures. The MHB Program has been assisting towns with further assessment of the freshwater tributaries contributing to poor beach water quality and identification of pollution sources. This effort has brought together local/state officials, partnering state agencies, nonprofits and citizens with a focus on sharing resources and solving problems. The MHB Program is committed to continuing this focus with priority towns, and improving beach management tools, including routine assessment, notification, and data analysis. ■



This publication was partially developed under Assistance Agreement Number CU 97127201-0 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of the Maine Healthy Beaches Program.

MAINE HEALTHY COASTAL BEACHES 2006 PROGRAM STAFF

Program Manager: Paula Thomson, Maine Coastal Program of State Planning Office—207-287-1482 or 1-800-662-4545; paula.thomson@maine.gov

Program Coordinator: Esperanza Stancioff, University of Maine Cooperative Extension/Maine Sea Grant—207-832-0343 or 1-800-244-2104; esp@umext.maine.edu

Assistant Coordinator: Keri Lindberg, University of Maine Cooperative Extension

Summer Interns: Susannah Corwin and Sarah Mosley (provided by Maine Department of Environmental Protection)

State agency partners: Maine departments of Environmental Protection, Health and Human Services, Marine Resources, and Conservation, as well as the Maine Geological Survey and Maine State Planning Office.

