



PLEASANT BAY ALLIANCE

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FOR IMMEDIATE RELEASE

Pleasant Bay Alliance to Host Public Meeting on Muddy Creek Resource Study

Interested citizens will have a chance to learn about potential changes in resource conditions that could result if a dike located in the position of an historic dike is installed to improve water quality in Muddy Creek. The findings of a resource assessment will be presented at a public meeting on Thursday, November 13th at 7:00 pm at the Chatham Community Center, 702 Main Street, Chatham.

Muddy Creek (also known as Monomoy River) is a tidal river dividing Chatham and Harwich that discharges into the main basin of Pleasant Bay. The contributing watershed for Muddy Creek is shared by Chatham (~25%) and Harwich (~75%). Poor water quality conditions have been documented in the Creek and are due to excessive nitrogen coming primarily from septic systems in the watershed. Nitrogen loading is compounded by limitations on flushing due to the Creek's long, narrow configuration and culverts under Route 28. Septic nitrogen load reductions needed to achieve threshold nitrogen levels range from 75% in upper Muddy Creek to 100% in lower Muddy Creek.

Analysis conducted as part of the Massachusetts Estuaries Project indicated that a dike installed mid way up the Creek, where a dike once was in place, would improve water quality by increasing tidal flushing in the lower portion and converting the upper portion to a fresh water system. Freshwater systems have the ability to take up nitrogen from surrounding land uses, thereby reducing the nitrogen load that would need to be removed through other means.

In exploring the feasibility of this concept, representatives of the Towns of Chatham and Harwich and MassDEP discussed the need for detailed information on how the dike re-installation would affect water quality and wetlands in order to further assess the feasibility of this approach.

In 2007 the Alliance obtained a \$35,000 grant from the Cape Cod Water Protection Collaborative's Shared Watersheds, Shared Responsibilities program to fund the resource assessment. Through a competitive process, the Alliance selected the School for Marine Science and Technology (SMAST) at UMASS-Dartmouth to conduct the study.

The study documents current resource conditions in Muddy Creek and anticipated changes to resource conditions if the dike were to be re-installed in the Creek. Resource conditions assessed in the study include freshwater and marine wetlands, hydrology, water quality, and benthic infauna (animals that live in the sediments). The assessment also examines whether the dike would affect abutting private property and upland resources.

“The concept of installing a dike to improve water quality is intriguing and well worth exploring, but it raises many significant questions about potential changes to resources in Muddy Creek, and whether beneficial changes would outweigh any other impacts to resources,” said Alliance Coordinator Carole Ridley.

Noting that the dike installation is a concept not a proposal, Ridley added “the Alliance believes this assessment is a prudent step, to gather information about what if any changes would occur before taking a position on the concept of the dike installation. We hope this information will also be useful to town boards and MassDEP who ultimately would have regulatory review if any such proposal is brought forward, as well as neighbors and interested citizens,” Ridley said.

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The Pleasant Bay Alliance is an inter-municipal organization of the Towns of Chatham, Orleans, Harwich and Brewster formed to implement the Pleasant Bay Resource Management Plan adopted in 1998 and updated in 2003 and 2008. The Alliance develops public policy recommendations, technical studies and public education tools to support the Bay's natural resources and the public's safe enjoyment of Pleasant Bay.