

Casco Bay is one of 28 “estuaries of national significance” designated by the U.S. Environmental Protection Agency. To protect the ecological integrity of the Bay and its watershed, the Casco Bay Estuary Partnership works with its partners to ensure effective management and wise stewardship of the Bay’s resources.

Minimizing Stormwater Pollution

Portland Combined Sewer Overflows (CSOs)

In 2011, the Portland City Council approved a 15-year implementation schedule for CSO remediation. The anticipated \$170 million “Tier III” plan will rely heavily on construction of in-line storage conduits for combined stormwater and sanitary wastes, reducing the number of CSO discharge points and preventing CSO discharges during many storm events. CBEP funded development by the City of an outreach plan for stormwater and CSO remediation. The City’s outreach effort significantly affected how discussion of the fee was managed and helped lay the ground work for the Council’s unanimous vote. Director, Curtis Bohlen, served on the City’s taskforce.

Protecting and Restoring Habitat

Royal River Dams and Fish Passage Improvements

In early August, CBEP through the Habitat Restoration Fund, worked with three other groups to remove a former granite bridge which collapsed into the river leaving about twenty slabs—some 4 feet long and about 2 feet thick up and an estimated 6,000 lbs./3 tons each—which had jammed up the water flow near Elm Street a few years earlier. The slabs were hoisted using hand pulleys and moved to the edge of the river banks, the terrain being too rough for heavy equipment. The goal is to eventually re-establish the connection between Casco Bay and the Royal River, though much larger projects involving two town owned dams would have to be completed before fish are able to return to higher points in the river.

Shellfish Committee (AKA “Clam Team”)

Expanding and Sustaining the Shellfisheries of Casco Bay 2011

CBEP commissioned a study to look at the condition of shellfish beds in Casco Bay. The study, “Expanding and Sustaining the Shellfisheries of Casco Bay 2011” is the fourth in a series. The study’s authors identified high value clam flats around Casco Bay, and looked at those that are closed to harvest either periodically or permanently. They assessed the cause of the area closures and determined whether remediation was likely to be practical. Significant

The work of the Casco Bay Estuary Partnership is guided by the *Casco Bay Plan*, which identifies five key goals for watershed protection:

1. Minimize pollution loading from stormwater and combined sewer overflows
2. Open and protect shellfish beds and swimming beaches
3. Protect and restore habitat
4. Reduce toxic pollution
5. Promote responsible stewardship



One of Portland’s CSOs located at Back Cove



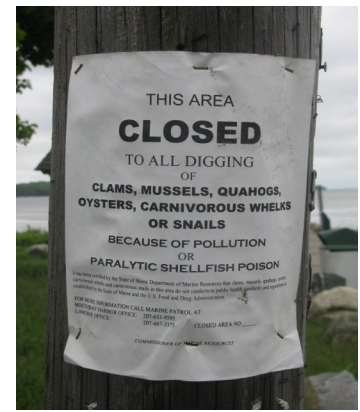
Royal River Rolling Stones Project Fall 2012

progress has been made over the past decade in addressing clam flat closures. More than 240 acres of previously closed clam flats have been opened to harvest. While more than 300 "overboard discharges" (OBDs: private wastewater disposal systems that discharge minimally treated wastes to coastal waters) remain in Casco Bay, many of the priority OBDs listed in earlier iterations of this report have been removed.

Sea Level Rise Adaptation

Estimating the Impact of Rising Waters

CBEP's second "Climate Ready Estuaries" project, applied "COAST" (Coastal Adaptation to Sea level rise Tool) to predict economic and other damages associated with future storm events in Portland's Back Cove neighborhood. Portions of the Back Cove neighborhoods already flood during spring tides, but the area has been designated by the City for many years for economic development and redevelopment. The project compares estimated costs of strategies for protecting the Back Cove neighborhood from flooding with anticipated future flood damages. Even quite extensive flood proofing activities are likely to prove cost-effective if development in the at-risk area continues as planned. While participants in public meetings disagreed about the wisdom of specific flood proofing alternatives, a broad consensus has emerged that the City should be thinking now about strategies for making local development more flood resistant.



Expanding and Sustaining the Shellfisheries of Casco Bay



High Tide , Marginal Way , Portland

Photo by C. Bohlman

Responding to Emerging Issues

January 2013 Mud Summit

The Casco Bay Estuary Partnership (CBEP) hosted a 'mud summit' to address emerging concerns over coastal ocean acidification and its effect on shellfish resources. The event brought together stakeholders to review the status of related science and available local information, improve understanding of the relationship between pH and shellfish in the Casco Bay region, and help set direction for local and regional efforts to understand the impact of changing pH on Casco Bay shellfish and the shellfish industry.



CBEP's 2013 "Mud Summit"

Protecting and restoring the ecological integrity of the Casco Bay watershed



The Casco Bay Estuary Partnership works to preserve the ecological integrity of Casco Bay and to ensure compatible human uses of the Bay's resources, through public stewardship and effective management.