

CASCO BAY ESTUARY PROJECT

FACT SHEET

WHAT IS THE CASCO BAY ESTUARY PROJECT?

Casco Bay lies at the heart of Maine's most populated area.

Since the arrival of European settlers in the late 18th century, Casco Bay has been the receptacle of an assortment of wastes generated by human activities taking place throughout its watershed. This legacy, combined with the ongoing demands of population growth and suburbanization, continues to stress the overall quality of the Bay.

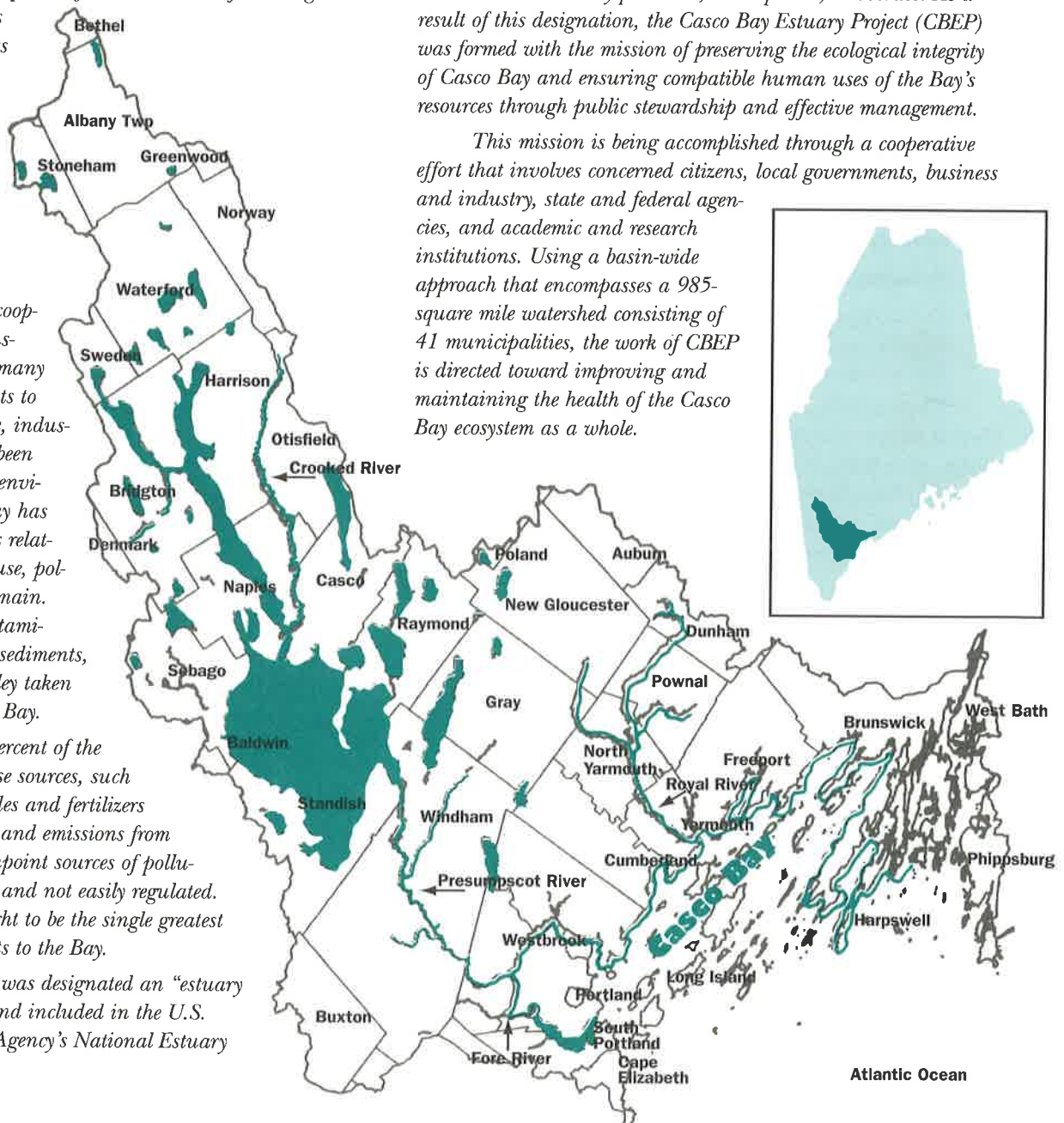
With the passage of clean water laws and the cooperation of businesses, industries, and municipalities, many of the former obvious threats to Casco Bay, such as sewage, industrial waste, and oil, have been greatly reduced. While the environmental health of the Bay has improved, specific problems relating to conflicting human use, pollution, and habitat loss remain. Elevated levels of toxic contaminants have been found in sediments, mussels, and lobster tomalley taken from urban portions of the Bay.

Today, roughly 60 percent of the pollution comes from diverse sources, such as roadway runoff, pesticides and fertilizers used on lawns and farms, and emissions from cars and trucks. These nonpoint sources of pollution are difficult to control and not easily regulated. Stormwater runoff is thought to be the single greatest contributor of contaminants to the Bay.

In 1990, Casco Bay was designated an "estuary of national significance" and included in the U.S. Environmental Protection Agency's National Estuary

Program, established in 1987 to protect nationally significant estuaries threatened by pollution, development, or overuse. As a result of this designation, the Casco Bay Estuary Project (CBEP) was formed with the mission of preserving the ecological integrity of Casco Bay and ensuring compatible human uses of the Bay's resources through public stewardship and effective management.

This mission is being accomplished through a cooperative effort that involves concerned citizens, local governments, business and industry, state and federal agencies, and academic and research institutions. Using a basin-wide approach that encompasses a 985-square mile watershed consisting of 41 municipalities, the work of CBEP is directed toward improving and maintaining the health of the Casco Bay ecosystem as a whole.



A Plan in Action

The *Casco Bay Plan*, developed over a five-year period through a collaborative process involving a host of stakeholders and completed in 1996, serves as CBEP's guide to protecting and restoring the Bay. It outlines a series of actions designed to meet the goals of the project. CBEP is working to carry out these action items, focusing on five overriding goals deemed crucial to the health of the Bay:

- Minimizing the loading of pathogens, toxics, nutrients, and sediments from stormwater and combined sewer overflows to Casco Bay;
- Protecting, restoring, and opening clam flats and swimming areas that have been impacted by poor water quality;
- Minimizing adverse environmental impacts to ecological communities resulting from the use and development of land and marine resources;
- Reducing toxic pollution in Casco Bay; and
- Encouraging all members of the Casco Bay community to act as responsible stewards to protect the Bay and its watershed.

The *Casco Bay Monitoring Plan* outlines 19 environmental monitoring objectives. Each monitoring activity is designed to help accomplish the actions outlined in the *Casco Bay Plan*. Monitoring is carried out on an ongoing basis for water quality, toxicity in mussel and lobster tissue, habitat loss, dissolved oxygen, air deposition, and sediment toxicity.

Project Management

The Casco Bay Estuary Project represents a new approach to environmental management involving a broad spectrum of interests in environmental management and decision making.

CBEP's 23-member Board of Directors, responsible for overseeing the project, is comprised of federal, state, local, business, industry, and nongovernment interests. Its members are dedicated to protecting the environment and promoting the sustainable development of the region and play an active role in project implementation.

The Board and the Project Director convene subcommittees to accomplish particular tasks outlined in the *Casco*



Jim Gray of SeptiTech installs a new septic system technology at Brighams Cove, Casco Bay. Seven overboard discharges were removed, which will allow this cove to be opened for shellfishing.

Bay Plan. For example, in the first year of implementation, the Board created three Task Forces (Public Education Campaign, Boaters Education, and Habitat Protection) to oversee three Year 1 Work Plan projects. These Task Forces disbanded after the tasks were completed successfully.

Since that time, six new subcommittees have been established—Data Management, Subsurface Wastewater, Board Representation, Clam Flat Management, Air Deposition, and Environmental Monitoring.

Moving Right Along...

The Casco Bay Estuary Project plays an active role in issues that affect the Bay. Check out some of the CBEP activities:

- ✓ Educating boat owners about environmentally sound marine practices
- ✓ Mapping clam flats in Casco Bay
- ✓ Analyzing lobster tissue for toxics
- ✓ Providing technical assistance to help open clam flats
- ✓ Working to eliminate overflows from combined sewer and stormwater drainage systems
- ✓ Developing a habitat fund to help protect significant wildlife habitat
- ✓ Conducting dissolved oxygen studies to determine water quality health
- ✓ Conducting lobster population studies in the Fore River

- ✓ Supporting water quality monitoring activities in the watershed
- ✓ Analysing mussel tissue for toxins
- ✓ Educating homeowners about environmentally friendly practices in the home
- ✓ Constructing and operating an air deposition station in the watershed to gain information about airborne pollution entering the Bay.

Did You Know?

- A quarter-million people, 25 percent of the state's population, live and work in the Casco Bay watershed.
- The Casco Bay shoreline extends 578 miles (including 785 islands, islets, and exposed ledges); the water surface encompasses nearly 200 square miles.
- Twelve significant lake and river systems feed the Bay, including Sebago Lake and four major tributaries: the Presumpscot, Royal, Stroudwater, and Fore Rivers.
- Tourism-related income exceeds \$145 million per year in Portland and \$250 million in the region.
- In 1994, the soft-shell clam resource in the open harvesting areas provided an estimated income of \$4.66 million to approximately 268 commercial diggers.

Action Spotlight

GIS Habitat Maps Bring it All Together for Community Planners

With CBEP funds, the U.S. Fish and Wildlife Service identified important coastal wildlife habitats and incorporated them into computerized geographic information system (GIS) maps. These maps and associated fact sheets were taken to town planners and land trust leaders in the watershed communities. Participants discussed how this information could be applied for town planning and habitat protection purposes. Already, two communities are using the maps as a tool in developing their open space plans; local land trusts are using the maps to help target land for protection.

All CBEP partners are working collaboratively to develop an accurate map of

current conservation lands. When overlaid with the habitat map, the conservation lands map will serve as a region-wide impetus to protect high value wildlife habitat, identify and connect protected wildlife corridors, provide recreation trails, buffer wetlands and river corridors to minimize nonpoint source pollution, and enhance the quality of life for watershed residents.

Action Spotlight

Expanding and Sustaining the Shellfisheries of Casco Bay

This CBEP project establishes a regional focus for the sustainable management of shellfish harvests and the abatement of pollution sources to clam flats. Shellfish inventories, surveys of shoreline pollution sources, existing water quality data, and local knowledge all come into play in rating closed shellfish growing areas according to their potential to thrive. The ratings are being incorporated into an accurate map of all shellfish growing areas in the Bay.

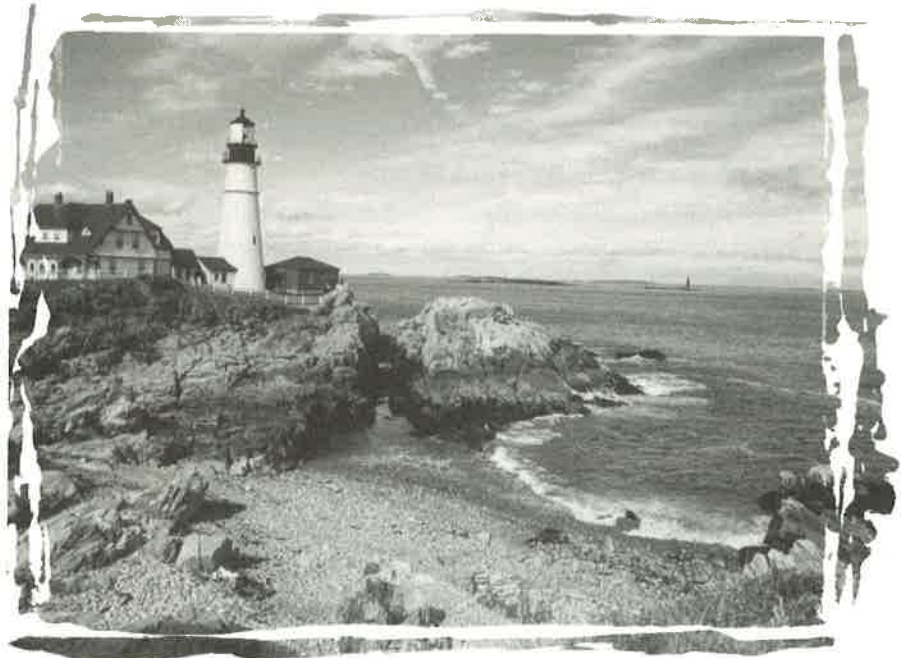
The project provides the technical support necessary to obtain state pollution abatement funds, to carry out pollution abatement projects, and to identify opportunities for preventing new sources of contamination. The project is also exploring the feasibility of employing new management tools, such as coordinating shellfish management and using techniques, such as flat rotation, to ensure the sustainability of clam harvests.



Kim Payne of Normandeau Associates discusses clam flat surveys with the CBEP Board of Directors on Peak's Island.

Get Involved!

The long-term health of Casco Bay depends on the combined efforts of all stakeholders—including you. The CBEP is dedicated to giving citizens an informed voice in the future of the Bay through education, outreach, and involvement. Because many of the decisions that affect the Bay are made at the local level, you can have an impact. Attend meetings of your town's Board of Selectmen or Council, Planning Board, Conservation Commission, or Comprehensive Planning Committee. Let them know that the Bay is important to you. You can make a difference!



Portland Headlight at Cape Elizabeth, Casco Bay

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Casco Bay's inclusion in the National Estuary Project makes the region eligible for federal funds and technical guidance necessary for continued study of the Bay and implementation of the action items. Support for the project is provided by the U.S. Environmental Protection Agency under Section 320 of the Clean Water Act and the Maine Department of Environmental Protection. Additional funds are provided through grants and contributions. The Project is administered by the Marine Law Institute at the University of Maine School of Law and the Edmund S. Muskie School of Public Service at the University of Southern Maine in Portland.

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