

# **Boston Harbor Islands**

## A National Park Area

### General Management Plan

Boston, Massachusetts  
2002

Prepared by  
Boston Support Office  
of the Northeast Region  
National Park Service  
for the Boston Harbor Islands Partnership



**BOSTON  
HARBOR  
ISLANDS**

# EXECUTIVE SUMMARY

THIS DOCUMENT PRESENTS THE FIRST GENERAL MANAGEMENT PLAN FOR THE NEWLY ESTABLISHED BOSTON HARBOR ISLANDS NATIONAL PARK AREA. THE BOSTON HARBOR ISLANDS BECAME A UNIT OF THE NATIONAL PARK SYSTEM IN NOVEMBER 1996 BY AN ACT OF CONGRESS THAT CONTAINS SEVERAL PROVISIONS WHICH, IN TOTAL, MAKE THIS A NATIONAL PARK LIKE NO OTHER.

The islands of Boston Harbor have served numerous public and private uses and are a unique example of an island cluster intimately tied to the life of a city. Although within sight of a dynamic and densely populated metropolitan area, they continue to offer the visitor a rare sense of isolation. Their proximity to a large urban population and their special natural and geologic resources, cultural and historic resources, and associated values contribute to their national significance.

The involvement of American Indians in the park is not only directed by the enabling legislation but asserted by many tribes and individuals who have come to play a prominent role in park planning. The island focus stems from the park's enabling legislation which highlights the importance of understanding the history of Native American use and involvement with the islands, and calls for protecting and preserving Native American burial grounds, particularly those connected with King Philip's War.

## Park Resources

The Boston Harbor Islands national park area contains some 30 islands (and former islands) lying within Boston Harbor. They range in size from less than 1 acre to 274 acres and together embrace 1,600 acres of land over an area of 50 square miles. The park incorporates the 16 islands of the Boston Harbor Islands State Park established in the 1970s.

Unlike islands typical of the New England coast, many of the Boston Harbor Islands are glacier-formed drumlins. With more than 200 mainland drumlins in eastern Massachusetts, these harbor islands are part of the only drumlin field in the United States that intersects a coastline.

Harbor water quality has improved over the past 10 years, as a wastewater treatment system for metropolitan Boston eliminates waste discharges into the harbor. Recreational activities such as swimming, fishing, and boating have increased as urbanites return to the harbor and the islands, and as national

and international visitors discover the islands' cultural and natural history and opportunities for recreation close to a major tourist destination.

The islands, known to have been inhabited 8,000 years ago, had been cleared to support agriculture and then various types of development. Today, the vegetation is composed predominantly of successional communities. Boston Harbor and its islands provide shelter and food-rich habitats for fishes, invertebrates, marine mammals, and birds, as well as nurseries for their young. Since Boston Harbor is part of the Gulf of Maine, its fauna is representative of the larger body.

Many of the Boston Harbor Islands contain buildings and structures related to uses such as coastal defense, agriculture, commercial fishing, year-round and summer habitation, resort life, industry, public health, immigration, and social welfare. More than 100 buildings and structures, including sea walls, forts, lighthouses, gun emplacements, concrete bunkers, wood-framed cottages, and brick military and institutional buildings, reflect the long history and changing character of the Boston Harbor Islands. The park contains three national historic landmarks. The Boston Harbor Islands contain numerous cultural landscapes that, when combined with the historic structures, archeological resources, and associated museum collections, relate the history and culture of the people who shaped the cultural resources in the vicinity of Boston Harbor.

The Boston Harbor Islands contain evidence of American Indian use of such archeological significance that, to date, 21 islands have been designated within an archeological district listed on the National Register of Historic Places. The park's enabling legislation directs that park managers include programs to protect Indian burial grounds and sites associated with King Philip's War **internment and other periods.**

Museum collections related to Boston Harbor Islands, comprising more than 6,000 items, are held by more than a dozen organizations including municipal, state, and federal agencies, as well as nonprofit and educational institutions. Collections include archival, historical, archeological, and natural history objects, specimens, documents, and images.

## Establishment of the Park and Current Management

Congress established the Boston Harbor Islands as a unit of the national park system in 1996. Rather than having the National Park Service (NPS) own and manage the park, the law makes NPS a nonland-owning participant in the Boston Harbor Islands Partnership and directs the Partnership "to coordinate the activities of the Federal, State, and local authorities and the private sector in the development and implementation of "a general management plan. The enabling legislation established a 13-member body consisting of: National Park Service, U.S. Coast Guard, Massachusetts Department of Environmental Management, Metropolitan

District Commission, Massachusetts Water Resources Authority, Massachusetts Port Authority, City of Boston, Boston Redevelopment Authority, Thompson Island Outward Bound Education Center, The Trustees of Reservations, Island Alliance, and Boston Harbor Islands Advisory Council.

The enabling legislation also established the Boston Harbor Islands Advisory Council, a permanent federal advisory committee currently with 28 members, and holding 2 seats on the Partnership. Its purpose is to advise the Partnership on the development and implementation of the general management plan. A unique aspect of the park is the Island Alliance, a nonprofit organization, with a seat on the Partnership, charged in the legislation with generating private funding for the park.

The Boston Harbor Islands national park area is operated day to day by the owners and managers of islands and other park areas who work through the Partnership to introduce consistency and coordination parkwide and to create parkwide programs. Several member agencies have experience in managing island properties for many decades.

The National Park Service's role is to help coordinate the Partnership and Advisory Council, to provide information and orientation to the public, to develop and operate programs, and to help assure that the park will be managed to NPS standards, as the law requires.

## Plan Background

The purpose of the general management plan is to clearly define the park's mission and management direction and establish a basic foundation for decision making for the Boston Harbor Islands Partnership in consultation with interested stakeholders. The plan considers the park holistically, in its full cultural and ecological contexts, as a unit of the national park system and as a part of Boston Harbor, harbor communities, and the region.

It takes the long view, 15 to 20 years into the future. As a policy-level document, the general management plan provides guidance for park managers and is not detailed, specific, or technical in nature. The general management plan acts as an agreement among the Partnership members and between park managers and the public.

## Public Process and Consultation

An extensive participatory process has characterized the development of this plan. From 1997, the Partnership's planning committee worked with the NPS planning team through monthly meetings, presentations, public workshops, special meetings with agency staff and advocacy and interest groups, newsletters, and a web site. The Boston Harbor Islands Advisory Council, which was appointed after a community-based planning process, added to the park's ability to reach a broader public.

A draft general management plan and draft environmental impact statement were released for public comment in June 2000. During the public comment period, eight formal public meetings hosted by the Advisory Council were held throughout the region.

Consultation also took place with the relevant state and federal agencies, and informally with members of the congressional delegation and state and local elected officials.

In a parallel course, the NPS held a number of consultation meetings with American Indian tribes, and regularly met with Indian tribes, offices, and organizations.

## Environmental Analysis

Consistent with the National Environmental Policy Act of 1970 (NEPA), alternative management schemes were developed to consider a reasonable range of ideas for managing the park. Information on park resources, visitor use, and visitor preferences was gathered and analyzed. Information was solicited about the critical issues and the scope of the project from the members of the Partnership and Advisory Council, the public, government agencies, and special-interest groups through newsletters, meetings, and personal contacts. Then alternative concepts were developed to support the park's purpose and significance, address issues, avoid unacceptable resource impacts, and respond to public desires and

concerns. In the combined draft general management plan and draft environmental impact statement four management alternatives were presented including a "no action" choice. The Partnership recommended Alternative C as the preferred alternative. The potential impacts of the four alternative actions were evaluated in the draft plan, and are summarized in the final environmental impact statement. The resources evaluated are: air quality, coastal processes, water quality, soils, upland vegetation, terrestrial wildlife, wetland and aquatic vegetation, wetland and aquatic marine wildlife, protected species, special communities or habitats, cultural landscapes, archeological and ethnographic resources, historic buildings and structures, museum collections, and socioeconomic factors.

In response to public comments on the draft general management plan, a number of clarifying changes have been made in this final plan. The preferred alternative is presented as the final general management plan. The final Environmental Impact Statement contains the written public comments with responses.

When funds become available to begin the design of facilities or to undertake other specific actions on individual islands that are consistent with the general management plan, then site-specific planning and technical environmental analysis will be done. These more specific undertakings will be subject to federal and state consultation requirements, and the public will be involved throughout the process.

Adoption of the general management plan will not result in changes to the resources so much as it will set the direction for future management decisions.

## Park Mission

The legislated purpose of Boston Harbor Islands national park area is three-fold: to preserve and protect a drumlin island system within Boston Harbor, along with associated natural, cultural, and historic resources; to tell the islands' individual stories and enhance public understanding and appreciation of the island system as a whole, including the history of American Indian use and involvement; and to provide public access, where appropriate, to the islands and surrounding waters for the education, enjoyment, and scientific and scholarly research of this and future generations.

The park's significance derives from its array of resources: the islands and peninsulas containing archeological resources, historic sites, open space, wildlife habitats, and relatively undeveloped shoreline in a major urban area of the country; the only drumlin field in the United States that intersects a coast, formed by the glaciers some 15,000 years ago; opportunities for tranquility and personal renewal; and land- and water-based education and recreation within an urban area with potential to serve visitors from the region and around the nation.

## Park Themes

Park themes communicate the national significance of the Boston Harbor Islands. They are conceptual and articulate the connections between the islands. To help people consider and learn more about the hundreds of individual resources (both natural and cultural), the Partnership has developed four themes around which countless stories about the Boston Harbor Islands can be presented to visitors and students in interpretive and education programs.

The themes are: Islands on the Edge, Home in the Harbor, Portal to New England, and Renewal and Reconnection. While primarily useful in communicating with visitors, the themes also can be used to help organize concepts related to park management, such as research.

A principle that has informed theme development is integration: nature and human history are interconnected. Similarly, stories related to Euro-American and American Indians are interwoven. The holistic approach breaks down the rigid lines often perceived between past and present, between people and their environment, and between pre-contact and post-contact periods of life on the islands.

## Management Areas

The primary action of this general management plan is the designation of specific “management areas” for each area of the park. By designating these areas, the Partnership has prescribed the resource conditions and visitor experiences that should exist at Boston Harbor Islands and the reasons for these proposed conditions. The plan describes what the management areas mean in terms of broad direction for resource management, visitor use, and development of park facilities, or infrastructure. The management area prescriptions and park policies form the core of the plan.

Management areas (or zones) help determine the balance between resource preservation and visitor use in each part of the park. They describe a range of desired resource conditions and desired visitor experiences to be achieved and maintained over time, and as such are “management prescriptions.” For example, in an area of emphasis on “natural features” one would expect to see landscapes affected primarily by the forces of nature, and visitors would have many opportunities to find tranquility; whereas in an area of emphasis on “visitor services and park facilities” one would see a “built” environment with some natural or historical elements, and visitors would expect to interact with many other people.

In the Boston Harbor Islands six management areas have been created, covering the full range of desired conditions for the park. They are: Mainland Gateways, Visitor Services and Park Facilities, Historic Preservation, Managed

Landscape, Natural Features, and Special Uses. The application in this plan of management areas throughout the park constitutes the essence of the plan, where resource conditions and desired visitor uses are prescribed for the life of the plan.

In addition to the six management areas defined in this plan, certain resources would have special protection regardless of the geographic area in which they fall. These resource types are treated with a protection emphasis that is applied as an “overlay” anywhere in the park.

## Goals and Policies

The plan describes mission goals for the park—which capture the essence of the park’s vision and articulate ideals of the Boston Harbor Islands Partnership—and policies related to each goal. The goals and policies are treated by subject:

- (1) resource protection,
- (2) research and information,
- (3) visitor access, use, and enjoyment,
- (4) education and interpretation,
- (5) management and operations, and
- (6) external cooperation.

Goals express the essence of the park’s mission and articulate the ideals that the Boston Harbor Islands Partnership is striving to attain in perpetuity. While they are not quantifiable, they do provide the basis for quantifiable long-term goals that are developed in the park’s five-year strategic plan.

Along with each mission goal is a context section that identifies critical issues for park management. The Partnership, the Advisory Council, park visitors, American Indian tribes, interested agencies and organizations, and the general public have identified and refined the issues addressed by this plan.

Associated with each mission goal is a set of policies relevant for this park. The Boston Harbor Islands policies build on the park's legislated mandates and Park Service policy that applies to the national system. The policies provide direction for day-to-day management decisions and are expressed in the present tense as desired future conditions. The guidance provided by policy is general in some cases and specific in others: It may prescribe the process by which decisions are made, how an action is to be accomplished, or the results to be achieved. Clearly stated parkwide policies ensure consistent management throughout the island system and meet the mandates of the federal enabling legislation.

# ERRATA

---

## ERRATA SHEET FOR BOSTON HARBOR ISLANDS GENERAL MANAGEMENT PLAN

Corrections to the text in the general management plan are noted below. A partial paragraph or sentence at the top of a column is counted as paragraph number one (paragraph 1). Text that has been added is underlined.

*REPLACE throughout general management plan*

In 2003 the Massachusetts Department of Environmental Management (DEM) and the Metropolitan District Commission (MDC) were brought together under a new agency, the Massachusetts Department of Conservation and Recreation. Throughout the general management plan, references to DEM and MDC, two members of the Boston Harbor Islands Partnership, should now read Department of Conservation and Recreation (DCR).

*page 122: left column, paragraph 3 DELETE sentence 3*

*page 162: left column, REPLACE paragraph 4 with the following:*

Sample story statements:

- Starting with American Indians during King Philip's War of 1675, captives of many different conflicts have been imprisoned on the islands.
- Quarantine stations and processing centers for immigrants were located on several islands.
- The islands have been used to isolate the poor, the sick, and the destitute from life on the mainland.
- Facilities necessary for urban life, such as wastewater treatment and garbage depots, have been located on the islands.

Other changes made to the text after printing have been incorporated into this copy of the GMP.

March 2004

# BOSTON HARBOR ISLANDS GENERAL MANAGEMENT PLAN

## TABLE OF CONTENTS

### PARK OVERVIEW

The Setting .....	1
Native Americans and the Islands .....	4
Park Resources .....	5
Establishment of the Park .....	15
Current Management (2000) .....	17
Island Maps .....	25

### PLAN BACKGROUND

Purpose of the General Management Plan .....	43
Development of the Plan .....	44

### PARK MISSION

Mission Statement .....	46
Purpose and Significance .....	46

### PARK THEMES

Islands on the Edge .....	47
Home in the Harbor .....	47
Portal to New England .....	48
Renewal and Reconnection .....	48

### MANAGEMENT AREAS

Mainland Gateways .....	49
Visitor Services and Park Facilities .....	50
Historic Preservation .....	50
Managed Landscape .....	51
Natural Features .....	51
Special Uses .....	51
Resources Receiving “Overlay Protection” ..	51

### GOALS AND POLICIES

Mission Goals .....	54
Introduction to Policies .....	54

### RESOURCE PROTECTION

Context .....	58
Resource Management Planning .....	59
Natural Resource Management–General ..	59
Restoration of Natural Systems .....	60
Biological Resource Management .....	61
Fire Management .....	62
Water Resource Management .....	62
Air Resource Management .....	63
Noise and Light Management .....	63
Geologic Resource Management .....	63
Cultural Resource Management–General ..	64
Burial Sites and Cemeteries .....	64
Treatment of Archeological Resources .....	65
Treatment of Ethnographic Resources .....	65
Treatment of Cultural Landscapes .....	65
Treatment of Historic Properties .....	65
Museum Collections .....	66
Carrying Capacity .....	66

### RESEARCH AND INFORMATION

Context .....	68
Studies and Collections .....	68
Scientific Research and Collecting Permits	69
Inventory and Monitoring of Natural Resources ..	69
Inventory and Evaluation of Cultural Resources ..	69
Social Science Studies .....	69
Ethnography .....	69
Protection of Research Potential .....	70

### VISITOR ACCESS, USE, AND ENJOYMENT

Context .....	71
Visitor Access, Use, and Enjoyment–General .....	73
Use Management .....	74
Accessibility .....	74
User Fees and Affordability .....	74
Park Access and Circulation Systems .....	75
Commercial Visitor Services .....	76
Harvest of Plants and Animals by the Public .....	76
Visitor Safety .....	76
Special Events .....	77

### EDUCATION AND INTERPRETATION

Context .....	78
Education and Interpretation–General .....	79
Interpretation and Education for Park Visitors .....	80
Outreach, Environmental Education, Heritage Education Services ..	80
Interpretation for Special Populations .....	81

### PARTNERSHIP MANAGEMENT AND OPERATIONS

Context .....	82
Partnership Management .....	83
Management Planning .....	84
Evaluating Environmental Impacts .....	85
Park Financing .....	85
Private Economic Activity .....	87
Park Development .....	87
Sustainability and Environmental Leadership .....	89
Maintenance .....	89
Solid Waste Management .....	89
Hazardous Materials and Toxic Waste .....	90
Energy Management and Recycling .....	90
Public Health and Safety .....	90
Park Boundary and Land Protection .....	90

### EXTERNAL COOPERATION

Context .....	95
Consultation .....	95
Harbor Management .....	96
Logan International Airport .....	97
Volunteers .....	97

### TABLES

Boston Harbor Islands Partnership .....	16
Current Visitor Conditions (2000) .....	22
Management Areas .....	52

## MAPS

Boston Harbor Islands	ix
Metropolitan Boston and Harbor Watersheds	2
Geological Formation of Boston Harbor Islands	6
Land Cover	11
Park Historic Buildings, Structures, and Landscapes	13
Land Ownership and Park Transportation	23
Individual Island Maps:	25
Bumpkin Island	29
Button Island	36
Calf Island	35
Deer Island	31
Gallops Island	28
Georges Island	26
Grape Island	29
The Graves	35
Great Brewster Island	30
Green Island	35
Hangman Island	37
Hingham Harbor Islands	36
Langlee Island	36
Little Brewster Island	30
Little Calf Island	35
Long Island	40
Lovells Island	28
Middle Brewster Island	35
Moon Island	40
Nut Island	34
Outer Brewster Island	35
Outer Islands	35
Peddocks Island	27
Raccoon Island	37
Ragged Island	36
Rainsford Island	39
Sarah Island	36
Shag Rocks	35
Sheep Island	37
Slate Island	38
Snake Island	38
Spectacle Island	41
Thompson Island	32
Webb Memorial State Park	34
Worlds End	33
Management Areas	55
Boston Harbor Islands Proposed Boundary	93

## VIGNETTES OF POTENTIAL ACTIVITY

Mainland Gateway	99
Boat Excursion to the Brewsters	99
Island Hub	100
Marina	100
Kayak Rentals	101
Historical Pageant	101
Lighthouse Tour	102
Conference Center	102
Historic Fort Programs	103
Campground	103
Environmental Learning Vessel	104

## APPENDICES

1. Boston Harbor Islands Partnership and Advisory Council Members	105
2. Individuals, Agencies, and Organizations Associated with Boston Harbor Islands National Park Area	107
3. Federal Laws	109
4. Laws Referred to in the Plan	117
5. Summary of Public Workshops, 1998	118
6. Summary of Cultural Landscape Study	121
7. Summary of Water Transportation Study	124
8. Spectacle Island Development	126
9. Summary of 2000 Visitor Surveys	127
10. Visitor Experience and Resource Protection (Carrying Capacity)	136
11. Financial Accountability Guidelines	138
12. Economic Sustainability Strategy, 2001–2011	139
13. Implementation Phasing and Costs	143
14. Plans and Studies	152
15. Peddocks Island Development	153
16. Harbor Visions Youth Charrette	154
17. Agencies' Roles in Resource Protection and Public Safety	156
18. Boston Harbor Islands Long-range Interpretive Plan	161
19. The Islands of Boston Harbor	173
20. Glossary	182
21. List of Preparers of the General Management Plan	186

INDEX	188
-------	-----

## BOSTON HARBOR ISLANDS



(click graphic to enlarge)

# THE PARK PLAN

# P A R K O V E R V I E W

The Boston Harbor Islands became a unit of the national park system in November 1996 by an act of Congress that contains several provisions which, in total, make this a national park like no other. This section of the general management plan provides a brief description of the park's setting, resources, and current management. It offers a brief introduction to the new park, based primarily on published sources. Original research and detailed inventories are needed before a definitive history of the islands or a comprehensive description of park resources can be presented. (Notably, such work is one goal of this plan.)

While the legal name is Boston Harbor Islands National Recreation Area, the park is known as Boston Harbor Islands, a national park area. This latter name was chosen by the Boston Harbor Islands Partnership at the behest of American Indians and in consultation with the



Boston Inner Harbor

National Park Service Washington office. The Indian nations that were involved in King Philip's War strongly voiced their opposition to the word "recreation" and believed it was inappropriate and disrespectful to their ancestors who were incarcerated, died, and were buried on the islands (see Native Americans and the Islands, page 4). This change allows the park to foster public understanding and appreciation for Indians' strongly felt view of the islands as sacred ground. It focuses more on the park's resources and history than on recreation.

Until 1970, when the Commonwealth of Massachusetts began systematically to acquire them for the benefit of the public, the islands of Boston Harbor had been shrouded from public view and appreciation for

generations by commercial and industrial development along the waterfront and by the poor quality of harbor water. In 1985, Boston Harbor was labeled the most polluted harbor in the nation; but the dramatic recovery of water quality during the 1990s, through the Massachusetts Water Resources Authority's wastewater treatment, contributed to widespread support for establishing a national park area. Now, after an investment of more than \$4 billion in better wastewater management and treatment, the harbor is cleaner and more inviting. Over the past three decades, numerous public and private agencies have once again turned their focus to Boston Harbor and its islands, as the region seeks to rebuild its historical and ecological ties to Massachusetts Bay.

The 34<sup>1</sup> islands of Boston Harbor, ranging in size from less than 1 acre to 274 acres, have served numerous public and private uses and are a unique example of an island cluster intimately tied to the life of a city. Although within sight of a dynamic and densely populated metropolitan area, they continue to offer the visitor a rare sense of isolation. Their proximity to a large urban population and their special natural and geologic resources, cultural and historic resources, and associated values contribute to their national significance.

## THE SETTING

Boston is the most populous city in New England and a major governmental, financial, economic, educational, and cultural center. The city is known for its human scale, vibrant neighborhoods, parks, comprehensive public transportation, and rich history. It is the twentieth most populous city in the United States, but its metropolitan area, ranking seventh, is the third most densely populated in the country. Approximately 7 million people live within a 50-mile radius or an hour's drive of downtown Boston, and 40 million people live within 250 miles.

The bounds of the region surrounding the park are variously defined. Common perceptions include the northeastern U.S., New England, or the Boston Harbor watershed. Here, the term refers to the 101 municipalities within the metropolitan area planning region. About 1.6 million people live in the 21 cities and towns immediately



surrounding Boston, or “Greater Boston” as used here. Greater Boston is home to 116 institutions of higher education, including Harvard University, the nation’s oldest.

The region contains some of the oldest, most valuable, and most visited historic sites in the nation. Boston’s Freedom Trail and, more recently, its National Historical Park have drawn visitors for decades. The Society for the Preservation of New England Antiquities and other private nonprofit groups own significant historic properties. To the northwest are Concord and Lexington, both renowned Revolutionary War sites; Concord also has important sites related to the literary and intellectual life of the 19th century. Directly north of the city, Essex County embraces the communities of Salem, Gloucester, Newburyport, and Marblehead, all significant maritime centers in the early national period. Immediately to the south of the region is Plimoth Plantation, containing replicas of the first permanent English settlement in the Northeast and a Wampanoag Indian summer village, which is one of the most popular living-history museums in the country. Eastern Massachusetts is home to 12 national park units—the Adams, Boston, Lowell, and Minute Man national historical parks; Boston African-American, Salem Maritime, Saugus Iron Works, Longfellow, Kennedy Birthplace, and Olmsted national historic sites; Cape Cod National Seashore; and Boston Harbor Islands.

The area also features the country’s oldest metropolitan park system; Boston’s famous “Emerald Necklace”; the nation’s first statewide conservation organization; and one of the country’s first state park systems, created in 1897. The metropolitan park system, operated by the Metropolitan District Commission, was planned by Charles Eliot and Sylvester Baxter and created by the state legislature in 1893. Eliot, who dedicated his career to the system that would protect the area’s remaining open spaces, understood the importance of the harbor’s estuaries, beaches, and islands, and made them integral to his 1893 park plan. Frederick Law Olmsted, designer of New York’s Central Park and parks and landscapes throughout the country, designed the “Emerald Necklace” of parks in Boston that have been renewed and revitalized in the 1990s. The Trustees of Reservations, established in 1891, was the model for land trusts internationally and protects more than 33,000 acres in Massachusetts. Reflecting the area’s wealth of cultural sites and facilities, tourism is Massachusetts’ third largest industry. Three counties in eastern Massachusetts—Suffolk,

Middlesex, and Barnstable—constitute the state’s largest travel market, with more than 12 million visitors in 1999.

### Massachusetts Bay and Boston Harbor

Massachusetts Bay is a projection of the Atlantic Ocean, which stretches between Gloucester in the north and Marshfield in the south. Its easternmost edge touches the boundary of Gerry E. Studds Stellwagen Bank National Marine Sanctuary, which was established in 1992. The bay encompasses approximately 800 square miles.

Boston Harbor is an “estuary” system where the salt water of Massachusetts Bay mixes with fresh water from three rivers: the Charles, the Mystic, and the Neponset. The harbor shores include six of Boston’s neighborhoods (East Boston, Charlestown, North End, Fort Point, South Boston, and Dorchester) and seven other municipalities: Hull, Hingham, Weymouth, Quincy, Chelsea, Revere, and Winthrop. Although it has extensive development on its edge, the estuary provides valuable habitat for wildlife, a nursery for marine organisms, water filtration, and flood control.

The Inner Harbor includes the mouths of the Charles and Mystic rivers, Chelsea Creek, and the port of Boston; the Outer Harbor includes the three bays of Dorchester, Quincy, and Hingham and the mouth of the Neponset River. Combined, the Inner and Outer harbors comprise approximately 50 square miles and are bounded by 180 miles of shoreline.

Boston Harbor, a continuously working harbor since the mid-17<sup>th</sup> century, and the islands have undergone significant physical transformation over the last 300 years. Both human actions and natural forces have caused this change. Many people are aware of the dramatic expansion of the Shawmut Peninsula by filling tidal land over the centuries to create what is now the city of Boston. However, most people are not aware of similar changes to current and former harbor islands. Natural forces significantly eroded Sheep and Hangman islands to mere outcroppings. Causeways and land bridges were constructed to connect Worlds End, Deer, and Nut islands to the mainland, as well as other former islands such as the end of what is now a section of the town of Hull and the Castle Island extension in South Boston. A modern vehicle bridge was constructed for Long Island. Massive landfills connected Wood, Noddles, Apple, and Governors islands for East Boston and Logan Airport. Today’s metamorphosis is the dramatic construction of Spectacle

Island with material from the central artery highway tunnel through Boston known as the “Big Dig.” Today’s visitor to the islands may get the sense of permanence. However, people and nature have had a dramatic impact on the geography of this resource over a relatively short period of time.

## NATIVE AMERICANS AND THE ISLANDS

Histories and other studies prepared by and with American Indians are needed in order to adequately present Indian connections with the islands. In that those studies are not complete, the following sketch is offered to provide the reader with context for the change in the park name, as well as introduce the complex Native American topics associated with the park.

Prior to European contact American Indians lived on the islands from early spring to late autumn. If one assumes the islands were surrounded by the abundant marine life that characterizes Massachusetts Bay today, then several species of fish, including striped bass, bluefish, and flounder, along with shellfish, would have provided a plentiful supply of food for American Indians. It is known that they fished in harbor waters and cleared fields and parts of the forest to plant crops of corn, beans, and squash. They also gathered wild berries and other plants for food and medicine, and hunted animals and fowl. According to the remains that have survived to modern times, the most common fauna were deer, cod, and softshell clam. Archeological evidence indicates that Indians used the islands for tool manufacturing and also for social and ceremonial activities. When English settlers arrived, Indians still regarded the islands as their home and remained until Euro-American settlers started encroaching on their land.

Beginning in 1675 American colonists engaged in a major war with aboriginal people in the region, which began a tragic time in the life of American Indians. It came to be known as King Philip’s War. King Philip was the name the English called Metacom, the Wampanoag sachem. As Indian resistance intensified and more colonial villages were attacked and burned, the English fear of Indians grew. Prior to the start of the war a number of “praying towns” had been established within Massachusetts Bay where natives were tolerant of and living among their European neighbors. As colonial settlements expanded, many American Indians were

displaced to the “praying Indian” villages and towns; some stayed in British colonial settlements; and still others continued in their traditional native communities.

King Philip’s War had far-reaching and long-lasting effects on American Indian communities in the region and on the relations between Indians and Europeans. The significance of the islands during the war period is not due to battles fought there but because of the forced removal of Native Americans to the islands. During the winter of 1675–76, the Massachusetts Bay Colony decreed that the inhabitants of the “praying towns,” such as Natick, be relocated. On October 30, 1675, a large body



Metacom (King Philip), son of the Wampanoag Massasoit

of Christian Indians was forced in shackles to the Charles River and, on three vessels, transported to islands in the harbor. The majority of those relocated were taken to Deer Island where they were incarcerated. Later some Indians were forced to other islands, probably Peddocks Island, Long Island, and one of the Brewster islands. According to some Indian oral histories, many more islands were used by the Colonial government to hold Native Americans due to an increasing number of captives during the period.

Accounts vary widely as to how many Indians were removed to the islands. Historians, using written records, give the range as between 500 and 1,100. Some Indians now believe that traditional (non-Christian) Indians were not counted by the Colonials and so the numbers were much higher. Historical records indicate that as many as one-half of the Indians died of starvation, exposure, and lack of appropriate medicines in what has been called a concentration camp. The General Court of Massachusetts, referring to Indians on the islands, proclaimed “that none of the sayd indians shall presume to goe off the sayd islands voluntarily, uponn payne of death . . .”<sup>2</sup> After the war, those who survived the island internment continued to

face dire relations with the colonies. Records indicate that the Colonial government sold some Indians into slavery, or indentured them to English families. But other praying Indians who were released moved into and strengthened Christian Indian settlements. Praying Indians also dispersed to other Native communities including the Nipmucks, Nipmucs, Wampanoags, and Abenakis (Penobscots) and to communities farther south, west, and north in Canada. They were joined by traditional Indians who sought refuge in these communities.

Research has yet to show exactly where Natives were held on the islands, or the locations of any island burial grounds from the period. This is not surprising because on many islands, like Deer Island, construction for military and institutional facilities during past centuries has transformed the landscape in successive projects. Only recently have those projects been guided by a concern for and subsequent laws protecting culturally sensitive sites and Native American burials.

The scope of King Philip's War extended west, beyond the Berkshire Mountains, south to Long Island Sound, and north into present-day Maine. However, the events referenced above are those most directly associated with Boston Harbor Islands. The island focus stems from the park's enabling legislation which highlights the importance of understanding the history of Native American use and involvement with the islands, and calls for protecting and preserving Native American burial grounds, particularly those connected with King Philip's War. This Congressional recognition of the importance of Indian history and of King Philip's War has raised public awareness around these topics. It has also raised managers' sensitivity to the complex issues surrounding the management and interpretation of island resources associated with Indian use of the islands. This recognition and awareness complements a broad range of federal and state initiatives to protect Native American sacred, cultural, and historic sites in collaboration with Indian tribes. The establishment of the park has also brought a new focus for tribes with cultural affiliation to the islands and their resources. Paramount among the many concerns expressed by Indian people is that any burial grounds or sacred sites be protected and treated with respect by all.

## **PARK RESOURCES**

The land mass of the Boston Harbor Islands totals approximately 1,600 acres. The Boston Harbor Islands national park area extends seaward 11 miles from downtown Boston. The park incorporates the 16 islands of the Boston Harbor Islands State Park.<sup>3</sup> The Boston Harbor Islands form a transition between the open ocean and the settled coast, between the world beyond Boston Harbor and the features specific to it. They are not only a physical entrance but a gateway as well to a long sweep of history, from Native American uses through the explosive growth of the city and industry and the concerns of the current post-industrial age. The only drumlin field in the United States that intersects a coast, 35 miles of relatively undeveloped shoreline within a densely settled urban area, resources associated with thousands of years of occupation by American Indians, and the complex natural communities of the intertidal zones all illustrate the intrinsic value of Boston Harbor Islands resources.

Both literally and symbolically, the islands offer a unique vantage point from which visitors can contemplate metropolitan growth and change.

The islands also offer an exceptional perspective on change in the region's ecosystem. Magnificent open spaces surrounded by expanses of open water, the islands vividly illustrate the region's complex geological past and the continual effect of natural processes on their habitats, their uses, even their shapes. From them, visitors can learn about how such complex ecosystems as harbors are revived. The improvement of Boston Harbor waters has regenerated the biotic communities of the islands and the sea around them and has made possible an impressively wide range of recreational uses. Thus the islands are both a recreational haven for urban residents and tourists and a highly effective laboratory in which to learn about natural change, cultural history, and stewardship.

### **Geology**

Boston Harbor is part of the Boston Basin, a topographic lowland underlain by sedimentary layers deposited at the end of the Precambrian time. Where bedrock is exposed (Calf Island, the Brewsters, and small islands near Hingham), it is a shaly to slaty formation called Cambridge Argillite which was deposited on the muddy floor of an ocean dating back some 570 million years.

**GEOLOGICAL FORMATION**  
of Boston Harbor

10,000 YEARS BEFORE PRESENT



6,000 YEARS BEFORE PRESENT



4,000 YEARS BEFORE PRESENT



2,000 YEARS BEFORE PRESENT



**LEGEND**



Water



Inundated Land



Current Land Forms

In the past 100,000 years, two separate periods of Pleistocene glaciation formed the hills that cap most islands of Boston Harbor and created the local drainage system, consisting of the Charles, Mystic, and Neponset watersheds. The cores of many harbor islands are drumlins—glacier-formed, asymmetrical, elongate masses of till formed into smooth-sloped hills on the Boston Basin lowlands. In profile, they look like upside-down teaspoons. As the climate warmed and the glacier receded from the Boston area some 15,000 years ago, the melting of glacial ice raised the level of the ocean, eventually creating this section of the basin and isolating the islands. (See map, Geological Formation of Boston Harbor, page 6.)

Natural coastal processes continue to reshape the island landforms, from sea level rise (as part of climate changes) to northeast storms. Rates of erosion on the islands can be dramatic. In general, the highest rates of beach erosion occur along beaches facing north and east, which are the dominant directions for winds and seas in these storms. The shifting shores of Thompson Island illustrate this process of erosion and sedimentation. Human use of the islands also effects erosion by removal of vegetative cover promoting erosion, or by structures built to prevent erosion.

Every island within the park, except for those composed largely of bedrock, has beach areas lining portions of its shores. The beaches generally most attractive to recreational users in the park are found on Spectacle (recently replenished), Long, Lovells, and Gallops islands and are primarily sandy and possess comparatively few biological resources. Rocky beaches, however, such as at Peddocks, provide excellent habitat for invertebrates and the animals that feed on them. Small barrier beaches have been identified on portions of Great Brewster, Gallops, Peddocks, Bumpkin, Long, Rainsford, and Thompson islands. Two islands within the park, Lovells and Long, have dunes. Lovells has the more extensive dune system, whereas Long Island's dunes are in one discrete area on its southern shore.

### Water

Although the waters of Boston Harbor are not included within the park boundary, they wash the island shores with twice-daily tides. Boston Harbor, with a mean tidal range of 10.33 feet, has one of the largest tidal ranges in the United States (although tides vary from location to location in the harbor due to local circumstances;

differences greater than 18 feet have been recorded). Most of the harbor varies in depth from about 3 to 30 feet, but the north and south ship channels, between the airport and Spectacle Island, and between Georges Island and Hull, can reach depths of 60 feet.

Surface water on the islands is rather limited. Perennial ponds are found on Thompson Island and the Worlds End peninsula, and freshwater marshes are found on Long, Peddocks, and Middle Brewster islands, and Worlds End.

The natural watershed around Boston Harbor extends as far west as Hopkinton, Massachusetts, 25 miles inland. Water also enters the harbor from the Quabbin Reservoir about 65 miles to the west, which supplies potable water to Boston and 47 surrounding communities.

Today, Boston Harbor is vastly cleaner than it had been for decades. As is typical of many coastal areas near major metropolitan centers, the harbor had been used for waste disposal since colonial times. Sewage from 43 municipalities now undergoes state-of-the-art primary and secondary treatment at Deer Island. Sludge is removed and the effluent is disinfected and dechlorinated and is ready to be discharged through a 9.5-mile outfall tunnel. The effluent is mixed with the deep waters of Massachusetts Bay.

In recognition of the improved water quality and the success of the Boston Harbor Project, the governor of Massachusetts and the mayor of Boston appointed a Joint Commission on the Future of Boston Harbor Beaches to recommend a restoration plan for the waterfront and island beaches with funding of \$30 million. Improvements range from green-space enhancements, bathhouse restoration, beach nourishment, and banners, to enhanced public transportation and increased public access to the beaches.



Outer Brewster Island

## Upland Vegetation

The flora of the islands reflects a long history of human alteration, including introduction of a large number of invasive exotic species. The islands' drumlins are thought to have been covered with mature forests of hemlock, maple, oak, pine, and hickory, which were cleared to support agriculture and pasturage, and to supply firewood for fuel. In addition, the construction of the islands' massive fortifications severely disrupted much of the native flora. Thorough documentation of the characteristics of the terrestrial environment is just beginning, but successional species including aspen, pine, birch, and white poplar are clearly evident on most of the islands.

Farming is known to have been carried out by Native Americans as well as later colonial settlers. Most of the fertile sites found on the islands have been converted to agriculture. The remnants of attempts at subsistence farming are evident in the appearance of apples, pears, grapes, chives, garlic, asparagus, and horseradish.

Today, patches of undisturbed native flora are rare on the islands, and vegetation on most of the islands is dominated by grasses and sumac. The owners of Worlds End and Thompson Island have continued to manage expansive grasslands that are part of the cultural landscape. Worlds End and Thompson Island have communities of mixed oak forest; on Thompson they cover approximately one-tenth of the island.

## Terrestrial Wildlife

The diversity of upland and marine habitats provides good nesting and feeding opportunities for a number of bird species. Field surveys have identified more than 100 bird species including gulls, terns, herons, ducks, geese, hawks, plovers, sandpipers, doves, owls, woodpeckers, and perching birds. During migration, large numbers of shorebirds utilize the mudflats and salt marshes around the harbor, while transient hawks and songbirds regularly make use of the more remote islands, or those with suitable habitat. In late fall and winter, great flocks of waterfowl gather in harbor waters.

A few species of terrestrial mammals, including exotic species, occur throughout the islands, such as cottontail rabbits, raccoons, skunks, gray squirrels, mice, muskrats, voles, and Norway rats. Some species have been known to devastate populations of small vertebrates and nesting birds.

Although formal surveys are in initial stages, Eastern garter snake, Northern brown snake, and Eastern smooth green snake are known to occur on the islands.

## Wetland and Aquatic Marine Vegetation and Wildlife

The Boston Harbor Islands provide shelter and food-rich habitats for marine birds, mammals, fishes and invertebrates, as well as nurseries for their young. Much of the Gulf of Maine fauna can be found in Boston Harbor, especially around the Brewsters.



Horseshoe crab on Grape Island

The once-plentiful eelgrass is the only type of seagrass now present in Boston Harbor; it is now confined to only four isolated areas, the largest of which is near the south coast of Bumpkin Island. Seagrass beds are critical wetlands components of shallow coastal ecosystems where they hold sediment, providing food and cover for a great variety of animals.

Salt marshes, the most highly productive ecosystems in the world, are dominated by saltwater cordgrass and provide habitat for many marine organisms. More than 50 percent of the state's salt marshes have been filled. The largest remaining salt marshes on the islands are found on Thompson and Snake islands. Smaller brackish marshes have been identified on Calf, Grape, Lovells, and Peddocks. Mud flats, which generally occur on the periphery and at the expanding edges of salt marshes, are found on Raccoon, Snake, and Thompson islands.

Lobsters, crabs, and clams inhabit submerged portions of the islands. Mussels and barnacles cling to the intertidal zone. Jellyfish live in the surrounding waters. Several species of fish, including striped bass, bluefish, and winter flounder, live in waters surrounding the islands. Little Brewster, Nixes Mate, Shag Rocks, and other islands characterized by bedrock outcroppings contain rocky intertidal communities of rockweed and barnacles.

Harbor seals haul out on some of the outer islands. Because their feeding grounds or migratory routes are nearby, humpback, fin, minke, and North Atlantic right whales and white-sided and striped dolphins are potential, though rare, visitors, as are harbor porpoises.

### Protected Species

The Massachusetts Natural Heritage Program lists six rare species known to exist within the park, including two species listed as threatened and four of special concern. They are the birds barn owl, common tern, least tern, and Northern harrier, and the plants sea beach dock and American sea blite.

The U.S. Fish and Wildlife Service reports several federally listed endangered and threatened species of fish, turtles, birds, and mammals near or in coastal waters of Massachusetts, but not known to be found among the Boston Harbor Islands. There are no island species on the federal list.

### Buildings and Structures

Many of the Boston Harbor Islands contain buildings and structures related to such uses as coastal defense, agriculture, commercial fishing, year-round and summer habitation, resort life, industry, public health, immigration, and social welfare. More than 100 buildings and structures, including sea walls, forts, lighthouses, gun emplacements, concrete bunkers, wood-framed cottages, and brick military and institutional buildings, reflect the long history and changing character of the Boston Harbor Islands. With several notable exceptions, the buildings and structures of the Boston Harbor Islands have not been evaluated with National Register criteria for their historical significance but will be the subject of several studies following this general management plan. Structures currently on the Register are the three national historic landmarks (Fort Warren, Boston Light, Long Wharf), Graves Light, and Long Island Head Light.

Not all structures in the park are available for park use. An important structure that is available is the partially restored Fort Warren, an impressive granite Third System fortification designated as a National Historic Landmark, which has stood on Georges Island as a major defensive post for the protection of the harbor in every conflict from the Civil War through World War II. Fort Andrews, erected on Peddocks Island in the first decade of the 20th century, is a rare example of a relatively intact coastal fort of the Endicott Period (1888–1905), although its 26 remaining buildings and structures have suffered over 50 years of abandonment and are generally in poor condition.

Navigational aids constructed to guide ships through the often treacherous harbor waters include Boston Light

on Little Brewster Island, a National Historic Landmark purported to include portions of the oldest lighthouse structure in the United States; and two lights on the National Register of Historic Places, Graves Light on The Graves and Long Island Head Light on Long Island. Nixes Mate is a pyramidal channel marker that has stood in the harbor since the early 1900s.

Approximately 30 cottages on Peddocks Island, dating from the early 20th century, are the last remaining residential structures on the harbor islands (aside from year-round institutional residences on Thompson and Little Brewster). They are occupied by their owners during the summer and allude to the former prevalence of summer communities and recreational activities in the harbor, as well as fishing communities. (In recent years, the Metropolitan District Commission has been acquiring, evaluating, and removing the cottages as owners vacate them (see Metropolitan District Commission, page 19).

On Deer Island an 1889 pump station, renovated for use as a visitor center, contains a community room and exhibits of historic pumps, recalling early attempts to deal concertedly and scientifically with the region’s waste water that has been discharged into Boston Harbor since 1878. Contemporary structures include 12 egg-shaped sewage “digesters” each standing 170 feet high on the southern end of the island.

### Cultural Landscapes

The Boston Harbor Islands contain numerous cultural landscapes that, when combined with historic structures, archeological resources, and associated museum collections, relate the history and culture of the people that shaped the cultural resources in the vicinity of Boston Harbor. As with structures, a number of cultural landscapes of the Boston Harbor Islands are potentially eligible for the National Register of Historic Places.



British men-of-war off Long Wharf before the American Revolution

Most cultural landscapes of the harbor islands are characterized as “historic vernacular,” meaning that they were imprinted by the settlement, customs, and everyday use of people who altered the physical, biological, and cultural character of their surroundings. Fields and forests once inhabited by American Indians were later used as Euro-American farms and pastures, that, when abandoned, were transformed through natural succession into stands of trees, shrubs, vines, and herbaceous vegetation. On Middle Brewster and Calf islands the stone walls, house foundations, and remnants of gardens still demarcate the summer communities that thrived prior to World War I. On Grape Island a farmhouse foundation and a lone willow tree remain, while horse pastures abandoned during World War II have reverted to tree cover. The past agricultural use of Thompson Island is still evident in the landscape.

Many islands may also have “ethnographic landscapes,” those containing natural and cultural resources that associated people define as “heritage resources” such as contemporary settlements, subsistence communities, and burial grounds. Such places can be found on Peddocks, Deer, Long, the Brewsters, and many other islands. The community of summer cottages on Peddocks Island, previously a fishing village, has been in active use for nearly 100 years. The islands were once seasonal homes for Indians. Deer Island and other islands became the location of tragic imprisonment of Indians who were held during King Philip’s War. (See *Native Americans and the Islands*, page 4.)

A surprising number of harbor islands and associated peninsulas contain “historic designed landscapes,” those consciously laid out by a landscape gardener, architect, or horticulturist according to design principles or by others in a recognized style or tradition. These are seen notably in the Olmsted design at Worlds End and in vestiges of military landscape design on several islands. Many island landscapes are also recognized as “historic sites,” those places associated with a historic activity, event, or person. Such sites include the lighthouses on Little Brewster, whose landscape portrays the lifestyle of keepers who have tended the light for nearly 300 years, and on The Graves and Long Island.

### **Archeological Sites**

The Boston Harbor Islands have a rich human history, some of which is revealed by physical evidence including pre-contact and historic archeological resources. The

islands began to separate geologically from the mainland during the Late Archaic period (3000 B.C. to 1000 B.C.), but have produced artifacts from the Early Archaic period indicating that native peoples were living on the shores of river estuaries. The Middle and Late Woodland periods (300 B.C. to 1000 A.D.) are most heavily represented in the archeological record, but erosion may have taken out earlier sites.

The islands contain evidence of American Indian use of such archeological significance that, to date, 21 islands have been designated within an archeological district listed on the National Register of Historic Places. Archeologists assume that all islands not surveyed potentially have prehistoric or pre-contact sites.

Soils, which contain highly alkaline shell fragments, have helped preserve bone as well as remains of tools and foods that typically deteriorate in New England soils. This, coupled with the fact that most of the islands were never long or intensively inhabited by Euro-Americans, suggests that they are likely to provide the best remaining or most easily retrievable evidence of pre-contact human occupation in the Boston area. Archeologists have established that the islands were used or inhabited by humans at least 8,000 years ago, and a 4,100-year-old human skeleton unearthed on one island in the late 1960s is one of the oldest ever excavated in New England.

Archeological sites of the historic period have not been systematically surveyed, although many are known to exist on the islands. Fifteen types of sites are known: agricultural, cemetery, fishing colony, fortification, hospital, hotel or resort, industrial, poorhouse, prison, prisoner-of-war camp, quarantine, sewage treatment, lighthouse, dump, and miscellaneous other site types.

### **Ethnographic Sites**

Many contemporary American Indians have cultural ties to the Boston Harbor Islands, and other groups may also feel connections to the islands based on long-standing use. Although little research has been conducted to identify any of these traditionally associated groups, they might include Irish immigrant families or groups of former island inhabitants including fishermen, lighthouse keepers, and “communities of caring,” people who tended to the sick. Ethnographic sites on the Boston Harbor Islands have not been documented.

## LAND COVER



(click graphic to enlarge)

## PARK HISTORIC STRUCTURES AND LANDSCAPES



(click graphic to enlarge)

Deer Island, to single out one island of ethnographic importance, has been used historically by Native Americans, quarantined immigrants, farmers, orphans, “paupers,” military personnel, and tens of thousands of prisoners (at the recently demolished county house of corrections), but it has special significance to American Indians as a place of internment in King Philip’s War (see *Native Americans and the Islands*, pg.4). Native Americans return to Deer Island every year in October to solemnly commemorate their ancestors’ suffering in this sorrowful historical chapter. That period marks an inhumane chapter in this region’s history. The descendants of Indian nations and tribes that were involved in the King Philip’s War are adamant that their stories be told about what they consider a holocaust in the 1670s.

In the 1840s, when the potato famine drove a million or more Irish citizens to emigrate to the United States, Deer Island was a landing point for thousands, many sick and poverty-stricken, where the City of Boston established a quarantine hospital in 1847. Approximately 4,800 people were treated in the first two years, but more than 800 died and were buried in the Rest Haven Cemetery. The documented number of people of European ancestry buried at Deer Island is approximately 4,000. (To commemorate those who died on the island, Indian and Irish memorials will be built on Deer Island.) In 1850, an almshouse was built to house paupers. Later institutional uses on Deer Island were a reform school, a county house of corrections, and a sewage treatment plant.

### **Collections and Archives**

Museum collections related to the Boston Harbor Islands, comprising more than 6,000 items, are held by more than a dozen organizations including municipal, state, and federal agencies, as well as nonprofit and educational institutions. Collections include archival, historical, archeological, and natural history objects, specimens, documents, and images.

### **ESTABLISHMENT OF THE PARK**

Congress added the Boston Harbor Islands to the national park system on November 12, 1996. The enabling legislation (Public Law 104-333)<sup>4</sup> is intended to foster the goals of current public and private land managers, including the Commonwealth of Massachusetts which had first acquired an island in the late 1950s. In 1970, the

Commonwealth had passed legislation<sup>5</sup> that provided for the systematic acquisition of selected islands in Boston Harbor for recreation and conservation purposes. With that acquisition nearly complete, the enabling legislation for the Boston Harbor Island national park area focuses on ways to better coordinate the management of the park and to improve visitor programs and access.

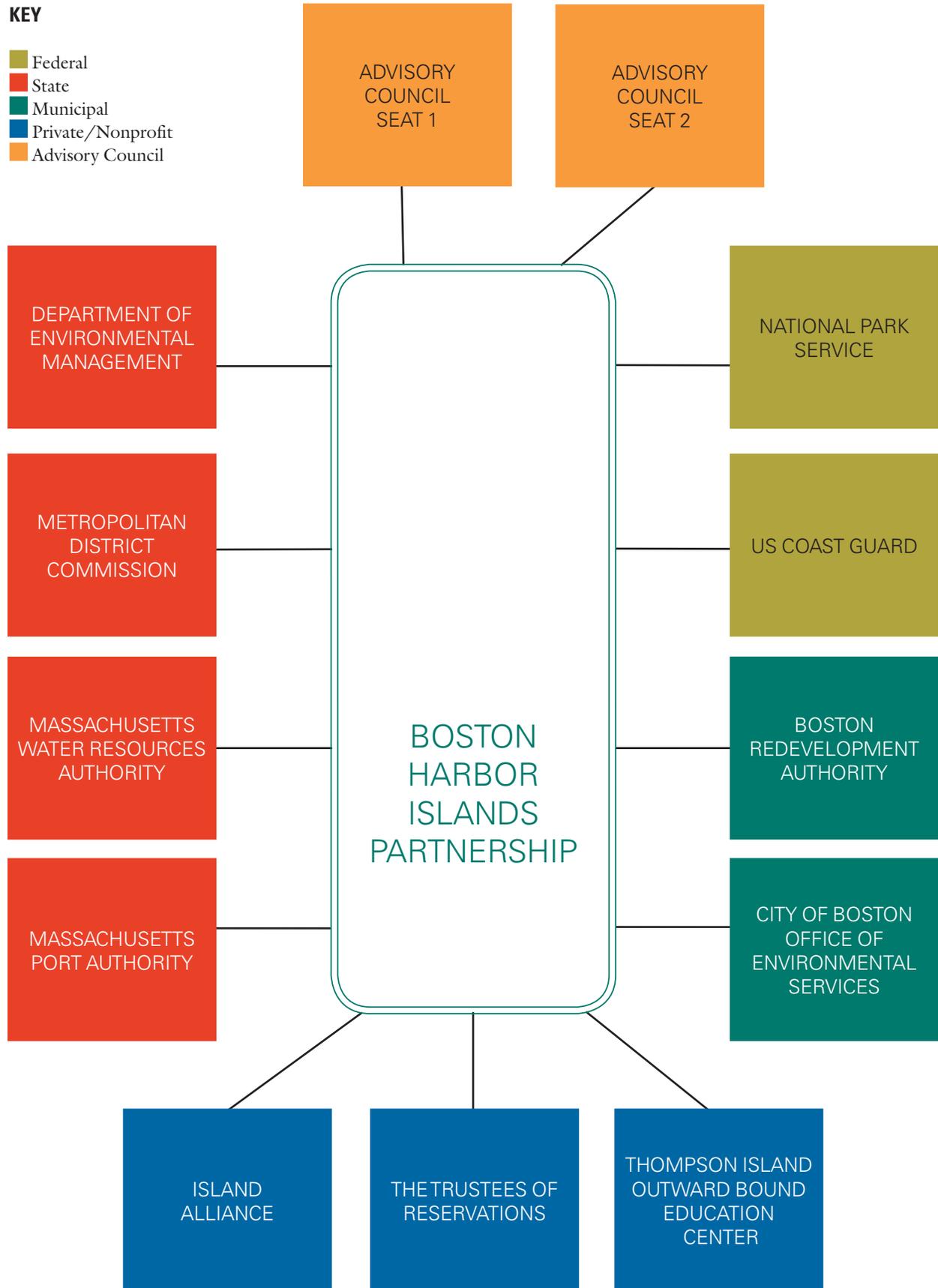
### **Partnership Management of the Park**

National parks operate within a legal framework that applies to all units that make up the national park system. In addition, specific legislation authorizes and defines a particular park. Basic tenets of the 1996 park legislation are that: “The recreation area shall be administered in partnership by the Secretary [of the Interior], the Commonwealth of Massachusetts, City of Boston and its applicable subdivisions and others in accordance with the provisions of law generally applicable to units of the National Park System....” Toward that end, the legislation established the Boston Harbor Islands Partnership “whose purpose shall be to coordinate the activities of the Federal, State, and local authorities and the private sector in the development and implementation of an integrated resource management plan for the recreation area.” The 13-member Partnership (12 members appointed by the Secretary of the Interior and 1 by the Secretary of Transportation) is responsible for planning and coordinating the park’s management and development.

The 1996 federal legislation also established the Boston Harbor Islands Advisory Council, a permanent federal advisory committee with no “sunset clause,” whose members are appointed by the director of the National Park Service. The Advisory Council’s purpose is to advise the Partnership on the development and implementation of the general management plan. The Council elects two of its members to seats on the Partnership and is mandated to seek advice from concerned citizens and organizations that have an interest in the park. The 28-member Council includes representatives of municipalities; educational and cultural institutions; environmental organizations; business and commercial entities, including those related to water transportation, tourism, and the maritime industry; Boston Harbor advocacy organizations; Native American interests; and community groups. Another unique aspect of the park is the Island Alliance, a nonprofit group charged with generating private funding for the park. It is the only such organization specifically named in a national park enabling law.

**KEY**

- Federal
- State
- Municipal
- Private/Nonprofit
- Advisory Council



Generally, the 1996 legislation requires that the park be administered in cooperation with the private sector, with municipalities surrounding Massachusetts and Cape Cod bays, and with historical, business, cultural, civic, recreational, and tourism organizations.

Public agencies of the Commonwealth operate under authorities from the Massachusetts legislature. The Massachusetts Environmental Joint Powers Act, which has not yet been employed, permits two or more agencies or jurisdictions to use their authorities, personnel, and resources jointly for an environmental purpose and in any geographic area they may choose. This law allows municipalities and state agencies to work together as well as to work with agencies in adjoining states. Another state law, the Massachusetts Recreational Use Law, provides strong protection against liability for “an owner of land who permits the public to use such land for recreational purposes without imposing a charge or fee. . . .”

### **Other Legislative Mandates Specific to the Park**

Closely allied with partnership management is the requirement that federal funding for the park be matched by nonfederal funding. All federal funds that may be appropriated over time to implement the 1996 law may only be expended in a ratio of one federal dollar to at least three dollars from other sources. The nonfederal share may be in the form of cash, services, or in-kind contributions.

In addition to requiring a partnership approach and management in accordance with laws governing the national park system, the 1996 legislation for the Boston Harbor Islands has other specific mandates for managing the national park area. The law incorporates language permitting the NPS to spend appropriated funds at mainland locations for park infrastructure, like piers and information kiosks, that may be needed for access, visitor services, or administration. Several of these locations are controlled by members of the Partnership: Harborwalk, Long Wharf, Charlestown Navy Yard, Hewitts Cove (portion), Salem Maritime National Historic Site, and Lynn Heritage State Park. However, the law directs that federal funds will not be appropriated for the acquisition of lands, except possibly for a conservation easement on Thompson Island.<sup>6</sup>

It is explicit in the 1996 law that the right of the Commonwealth of Massachusetts, or any of its political

subdivisions, remains unchanged regarding the exercise of civil and criminal jurisdiction or the right to carry out state laws, rules, and regulations within the park.

The legislation also stipulates that the maintenance, operation, improvement, use, and associated flight patterns of Logan International Airport “shall not be deemed to constitute the use of “ the park nor “to have a significant effect on natural, scenic, and recreation assets” of the park.

All units of the national park system are required by the National Parks and Recreation Act of 1978 to operate in accordance with an approved general management plan. The 1996 enabling legislation requires that the Boston Harbor Islands Partnership develop and implement a general management plan, called an “integrated resource management plan.” Both legislative mandates are met by this document, which adopts the more common term “general management plan.”

Finally, as discussed in Native Americans and the Islands (page 4), the Boston Harbor Islands enabling legislation highlights the importance of understanding the history of Native American use and involvement with the islands, and calls for protecting and preserving Native American burial grounds, particularly those connected with King Philip’s War.

### **CURRENT MANAGEMENT (2000)**

During the four years from 1996 to 2000 the Boston Harbor Islands national park area has been operated day to day by the agency property owners and managers who have worked through the Partnership to introduce and maintain consistency parkwide and to create parkwide programs. Several of the member agencies were managing island properties for many years prior to establishment of the park. Their recent management reflects long-standing plans along with new ideas introduced through the new national park area. The Partnership, which first convened in June 1997, has begun setting the overall policy direction, demonstrated by endorsement of the preferred alternative in the 2000 draft general management plan. Partnership committees have been serving as coordinators of parkwide functions and information-sharing forums.

The Boston Harbor Islands Partnership consists of 13 people representing the following entities: one each from United States of America – National Park Service and U.S.

Coast Guard; Commonwealth of Massachusetts – Department of Environmental Management, Metropolitan District Commission, Massachusetts Water Resources Authority, and Massachusetts Port Authority; City of Boston – Office of Environmental Services and Boston Redevelopment Authority; Thompson Island Outward Bound Education Center; The Trustees of Reservations; Island Alliance; and two members from Boston Harbor Islands Advisory Council. This section introduces the overall management responsibilities of the Partnership agencies as they existed in the year 2000. Highlights from the agencies’ resource protection, research, visitor use, education and interpretation, and park operations activities are presented in the policy section of this plan.

The core of this park is Boston Harbor Islands State Park. Under state legislation in 1970, the Commonwealth was authorized to acquire islands in Boston Harbor to protect resources and provide recreation. Approximately 150,000 people have visited the state park annually, with a concentration of visitors on summer weekends. Boston Harbor Islands State Park consists of 16 islands managed jointly by the Department of Environmental Management and the Metropolitan District Commission. Typically the season has run from May until October, with six islands open for visitors during daylight hours. Three of these have also accommodated overnight campers. Special events are held at other times of the year. (See Current Conditions chart, page 22 for a synopsis of park offerings.)

### **National Park Service (NPS)**

Since 1997, the National Park Service has provided staff to the Partnership and Advisory Council through a dedicated project office as well as substantial planning assistance from the Boston Support Office. On the mainland, NPS has provided parkwide information and orientation, in cooperation with the Partnership agencies. It has coordinated the operation of visitor contact stations at Long Wharf and the John Joseph Moakley United States Courthouse at Fan Pier. The Fan Pier facility contains a seasonal information desk, an interactive exhibit, a bookstore, and a small fast-food restaurant. The project office also has coordinated the main visitor information telephone line for parkwide activities and an interactive web site. Public programs have been offered by the National Park Service on the ferry from Long Wharf and at Boston Light. Project staffing has been provided by NPS; United States Coast Guard; Department of Environmental

Management; Metropolitan District Commission; Massachusetts Water Resources Authority; Island Alliance; and volunteers from the Volunteers and Friends of the Boston Harbor Islands, the U.S. Coast Guard Auxiliary, and the U.S. Environmental Protection Agency. The only NPS authority to purchase island property is potentially to acquire a conservation easement or other less-than-fee interest on Thompson Island in partnership with other entities.

### **U.S. Coast Guard (USCG)**

The United States owns three lighthouses on islands in the park—Boston Light, Long Island Head Light, and The Graves Light, as well as the navigational marker Nixes Mate and the freestanding Deer Island Light, not in the park, off the tip of Deer Island. The Coast Guard has operated Boston Light Station on Little Brewster Island since 1939, when the U.S. Lighthouse Service became part of the USCG. Federal legislation requires that the light station continue to be staffed, the only such remaining lighthouse in the United States (see Appendix 3). Little Brewster is the site of America’s first lighthouse (1716) and the second oldest lighthouse tower (1783). The other two lighthouses are completely automated, and the Coast Guard performs routine maintenance on at least a quarterly basis. Long Island Head Light (1819), located on the northeasternmost end of Long Island, offers outstanding views of the main channel into Boston and the northern regions of the park. Access at this time (by reservation only) is by small private craft or vehicle through the City of Boston’s facilities on Long Island, which are not open to the public. The Coast Guard carried out a major repair and rehabilitation on the light in 1998. The Graves Light, on a small island of bedrock, is inaccessible to the public due to the lack of a large boat mooring, the numerous rock outcroppings, and the range of tide and wave action at the site. In July 1999, the Coast Guard opened Little Brewster Island for limited public access under a pilot program in cooperation with the Island Alliance, U.S. Coast Guard Auxiliary, the Volunteers and Friends of the Boston Harbor Islands, Massachusetts Port Authority, and NPS. The Coast Guard is represented on the Partnership by the Group Boston command.

### **Massachusetts Department of Environmental Management (DEM)**

DEM, established as the Department of Natural Resources in 1897, is the agency that operates the state’s

forests and parks system. It has managed 13 islands in Boston Harbor Islands State Park since the 1970s: Bumpkin, Gallops, Grape, Great Brewster, Middle Brewster, Outer Brewster, Calf, Little Calf, Green, Hangman, Raccoon, Slate, and Sheep. It also manages Spectacle Island (see map, page 41 and Appendix 8) jointly with the City of Boston. Spectacle, scheduled to be opened in 2003, is being developed as a park capped with material from the Boston highway and tunnel project. DEM islands that have been developed for visitors are Bumpkin, Gallops, and Grape; together they have received approximately 23,000 visitors per year. In past years, Great Brewster and Calf islands had piers and water shuttle service. DEM expects to construct a new pier on Great Brewster to open the island again to the public. Public access to Calf Island is planned on a controlled basis. Currently these islands are accessible by small craft, i.e. private boaters. Headquarters for the state park are adjacent to the ferry terminal at Hingham, where DEM has also maintained an information board at Hewitts Cove.

#### **Metropolitan District Commission (MDC)**

MDC, which was established as the Metropolitan Parks Commission in 1893, operates a 20,000-acre park system throughout the 36 cities and towns of metropolitan Boston. In Boston Harbor, it has managed three islands of the state park, starting in the late 1950s with the acquisition of one island. The islands are Georges, Lovells, and Peddocks. Georges, the island hub for the ferry system, has received the great majority of island visitors—approximately 100,000 annually. Visitors have come to explore Fort Warren, the Civil War-era fort that has been partially restored, or to enjoy the grounds around the fort for picnics. Lovells, which features a lifeguarded beach and Fort Standish, a turn-of-the-century-era fortification, has received about 13,000 visitors. Peddocks, the second largest harbor island, contains more than 20 buildings that remain of Fort Andrews, built in 1900 (see Appendix 15). Peddocks and Lovells also offer camping. Peddocks also has approximately 30 summer cottages that are maintained by private owners under permit from the MDC. Since 1993, the policy of the MDC has been to purchase the cottages as owners vacate them and to evaluate their condition and historical significance. Cottages deemed to be historic and those in good repair may be retained for adaptive reuse; others may be removed. Peddocks Island also has campsites, wetlands, and beaches. A new pier is expected to support a great increase in visitors, which in the past numbered approximately 25,000 annually.

#### **Massachusetts Water Resources Authority (MWRA)**

MWRA, created by legislation passed in 1984, provides sewer and water services for 61 cities and towns with a total population of 2.5 million people and 5,500 businesses. In 1985 it was required by a federal court order to carry out the “Boston Harbor Project” by building and operating new primary and secondary wastewater treatment facilities and eliminating the discharge of sewage into the harbor. The facilities serve 43 communities. MWRA owns and operates two facilities within the park: Deer Island Wastewater Treatment Plant and Nut Island Headworks. Causeways now join each island to its adjacent mainland, making the islands accessible for drivers, cyclists, and walkers. Each island also can be accessed from the water using piers erected for the Boston Harbor Project. The Deer Island facility is on-line and open to the public, and site restoration and landscaping are nearly complete. Sixty of its 210 acres are designed for public access and include a three-mile perimeter walkway, two additional miles of trails, a mooring basin for small vessels, and extensive landscaping and site restoration. MWRA provides tours of its facilities, including a historic sewage pumping station. The Nut Island Headworks Facility now includes a 14-acre open space area with walking paths, and landscaped hills which offer views of Quincy and Hingham bays. Approximately \$29.6 million has been spent on public-access-related improvements on Deer and Nut islands as part of the Boston Harbor Project.

#### **Massachusetts Port Authority (Massport)**

Operating Logan International Airport and a number of key maritime industrial facilities in the port are the Authority’s primary missions. In addition to Logan, Massport owns nearly 600 acres along the Boston waterfront, including maritime industrial facilities in South Boston (Conley Container Terminal, Black Falcon Cruise Terminal, and the North Jetty) and in Charlestown (Boston Autoport and Medford Street Terminal). Massport owns, operates, and/or leases a number of other noteworthy waterfront properties: the Boston Fish Pier, the Boston World Trade Center, and significant additional development property in South Boston; the East Boston Piers (including Piers Park); and Constitution Plaza at Hoosac Pier in Charlestown. While Massport does not directly own or operate any of the Boston Harbor Islands, several of its properties, particularly those near the future

Boston Convention and Exhibition Center in South Boston and the East Boston Piers, are potential locations for water transportation and visitor facilities that could provide connections to the islands in the future.

### **City of Boston**

The City of Boston owns Long, Moon, and Rainsford islands, and part of Spectacle Island. Long and Moon islands are not open for public recreational use, but instead are used for social services at a campus on Long Island, and at a police firing range and firefighting training facility on Moon Island. The City plans to continue these uses in the foreseeable future, as no mainland sites to which these functions could be located are expected to be identified. However, the City has begun discussions about opening portions of Long Island to limited public access by water, and a study is under way to ascertain appropriate public uses. The condition of the Long Island Bridge is such as to require significant capital investment to make the island open for more than the current vehicle traffic. In recent years, several programs, such as a native plant nursery (by the Volunteers and Friends of the Boston Harbor Islands), a two-week summer day camp (with the New England Aquarium and Massachusetts Environmental Trust), and a Boston Parks Department fishing contest, have allowed limited public access. Rainsford Island is accessible only by private watercraft and has no visitor facilities or services. The City has recently started a stewardship and management plan for Rainsford.

### **Boston Redevelopment Authority (BRA)**

Boston Redevelopment Authority is the City of Boston's planning, economic, and industrial development agency. One of BRA's planning functions is to oversee planning and permit development along the Boston waterfront. The Authority initiated the Harborwalk program which, when complete, will provide a 43-mile pedestrian walkway along the waterfront ensuring that the public has access to the water's edge. The BRA owns the Boston Marine Industrial Park, which is a 152-acre maritime facility providing 3,000 industrial jobs. It also owns and manages Long Wharf, which is a major water transportation facility on Boston Harbor, in downtown Boston. The north side of Long Wharf currently contains a marina and docking facility for water shuttles and commuter boats. The south side of the wharf contains a ticket booth and docking facilities for excursion vessels and

the Boston Harbor Islands ferry terminal. BRA is in the process of building a bulkhead and floating dock system (at the site of historic "T" Wharf) next to Long Wharf to serve as the permanent main downtown terminal for the harbor islands ferry system.

### **Thompson Island Outward Bound Education Center (TIOBEC)**

Since the early 1800s, Thompson Island has served as a home of educational institutions, making it the oldest continuously operating educational site in the city. Thompson Island today is owned and managed by a private nonprofit educational institution which incorporates Outward Bound principles of respect for self, empathy for others, responsibility to community, and stewardship of the environment. In addition to offering school-year and summer programs for the Boston Public Schools, youth service organizations, and Boston area youth, this nonprofit organization operates a private middle school for boys from Boston. Currently the Thompson Island Outward Bound Education Center raises \$2 million for scholarships. It also hosts training, events, and conference services to the corporate and nonprofit communities. The public has had access to Thompson Island during the summer on Saturdays through tours by the Volunteers and Friends of the Boston Harbor Islands. Annual visitation totals 19,000, with 5,600 engaging in educational programs.

### **The Trustees of Reservations (The Trustees)**

The Trustees is a nonprofit, member-supported conservation organization which owns and manages Worlds End for public recreational uses, such as walking, bicycling, horseback riding, fishing, picnicking, and cross-country skiing. Worlds End is a mainland peninsula and can be reached by foot, bicycle, and vehicle. An entrance fee is charged, and the reservation is open every day of the year. Annually, it receives approximately 60,000 visitors. The Trustees owns and operates 89 reservations throughout the state totaling some 22,000 acres.

### **Island Alliance**

The Island Alliance was established in 1996 solely to provide financial support to the Boston Harbor Islands national park area. It works to attract investment and support for the park from the private sector, coordinating outside activities to provide necessary strategic and

financial resources. It assists directly with the support of mainland facilities, such as the visitor contact station at Fan Pier which includes a retail outlet and food service, and with the launch of new programs such as guided tours to Boston Light.

### Advisory Council

The Advisory Council has 28 members appointed by the director of the National Park Service to represent seven distinct interest groups: municipalities; educational and cultural institutions; environmental organizations; business and commercial entities; Boston Harbor advocacy organizations; Native American interests; and community groups. Several of the interest groups have chosen to add ex officio members to increase active constituent participation and communications. These groups are municipalities, educational and cultural organizations, environmental organizations, Native Americans, and community groups. The Council's role is to advise the Partnership in the planning and operation of the park through public involvement, and it has helped facilitate the public process in connection with this general management plan. It has two seats on the Partnership. It operates subject to the provisions of the Federal Advisory Committee Act and the Boston Harbor Islands enabling legislation.

1 This plan deals with the islands and peninsulas currently within the park plus those proposed for inclusion, for a total of 34.

2 Nathaniel B. Shurtleff, ed., *Records of the Governor and Company of the Massachusetts Bay in New England* (New York, AMS Press, 1968), 5:64.

3 Bumpkin, Calf, Gallops, Georges, Grape, Great Brewster, Green, Hangman, Little Calf, Lovells, Middle Brewster, Outer Brewster, Peddocks, Raccoon, Sheep, and Slate.

4 The Boston Harbor Islands were added to the national system by a section of the National Parks and Public Lands Management Act of 1996 which was enacted as Public Law 104-333, Section 1029—Boston Harbor Islands Recreation Area, and was then codified to Title 16 of the U.S. Code at Chapter 1, Section 460kkk—Boston Harbor Islands National Recreation Area.

NOTE: Citations for laws referenced in the plan can be found in Appendix 4.

5 "An Act Providing for the Acquisition of the Islands in Boston Harbor. . . for the Purposes of Recreation and Conservation" was passed as Chapter 742 of the Acts of the Massachusetts Legislature, 1970.

6 This latter provision is contained in a 1998 amendment (Public Law 105-355) to the park enabling legislation which authorizes the National Park Service "to acquire, in partnership with other entities, a less than fee interest in lands at Thompson Island . . . by donation, purchase with donated or appropriated funds, or by exchange."

**CURRENT CONDITIONS (2000)**

Island	Acres*	Manager	Staffed (Intermittent)	Guided Tours	Lifeguard	Visitor Station	Drinking Water	Refreshments	Toilet Facilities	Picnic Areas	Hiking Paths	Camp Sites	Historic Structures	Passenger Ferry	Water Shuttle	Boat Slips	Vehicle Access	Open by Arrangement
Bumpkin Island	32.7	DEM	✓	✓		✓			✓	✓	✓	✓		✓				
Button Island	1.0	Town of Hingham									✓							
Calf Island	22.4	DEM											✓					
Deer Island	203.5	MWRA	**	✓		✓	✓		✓		✓	✓					✓	✓
Gallops Island	26.9	DEM	✓	✓		✓			✓	✓	✓			✓				
Georges Island	41.3	MDC	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		
Grape Island	53.7	DEM	✓	✓		✓			✓	✓	✓	✓		✓				
The Graves	1.8	U.S. Coast Guard											✓					
Great Brewster Island	23.9	DEM									✓		✓					
Green Island	1.7	DEM																
Hangman Island	0.3	DEM																
Langlee Island	5.2	Town of Hingham																
Little Brewster Island	3.1	U.S. Coast Guard	**	✓									✓					✓
Little Calf Island	0.8	DEM																
Long Island	225.2	City of Boston											✓					
Lovells Island	51.9	MDC	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓			
Middle Brewster Island	13.6	DEM											✓					
Moon Island	45.7	City of Boston											✓					
Nut Island	14.0	MWRA	**	✓							✓						✓	✓
Outer Brewster Island	20.1	DEM											✓					
Peddocks Island	210.4	MDC	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓			
Raccoon Island	3.6	DEM																
Ragged Island	4.1	Town of Hingham									✓							
Rainsford Island	21.6	City of Boston											✓					
Sarah Island	4.6	Town of Hingham																
Sheep Island	3.2	DEM																
Slate Island	12.7	DEM																
Spectacle Island ***	105.0	DEM & City of Boston	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		
Thompson Island	169.9	Thompson Is. Outward Bound	**	✓			✓		✓	✓	✓		✓	✓				✓
Worlds End	274.3	The Trustees of Reservations	✓			✓			✓		✓						✓	

\* Acreage derived from measurements in GIS by Environmental Data Center, University of Rhode Island \*\* Full-time staff

\*\*\* Expected conditions when island is opened in 2003

## LAND OWNERSHIP & PARK TRANSPORTATION



(click graphic to enlarge)

**INDIVIDUAL ISLAND MAPS: EXISTING CONDITIONS**

Maps are grouped according to method of access to island.

*Bumpkin Island* .....29

*Button Island* .....36

*Calf Island*.....35

*Deer Island* .....31

*Gallops Island*.....28

*Georges Island*.....26

*Grape Island* .....29

*The Graves*.....35

*Great Brewster Island* .....30

*Green Island* .....35

*Hangman Island*.....37

*Hingham Harbor Islands* .....36

*Langlee Island* .....36

*Little Brewster Island* .....30

*Little Calf Island*.....35

*Long Island*.....40

*Lovells Island*.....28

*Middle Brewster Island*.....35

*Moon Island*.....40

*Nut Island*.....34

*Outer Brewster Island*.....35

*Outer Islands* .....35

*Peddocks Island*.....27

*Raccoon Island* .....37

*Ragged Island*.....36

*Rainsford Island*.....39

*Sarah Island*.....36

*Shag Rocks* .....35

*Sheep Island* .....37

*Slate Island*.....38

*Snake Island* .....38

*Spectacle Island* .....41

*Thompson Island* .....32

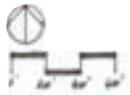
*Webb Memorial State Park* .....34

*Worlds End* .....33

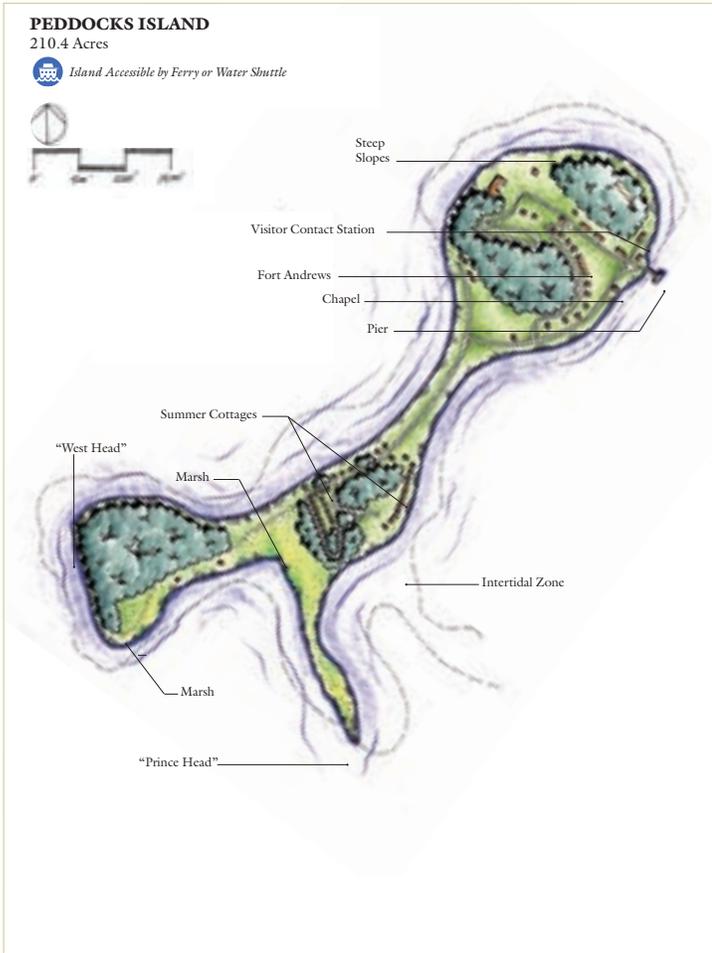
**GEORGES ISLAND**

41.3 Acres

 *Island Accessible by Ferry or Water Shuttle*



(click graphic to enlarge)



(click graphic to enlarge)

**GALLOPS ISLAND**

26.9 Acres

 *Island Accessible by Ferry or Water Shuttle*



(click graphic to enlarge)

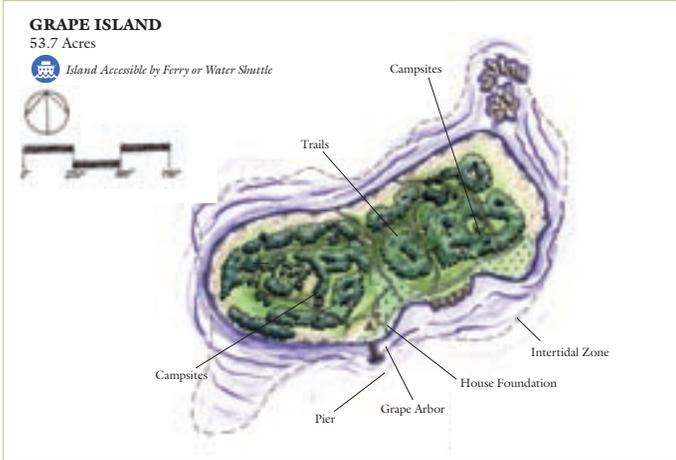
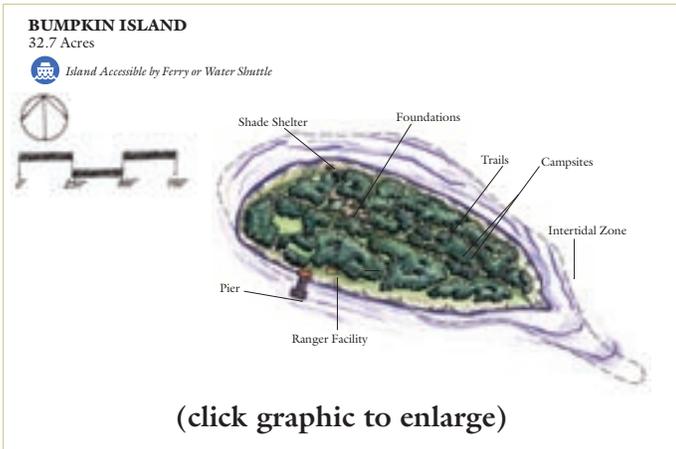
**LOVELLS ISLAND**

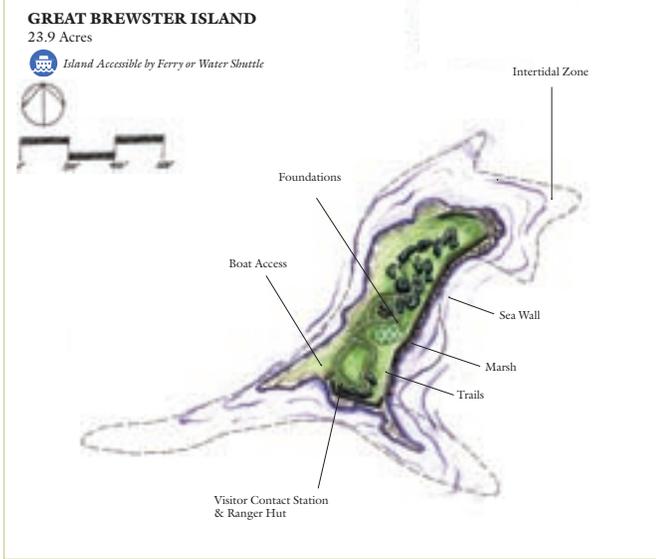
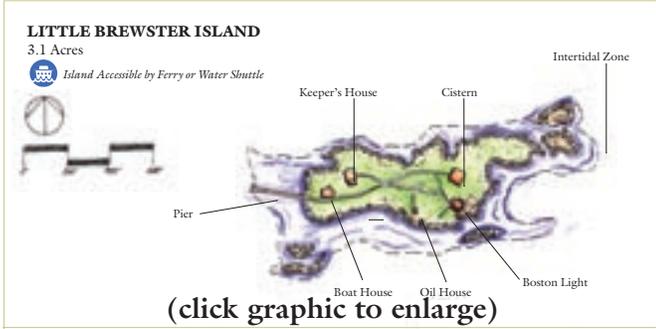
51.9 Acres

 *Island Accessible by Ferry or Water Shuttle*



(click graphic to enlarge)







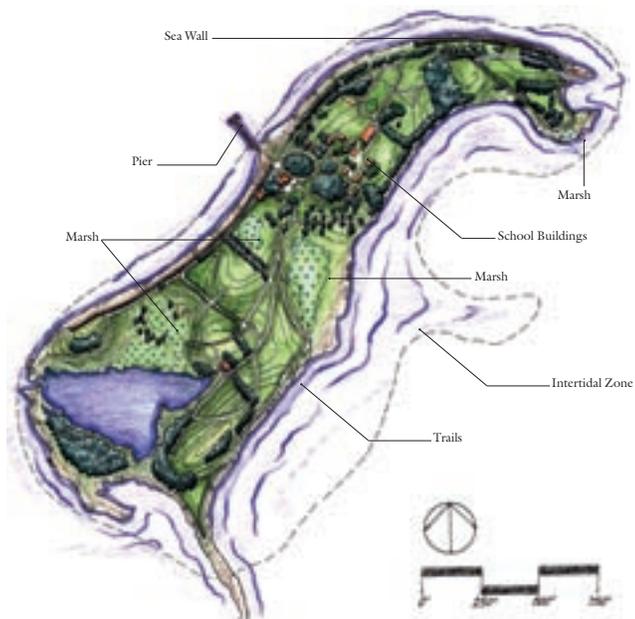
(click graphic to enlarge)

**THOMPSON ISLAND**

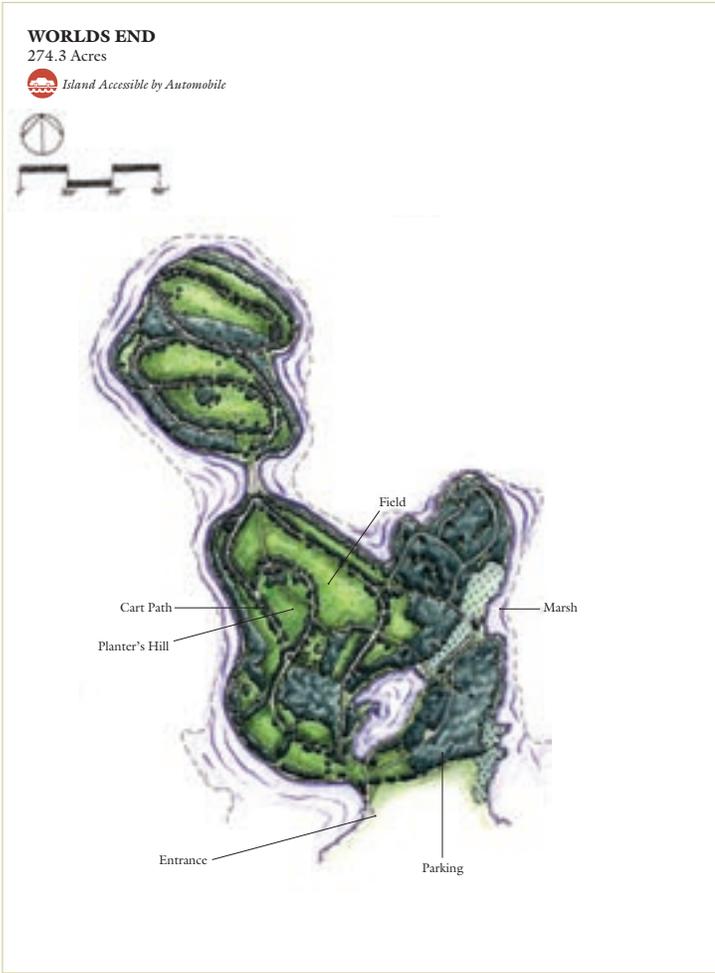
169.9 Acres



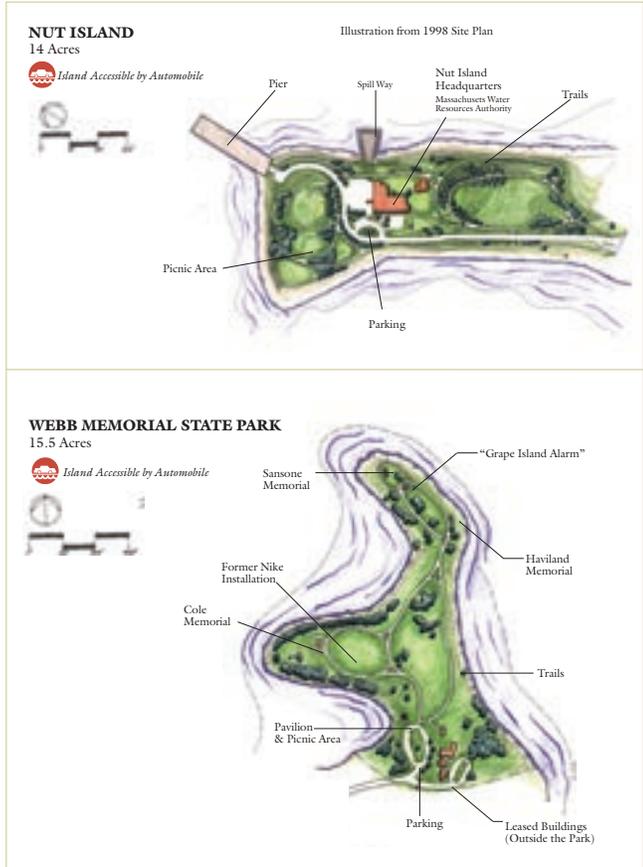
*Island Accessible by Ferry or Water Shuttle*



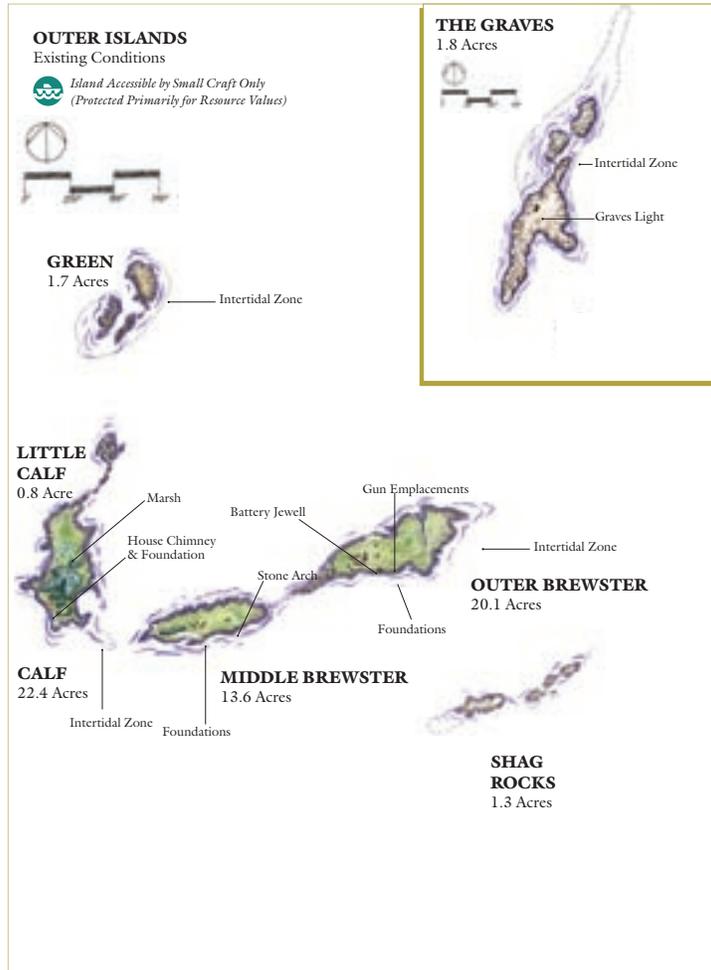
(click graphic to enlarge)



(click graphic to enlarge)



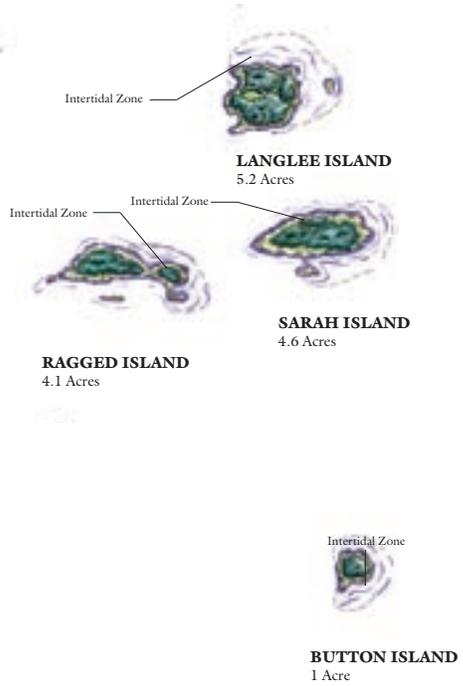
(click graphic to enlarge)



(click graphic to enlarge)

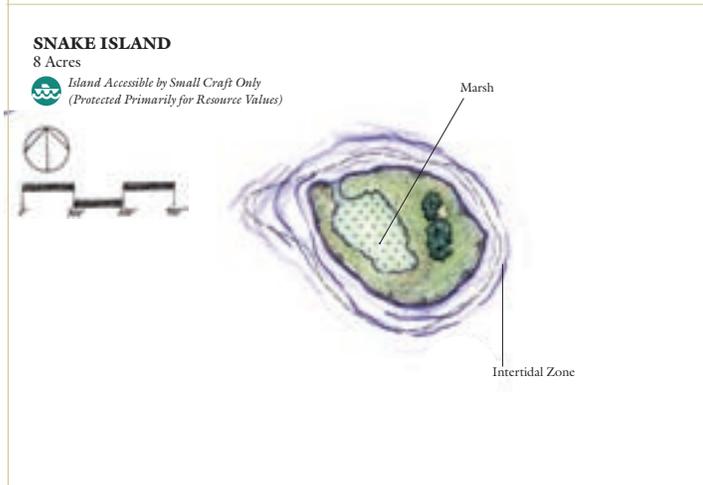
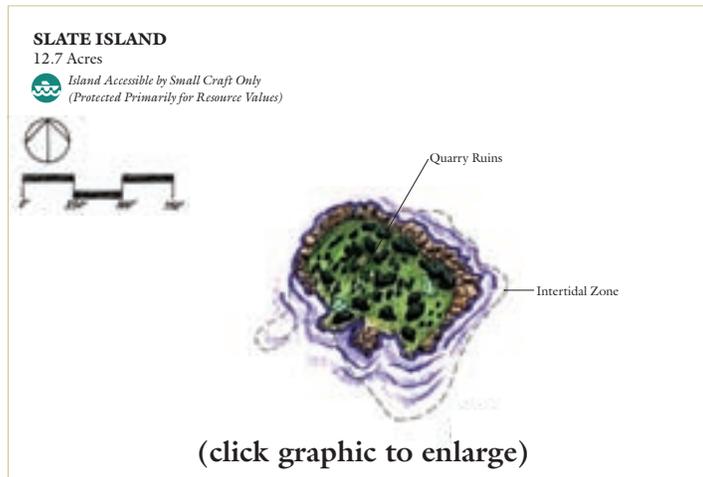
**HINGHAM HARBOR ISLANDS**

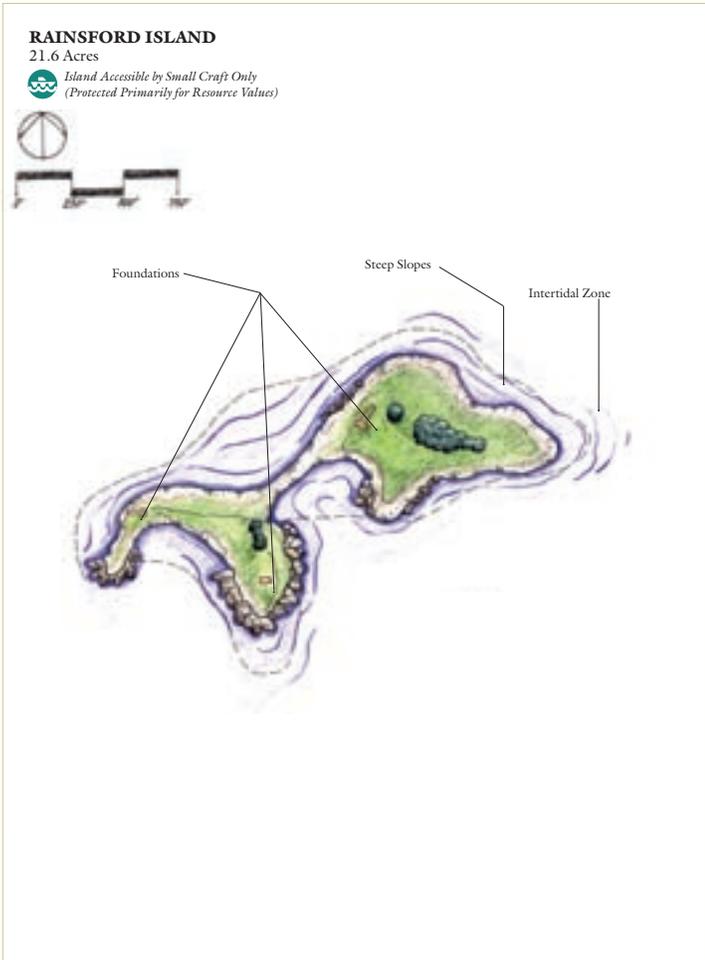
 *Island Accessible by Small Craft Only  
(Protected Primarily for Resource Values)*



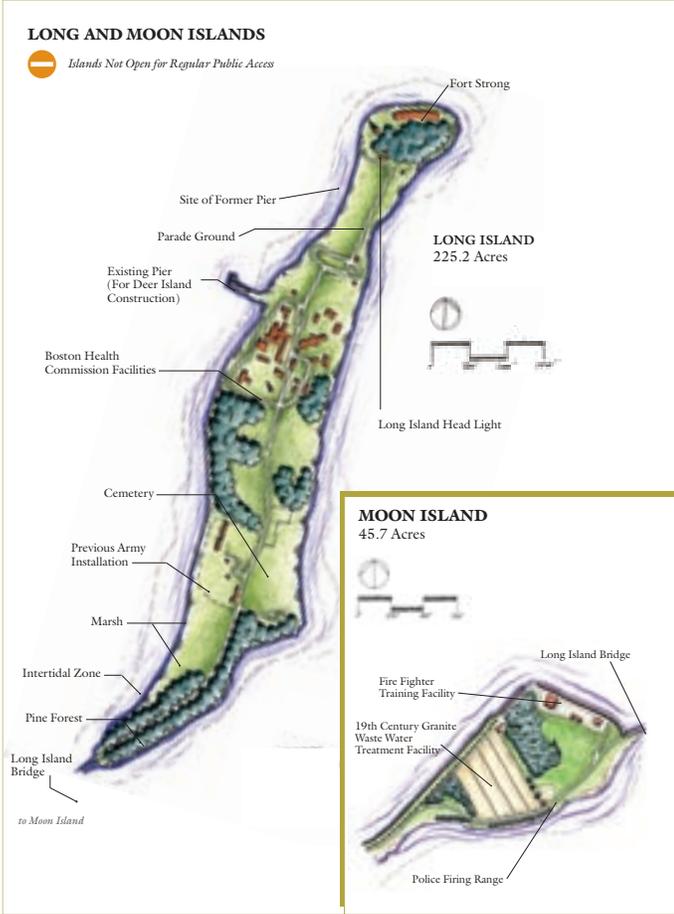
(click graphic to enlarge)

<p><b>HANGMAN ISLAND</b> 0.3 Acre  Island Accessible by Small Craft Only (Protected Primarily for Resource Values)</p>  <p>(click graphic to enlarge)</p>
<p><b>RACCOON ISLAND</b> 3.6 Acres  Island Accessible by Small Craft Only (Protected Primarily for Resource Values)</p>  <p>(click graphic to enlarge)</p>
<p><b>SHEEP ISLAND</b> 3.2 Acres  Island Accessible by Small Craft Only (Protected Primarily for Resource Values)</p>  <p>(click graphic to enlarge)</p>

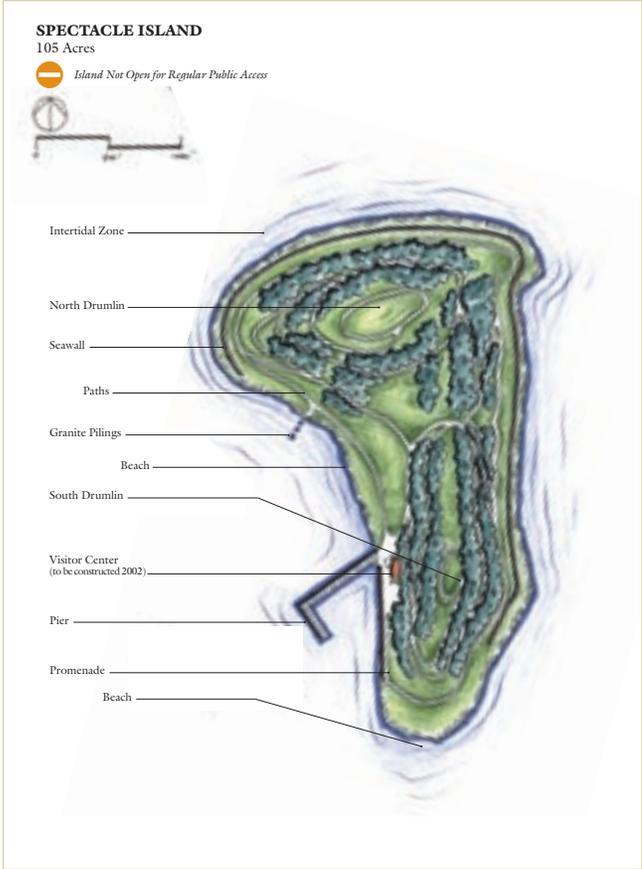




(click graphic to enlarge)



(click graphic to enlarge)



(click graphic to enlarge)



# P L A N B A C K G R O U N D

## PURPOSE OF THE GENERAL MANAGEMENT PLAN

The purpose of the general management plan is to clearly define the park's mission and management direction. It provides a foundation to guide and coordinate all subsequent planning and management. The purpose of the plan is also to ensure that this basic foundation for decision making has been developed by the Boston Harbor Islands Partnership in consultation with interested stakeholders and has been adopted by the National Park Service after adequate analysis of the benefits, environmental impacts, and economic costs of alternative courses of action. It acts as an agreement among the Partnership and between park managers and the public.

All parks within the national park system are required by law to operate under approved general management plans. This ensures that park managers will carry out, as effectively and efficiently as possible, the mission of the National Park Service:

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The plan is a policy-level document that provides guidance for park managers. It is not detailed, specific, or highly technical in nature. As the foundation for all subsequent planning and management, other plans tier off the general management plan. It provides a consistent framework for coordinating and integrating all the various types of park planning and implementation that are needed.

The general management plan takes the long view, 15 to 20 years into the future. The plan considers the park holistically, in its full cultural and ecological contexts: as a unit of the national park system and as a part of Boston Harbor, harbor communities, and the region. A general management plan may be updated before a complete revision is necessary if conditions and management prescriptions over most of the park remain essentially unchanged. The four basic elements required of NPS general management plans<sup>7</sup> are:

- measures for **preservation** of the area's natural and cultural resources
- types and general intensities of **development** (of park facilities and infrastructure) associated with public enjoyment and use of the area, including general locations, timing of implementation, and costs
- identification and implementation commitments for visitor **carrying capacities**
- potential **boundary** modifications and the reasons therefor.

In addition to the general Park Service planning mandate, the 1996 enabling legislation for the Boston Harbor Islands specifically calls for the development of a plan to help guide the Boston Harbor Islands Partnership in coordinating and prioritizing efforts, such as improved public access to the islands. The law highlights a number of topics the plan should address:

- a program for **coordinated administration** emphasizing partnership, with assignment of responsibilities to the appropriate government agency or nonprofit organization
- a **financing plan** for public improvements and services recommended in the plan, including a delineation of profit-sector roles and responsibilities
- a program for coordinating and consolidating agency activities related to **planning and regulation**
- policies and programs to enhance **public outdoor recreation** in the area
- policies and programs to conserve, protect, and maintain the **scenic, historical, cultural, natural, and scientific values** of the islands
- policies and programs to develop **educational opportunities** in the area
- policies and programs to enhance **public access** to the islands
- identification of potential **sources of revenue** from programs or activities in the area
- policies and programs to protect and preserve **American Indian burial grounds** connected with the King Philip's War internment period and other periods
- a policy statement that recognizes **existing economic activities** within the recreation area.

The primary action of this general management plan is to designate specific “management areas” for each area of the park. By designating these areas, the Partnership has prescribed the resource conditions and visitor experiences that should exist at Boston Harbor Islands and the reasons for these proposed conditions. The plan describes what the management areas mean in terms of broad direction for resource management, visitor use, and development of park facilities, or infrastructure. Taken as a whole, the management area prescriptions, the park policies, and other provisions of this plan meet the above legislative requirements.

Five-year strategic plans, the first of which has been developed concurrently with the general management plan, lay out goals and management actions needed in the near term to implement the general plan. More specific implementation plans support these two goal-oriented planning documents. When funds become available to begin the design of facilities or to undertake other specific actions on individual islands that are consistent with the general management plan, then site-specific planning and technical environmental analysis will be done. These more specific undertakings will be subject to federal and state consultation requirements, and the public will be involved throughout the process.

## **DEVELOPMENT OF THE PLAN**

### **Public Process**

An extensive participatory process has characterized the development of this plan. Starting in fall 1997, the planning committee of the Partnership worked with the NPS planning team on activities that included monthly meetings, reports to the Partnership, presentations, public workshops, meetings with various advocacy and interest groups, working sessions with staff from agencies and organizations that own and manage property in the park, newsletters, and a web site. The Boston Harbor Islands Advisory Council, which was appointed after a community-based planning process, added to the park’s ability to reach out to a broader public. The Partnership sponsored seven public scoping workshops throughout the region in 1998. The workshops were to elicit broad comment and to engage a cross-section of staff from the Partnership agencies as facilitators. (See Appendix 5 for a summary of the comments from these meetings.)

A draft general management plan and draft environmental impact statement were released for public comment in June 2000. Prior to that publication and subsequent formal 60-day period for comments, there had been two earlier periods of comments sought internally from the planning committee and Advisory Council. During the public comment period, eight formal public meetings hosted by the Advisory Council were held throughout the region. Comments from all these sources informed the preparation of the final general management plan.

Consultation took place with the State Historic Preservation Officer under the nationwide Programmatic Agreement; U.S. Fish and Wildlife Service; National Marine Fisheries Service; USDA Natural Resources Conservation Service; Environmental Protection Agency; Massachusetts Environmental Policy Office; Massachusetts Natural Heritage Program; and others. And, informal consultation has taken place with members of the congressional delegation and state and local elected officials.

### **Native American Consultation**

In a parallel course, the NPS held a number of consultation meetings with American Indian tribes. Although only one federally recognized tribe resides in Massachusetts, many other tribes have been invited to participate because of historical involvement with the region or King Philip’s War period. Federally recognized tribes include: the Wampanoag Tribe of Gay Head (Aquinnah), the Stockbridge-Munsee Band of Mohican Indians; the Penobscot Nation; the Delaware Tribe of Western Oklahoma; the Narragansett Tribe; the Mashantucket-Pequot Tribal Nation; Mohegan Indian Tribe of Connecticut; and Wabanaki Tribes of Maine, and the Aroostook Band of Micmacs. In addition, state recognized tribes, offices, and organizations have regularly participated in meetings including: the Nipmuc Nation (Hasanamisco); Nipmuk Tribal Council of Chaubunagungamaugg; Natick Nipmucs; Mashpee Wampanoag Tribe; and the Muhheconneuk Intertribal Committee on Deer Island. The executive director of the Commonwealth of Massachusetts Commission on Indian Affairs actively participates in the process in his capacity with state-owned lands and his relationship with state agencies, including the State Historic Preservation Officer. The executive director of the North American Indian Center of Boston hosted the majority of meetings.

### Environmental Analysis

General management plans are governed by several federal laws. One, the National Environmental Policy Act of 1970 (NEPA), requires that alternative management schemes be developed to propose a reasonable range of ideas for managing the park. Information on park resources, visitor use, and visitor preferences is gathered and analyzed. Information was solicited about the critical issues and the scope of the project from the members of the Partnership and Advisory Council, the public, government agencies, and special-interest groups through newsletters, meetings, and personal contacts. Then alternative concepts were developed to support the park's purpose and significance, address issues, avoid unacceptable resource impacts, and respond to public desires and concerns. In the combined draft general management plan and draft environmental impact statement four management alternatives were presented including a "no action" choice. The Partnership recommended Alternative C in a vote on April 15, 1999, as the preferred alternative. In response to public comments on the draft general management plan, changes have been made in this final plan and the final EIS contains these comments with responses.

Adoption of the general management plan will not result in changes to the resources so much as it will set the direction for future management decisions. Future implementation plans will cover: resource management, trail management, interpretation, visitor use management, comprehensive identity and signage, land protection, fire management, hazardous materials survey, integrated pest management, invasive plants management, vegetation restoration, collections management, archeological resources management, wetland and floodplain protection, shoreline and sea wall management, land and water transportation, commercial services, and public safety, among others. See Appendix 14 for a list of future plans and studies.

### Concepts Eliminated from Consideration in This Plan

Throughout the planning process the planning committee was presented with various ideas and concepts for the Boston Harbor Islands. In particular, ideas presented by audiences at public forums held throughout the region were discussed and analyzed by planners. The following ideas and concepts represent some of those ideas that, for various reasons, were reviewed but thought not to be viable at this time. Some represent ideas whose time is yet to come and others are ideas that may never be viable. They are noted here for future reference.

#### *ADAPTIVE REUSE OF FACILITIES ON EVERY ISLAND*

Many people recommended rehabilitating existing structures on the islands for such functions as restaurants, bed-and-breakfast accommodations, a health and sports center, a youth hostel, hotels, and conference centers, both as attractions for a wider public and for revenue. The general management plan supports this in appropriate areas. However, for Long and Moon islands, while the City of Boston has been opening parts of Long Island for public use, existing health and human service functions in these locations are essential to residents of Boston. Those activities will remain secure on the islands until new appropriate locations can be found for these services.

#### *FULL PUBLIC ACCESS TO MOST ISLANDS*

The need to protect park resources makes it undesirable to have unrestricted access to park islands. In addition to resource protection concerns, certain existing uses and activities cannot accommodate full-time visitation from the general public. These are a school on Thompson Island, wastewater treatment facilities on Deer Island, and lighthouses on Little Brewster and Long Island. However, activities in these locations can be functionally and programmatically part of the park and contribute to its interpretive programs.

#### *CERTAIN NEW RECREATIONAL FACILITIES*

These might include a golf course, a roller-blade park area, an arena for "extreme sports," dirt-bike trails, an amusement park, and casinos. A consensus formed around the guideline that uses which can be provided on the mainland and which have no essential relationship to the harbor islands setting and the park mission should not be located on the islands.

#### *PRIVATE RESIDENTIAL OCCUPANCY*

There was both support and opposition to continuing to allow Peddocks Island cottages to be occupied by their owners. Currently there remain approximately 30 privately owned summer cottages. Under existing plans of the Metropolitan District Commission, the cottages are scheduled for evaluation and removal as leases expire and cottages are vacated and turned over to the MDC (see Metropolitan District Commission, page 19).

<sup>7</sup> Required by National Parks and Recreation Act of 1978.

# P A R K M I S S I O N

## MISSION STATEMENT

The foundation of the general management plan rests on the park mission, a short narrative that reflects the park's purpose and significance. The mission provides a common ground for park management based on the 1996 enabling legislation. It describes the management philosophy for the park and what the park is to be like in the future.

The mission of the Boston Harbor Islands, a national park area, is to protect the islands as a resource of national significance and to make the island system an integral part of the life of the surrounding communities and region, while improving public knowledge and access for education, recreation, and tranquility within an urban area.

## PURPOSE AND SIGNIFICANCE

Park purpose and significance statements support the mission statement. The purpose states why the park was established as a unit of the national park system. Park significance defines the park's place within the broader regional and national context. Park themes flow from these statements and incorporate key concepts that characterize the Boston Harbor Islands national park area. Their function is to communicate the park's purpose and significance to the public.

The purpose of Boston Harbor Islands, a national park area is:

- to preserve and protect an island system within Boston Harbor, along with associated natural, cultural, and historic resources
- to manage the islands in partnership with public and private entities
- to provide public access, where appropriate, to the islands and surrounding waters for the education, enjoyment, and scientific and scholarly research of this and future generations
- to tell the islands' individual stories and to enhance public understanding and appreciation of the island system as a whole, including the history of American Indian use and involvement.

By their configuration, assemblage of natural, geologic, cultural, and historic features, and proximity to a major metropolitan area, the Boston Harbor Islands collectively offer outstanding opportunities for public use and enjoyment. The primary significance of the park's resources resides in:

- islands and peninsulas composed of 1,600 acres of land, archeological resources, historic sites, open space, wildlife habitats, and 35 miles of relatively undeveloped shoreline; all inside an area of 50 square miles and set against the skyline of Boston and other harbor communities
- the only drumlin field in the United States that intersects a coast, formed by the glaciers some 15,000 years ago
- opportunities for tranquility and personal renewal, and land- and water-based education and recreation within an urban area with potential to serve visitors from around the nation.

Contributing to the significance of the park are:

- resources and sites associated with thousands of years of occupation of the islands by American Indians
- three National Historic Landmarks—Boston Light, Fort Warren, and Long Wharf—and other historic sites and landscapes resulting from Euro-American use
- complex natural communities adapted to coastal and island life
- social service facilities and urban infrastructure (water and sewer) that are an integral part of the surrounding communities as well as the history of the region.

## P A R K

Park themes communicate the national significance of the Boston Harbor Islands. They are conceptual, rather than a simple listing of important topics or a chronology of events. The themes articulate the connections between the islands and express key concepts that characterize the system. There are hundreds of individual resources (both natural and cultural) and countless stories about the Boston Harbor Islands that could be presented to visitors and students in interpretive and education programs. The pitfall is that the visitor could become overwhelmed by the profusion of unrelated facts and fail to appreciate the island system as a whole. To help people consider and learn more about the bigger picture, the Partnership has developed four themes: Islands on the Edge, Home in the Harbor, Portal to New England, and Renewal and Reconnection.

A principle that has informed theme development is integration: nature and human history are interconnected. Similarly, stories related to Euro-American and American Indians are interwoven. The holistic approach breaks down the rigid lines often perceived between past and present, between people and their environment, and between life on the islands during pre-contact and post-contact periods.

While primarily useful in communicating with visitors, the themes also can be used to help organize concepts related to park management, such as research.

More specific story statements that deal with individual islands or more detailed ideas may be elaborated from the park themes for use in education and interpretation. Sample story statements are presented in Appendix 18. The themes and accompanying sub-themes are presented below.

### ISLANDS ON THE EDGE

Since their ancient formation by rising sea level, the Boston Harbor Islands have literally been on the edge of the continent, places where land meets sea. With the growth of Boston and its surrounding communities, the islands came to be unusual for their lack of inhabitants and development at the edge of a major metropolitan area. Figuratively, the Boston Harbor Islands have often been on the “edge of society”: places used to isolate people, institutions, and activities.

## T H E M E S



Islands on the Edge

### Sub-themes

#### *ON THE EDGE OF THE CONTINENT*

The Boston Harbor Islands mark a zone where a drumlin field intersects a coastline—a geological rarity—and where salt water meets fresh water.

#### *ON THE EDGE OF THE CITY*

Boston Harbor Islands national park area contains 34 islands with a wealth of natural and cultural resources, at the edge of a major metropolitan area.

#### *ON THE EDGE OF SOCIETY*

The Boston Harbor Islands have been perceived as being on the “edge of society” and have been used to isolate people, institutions, and activities.

### HOME IN THE HARBOR

The islands and surrounding estuary have been home to a rich diversity of plant and animal life for millennia. People have lived on and around the Boston Harbor Islands for thousands of years and have made a mark on the landscape.

### Sub-themes

#### *NATURAL INHABITANTS*

Terrestrial, intertidal, and estuarine life abounds on and around the islands.

#### *AMERICAN INDIAN HOMELAND*

American Indians have lived on the Boston Harbor Islands for thousands of years.

#### *FARMERS, FISHERS, AND FACILITY KEEPERS*

Although most of the islands were never permanently settled, nearly all were home to farm and fishing communities and to people who worked in facilities located on the islands.



Home in the Harbor

## PORTAL TO NEW ENGLAND

Marking the maritime entry to New England, the Boston Harbor Islands have played an important role in European exploration, navigation, commerce, and defense.

### Sub-themes

#### *PORT OF ENTRY*

European newcomers exploring this part of North America found Boston Harbor a hospitable haven and an important portal to the wealth of the “new world.”



Portal to New England

#### *MARITIME COMMERCE*

Maritime commerce through Boston Harbor was the lifeblood of early New England and now, some 300 years later, it continues to be a vital economic activity.

#### *NAVIGATION*

The challenge of navigating through the islands led to the construction of numerous navigational aids, including the country’s first lighthouse.

#### *COASTAL DEFENSE*

The islands have a long history as the location of strategic coastal defenses and are dotted with the remains of fortifications.

## RENEWAL AND RECONNECTION

Boston Harbor and its islands provided a rich and sustaining environment for human life until pollution and intensive use of the waterfront severed people’s everyday connection to the harbor. Now, with the cleanup of Boston Harbor, natural ecosystems have the opportunity to renew themselves. People are rediscovering the harbor as a setting for personal renewal and tranquility.

### Sub-themes

#### *RENEWING THE HARBOR*

Boston Harbor has one of the most advanced wastewater treatment systems in America, with the result that the water is cleaner now than it has been in decades, thus serving as a catalyst to reconnect the city with the harbor.

#### *CONNECTING TO NATIVE AMERICAN HERITAGE*

American Indians value the Boston Harbor Islands as a place to celebrate and commemorate their cultural heritage.

#### *OPPORTUNITIES FOR PERSONAL RENEWAL*

During the 1800s and early 1900s, the Boston Harbor Islands were places for people to seek relaxation and personal renewal; today these opportunities are once again increasing.

#### *PIONEERS IN LAND STEWARDSHIP*

Individually, organizations that are members of the Boston Harbor Islands Partnership have been pioneers in the stewardship of our nation’s natural and cultural heritage. Collectively, they are in the forefront of national park stewardship.

#### *A BEACON FOR SUSTAINABLE DEVELOPMENT AND RENEWABLE RESOURCES*

The Boston Harbor islands and their management can demonstrate the use of renewable resources and “green” technology to meet present needs without compromising the ability of future generations to meet their needs.



Renewal and Reconnection

# M A N A G E M E N T A R E A S

Management areas (sometimes called management zones) help determine the balance between resource preservation and visitor use in each part of the park. They describe a range of desired resource conditions and desired visitor experiences to be achieved and maintained over time, and as such, may be regarded as “management prescriptions.” For example, in an area of emphasis on “natural features” one would expect to see landscapes affected primarily by the forces of nature, and visitors would have many opportunities to find tranquility; whereas in an area of emphasis on “visitor services and park facilities” one would see a “built” environment with some natural or historical elements, and visitors would expect to interact with many other people.

Management areas identify the kinds and relative levels of visitor use, management activities, and infrastructure that are appropriate for maintaining the desired conditions. The list of uses and infrastructure development under each management area is used to help managers determine whether a specific action would be consistent with the overall direction established for the area. In designating management areas, an effort was made to apply areas to large sections of islands, or entire islands, to avoid fragmentation or a “spot-zoning” effect. This is possible because the management areas are not rigidly defined, but instead describe a range of conditions and experiences to be achieved by park managers. They set the outlines of acceptable and unacceptable treatment and use. A particular use or development would not occur in every location where the management area is applied in the park, and before actions are taken at specific sites additional research and analysis would be needed.

In addition to the six management areas defined in this plan, certain resources would have special protection regardless of the geographic area in which they fall. These resource types are treated with a protection emphasis that is applied as an “overlay” anywhere in the park.

## MAINLAND GATEWAYS

Areas containing mainland gateways are facilities that welcome harbor islands visitors, providing boat access and information meant to foster a sense of anticipation about the adventure ahead. These developed sites offer orientation, and may provide interpretive and educational programming to intrigue and draw in the visitor to the islands. Mainland gateways may be professionally staffed and have high levels of visitation and activity.

The Partnership desires access to the islands from many locations on the mainland. Yet, the level of services offered at these locations will vary based on visitor demand and ability of the market to respond. Some departure points will provide a level of service that qualifies them to be designated as official mainland gateways by the Partnership. Other waterfront locations not included with the Mainland Gateway management areas will feed visitors to the official gateways or, in some cases, directly to the islands.

The 1996 park legislation names many locations where federal funds could be used to help support gateways (see Boundary and Land Protection, page 91, for a list of areas that may be considered for park access, visitor services, and administration). No locations have yet been included in the Mainland Gateway management area; however, the Partnership has identified potential locations, 15 of which are shown on Management Areas map (page 55). These potential gateways were identified because of historical patterns of visitor use, existing facilities, good public access, or an expressed desire by a local community to be included. As the park evolves, as the visitation grows, and as the water transportation system is able to sustain expanded service, official gateways will be designated by the Partnership and developed in collaboration with the facility owners.

Although no Mainland Gateway management areas have been designated, the Partnership has developed criteria to be used in designating gateways. The Partnership will use a process established in the water transportation policy, on page 76, to apply the following criteria when deciding whether to name an official gateway. Mainland Gateway areas allow for a range of desired conditions and visitor experiences, similar to other park management areas. Some gateway locations are intended to be high-visitation sites that serve national, regional, and local audiences.

Others serve primarily local residents, and may be designed for “touch and go” transport (drop off and pick up only). The larger, more active locations will be staffed while the smaller gateways may not be, and services will vary with the level of staffing. The fundamental criteria that must be met by all official gateways are:

- Free access – Mainland gateways are located in areas open to the public without charge.
- Intermodal access – Mainland gateways are sited near public, multi-modal transit systems including highways, bikeways, and commuter boats.
- Piers – Mainland gateways have piers that accommodate regularly scheduled island vessels and meet other program requirements such as access for people with disabilities.
- Long-term docking facilities – Ferry terminals have long-term arrangements so that docking facilities are available for authorized island ferry and water shuttles; thus providing park visitors with assurance that terminals remain in the same locations over long periods of time.
- Identity – A uniform park identity sign package is located at each gateway including a “welcome” sign, orientation panels, and highway directional signs.
- Visitor amenities – At a minimum, seating and a shade shelter are present.
- Good neighbors – Mainland gateways have the ability to accommodate visitor activity without significant negative effects on adjacent residential neighborhoods.
- Parking – Where feasible, gateways provide parking for island visitors.

The larger, more active locations bring these additional attributes:

- Restrooms and drinking water – either seasonal or year-round facilities are available
- Visitor contact station – an indoor space providing a point of contact for potential visitors is made available
- Sales – island-related souvenirs, educational material, and trip supplies are sold
- Staff – staffed locations may “piggy-back” on existing visitor facilities provided by harbor communities.

## VISITOR SERVICES AND PARK FACILITIES

Areas of Visitor Services and Park Facilities emphasis are predominantly developed areas with some natural or historic elements. These areas feature a high degree of impact on natural resources, while historic resources may be adaptively reused for visitor services. Visitors interact with each other in a built environment where they have a variety of amenities and conveniences. There is much opportunity for recreational, cultural, and educational activities.

Island areas where visitor services and park facilities are emphasized are areas that have been previously disturbed or developed; that have little resource value; or that are able to accommodate a high level of visitor activity without significant negative effects.

Areas of Visitor Services and Park Facilities include portions of Deer, Georges, Long, Peddocks, and Spectacle islands where ferry piers and supporting facilities are located.

## HISTORIC PRESERVATION

Areas of Historic Preservation emphasis are designated to perpetuate historical settings, designs, materials, workmanship, or association. The historic resources are preserved, restored, reconstructed, or adaptively reused for visitor education and appreciation. Visitors expect to encounter a moderate to high number of other people as they explore and learn about the historic buildings, structures, and landscapes featured.

Island areas selected for Historic Preservation emphasis are those that contain historic buildings, structures, or landscapes; have mainly historic resource values; and have moderate to high visitor use .

Areas with management emphasis on historic preservation are at forts and fortifications at Georges, Long, Lovells, and Peddocks islands; also at lighthouses on Little Brewster, The Graves, and Long Island; and the historic granite wastewater treatment structures on Moon Island.

### MANAGED LANDSCAPE

Areas of Managed Landscape emphasis are landscapes that are predominantly “open” space, managed to preserve their cultural and natural features, such as meadows, orchards, gardens, groves of trees, and lawns. Visitors expect to encounter some people, but they also find many opportunities for tranquility at certain times. Some visitor amenities are available, such as picnic areas, composting toilets, and ranger-led tours.

Island areas selected for Managed Landscapes emphasis are those that reflect the imprint of human use (but not of primary cultural resource value); that retain some character-defining cultural resource features; and that are able to accommodate a moderate level of visitor activity without significant negative effects. The need to balance natural and cultural resource management will be most evident in these areas.

Areas of predominantly open space and landscapes managed to preserve their natural and cultural features include Great Brewster, Gallops, Rainsford, Grape, Bumpkin, Worlds End, Webb State Park, most of Thompson, most of Lovells, the southern portion of Long, most of Spectacle, the perimeter of Deer, and the park at Nut.

### NATURAL FEATURES

Areas of Natural Features emphasis are characterized by landscapes that appear to be affected primarily by the forces of nature such as wetlands, areas of successional growth, and densely wooded areas. The imprint of human influence is substantially unnoticed, and natural features dominate. Visitors have many opportunities for tranquility and expect to see few other visitors. They have opportunities for challenges and adventure, and they need to be self-reliant.

Island areas selected for Natural Features emphasis are those that predominantly reflect forces of nature; that retain some feeling of “wilderness”; that potentially are affected by visitor activity.

The islands with management emphasis on natural features are all the Brewsters except Little Brewster, Great Brewster, and The Graves; the southern half of Peddocks; the Hingham Harbor islands; Slate, Sheep, Raccoon, Hangman, Snake, and portions of Thompson.

### SPECIAL USES

Areas of Special Uses emphasis contain a range of uses that were developed previously, including social service facilities, sewage treatment plants, a police firing range, a firefighting training station, and a full-time school. Natural resources, in some cases, have been eliminated or highly modified to meet some of these needs. Some areas are restricted, while others present visitors with opportunities to learn about the site through guided tours and other educational programs.

Island areas selected for Special Uses emphasis have already been developed by public agencies, and will continue to be used for nonpark programs, such as MWRA’s Deer Island sewage treatment facility and the health facilities at Long Island.

### RESOURCES RECEIVING “OVERLAY PROTECTION”

Some resource types, such as the following, would have special protection regardless of the area in which they fall. These areas may be closed to visitors at times, or they might be targeted for active management or research.

- breeding and nesting habitat (seasonal)
- steep slopes
- erosive soils
- marshes and wetlands
- shellfish areas
- threatened and endangered species habitat (plant and animal)
- Indian historic and ethnographic sites
- archeological sites, cemeteries, and burial grounds
- other critical or sensitive habitat

Some small islands, such as Snake, Sheep, Hangman, Green, Calf, Little Calf, Middle Brewster, and Outer Brewster, may be closed (or have seasonal restrictions) to protect habitat or nesting sites of wildlife that are disturbed by human presence. Priority is given to increasing the oversight of critical areas, such as nesting sites for terns, which should be monitored daily in nesting season and have signs posted for potential visitors.

# MANAGEMENT AREAS

## MAINLAND GATEWAY



## VISITOR SERVICES AND PARK FACILITIES EMPHASIS



## HISTORIC PRESERVATION EMPHASIS



## MANAGED LANDSCAPES EMPHASIS



## NATURAL FEATURES EMPHASIS



## SPECIAL USES EMPHASIS



### FUTURE RESOURCE CONDITIONS

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| <ul style="list-style-type: none"> <li>■ The mainland environment is a developed area.</li> <li>■ Any historic resources retain integrity and are adaptively reused for park purposes.</li> <li>■ There may be a high degree of impact on natural resources.</li> </ul> | <ul style="list-style-type: none"> <li>■ The setting is predominantly developed.</li> <li>■ Any historic resources retain integrity and are adaptively reused for park purposes.</li> <li>■ There may be a high degree of impact on natural resources.</li> </ul> | <ul style="list-style-type: none"> <li>■ A particular historical scene predominates.</li> <li>■ There may be a moderate degree of impact on natural resources.</li> </ul> | <ul style="list-style-type: none"> <li>■ A particular landscape predominates.</li> <li>■ Character-defining natural and cultural features are preserved.</li> </ul> | <ul style="list-style-type: none"> <li>■ Natural processes dominate, and the imprint of human influence is substantially unnoticeable.</li> </ul> | <ul style="list-style-type: none"> <li>■ Resources have been developed for specialized uses.</li> </ul> |
|---|---|---|---|---|---|

### FUTURE VISITOR EXPERIENCES

- |   |   |   |   |  |   |
|---|---|---|---|--|---|
| <ul style="list-style-type: none"> <li>■ Interpretation and educational programs help visitors "discover" the islands.</li> <li>■ Visitors anticipate a trip to the islands with a feeling of adventure.</li> <li>■ There is a high level of activity and human interaction.</li> </ul> | <ul style="list-style-type: none"> <li>■ Visitors access a variety and range of visitor services, amenities, and conveniences.</li> <li>■ There are opportunities for a mix of recreational, cultural, and educational activities.</li> </ul> | <ul style="list-style-type: none"> <li>■ Visitors have close interaction with historic buildings, structures, and landscapes, with opportunities to learn about their history.</li> <li>■ The visitor density is moderate to high.</li> </ul> | <ul style="list-style-type: none"> <li>■ Although the setting is predominantly open space, visitors have the comfort of certain amenities.</li> <li>■ In a moderate visitor density, there is a likelihood of encountering others; but opportunities for tranquility are available at certain times.</li> </ul> | <ul style="list-style-type: none"> <li>■ One feels immersed in a natural landscape.</li> <li>■ There is low visitor density with opportunities for tranquility.</li> <li>■ There are opportunities for challenge and adventure.</li> <li>■ Visiting requires self-reliance.</li> <li>■ There are opportunities to</li> </ul> | <ul style="list-style-type: none"> <li>■ learn about the site through guided tours and other educational programs.</li> </ul> |
|---|---|---|---|--|---|

### Illustrations of Kinds and Levels of POTENTIAL VISITOR USE

- |   |   |   |   |  |   |
|---|---|---|---|--|---|
| <ul style="list-style-type: none"> <li>■ High level of use</li> <li>■ Gathering place for groups</li> <li>■ Orientation for groups by staff</li> <li>■ Overall park significance understood through exhibits and ranger contacts</li> <li>■ Itinerary planning, purchase of trip provisions, etc.</li> <li>■ Embarkation point for trip to islands</li> </ul> | <ul style="list-style-type: none"> <li>■ High level of use</li> <li>■ Itinerary planning, purchase of trip provisions, etc.</li> <li>■ Gathering place for groups</li> <li>■ Orientation for groups by staff</li> <li>■ Park resources protected through wide range of media and programs such as guided tours, demonstrations, special events, performances, school programs, etc.</li> <li>■ Departure point for boats to other islands on the park transportation system</li> <li>■ Restaurants or snack bars, or picnic areas</li> <li>■ Walking</li> <li>■ Swimming</li> <li>■ Overnight stays in lodging</li> </ul> | <ul style="list-style-type: none"> <li>■ Moderate level of use</li> <li>■ Park resources viewed and experienced through indoor and outdoor exhibits, self-guided tours, and ranger contacts</li> <li>■ Picnicking</li> <li>■ Walking</li> <li>■ Swimming</li> <li>■ Viewing historic landmarks</li> <li>■ Special events such as historical reenactments, demonstrations, and commemoration ceremonies</li> </ul> | <ul style="list-style-type: none"> <li>■ Moderate level of use</li> <li>■ Park resources viewed and experienced through indoor and outdoor exhibits, self-guided tours, and ranger contacts</li> <li>■ Camping and picnicking</li> <li>■ Walking</li> <li>■ Swimming</li> <li>■ Fishing</li> <li>■ Sunbathing and beachcombing</li> <li>■ Cross country skiing</li> </ul> | <ul style="list-style-type: none"> <li>■ Low level of use</li> <li>■ Park resources viewed and experienced through indoor and outdoor exhibits, self-guided tours, and ranger contacts</li> <li>■ Nature study</li> <li>■ Birdwatching and wildlife viewing</li> <li>■ Primitive camping</li> <li>■ Walking</li> <li>■ Stargazing</li> <li>■ Fishing</li> <li>■ Sunbathing and beachcombing</li> <li>■ Cross-country skiing</li> </ul> | <ul style="list-style-type: none"> <li>■ Low level of use</li> <li>■ Generally not available for recreation</li> <li>■ Public access restricted</li> <li>■ Primarily guided tours and special programs</li> </ul> |
|---|---|---|---|--|---|

\* Secretary of the Interior's Standards for the Treatment of Historic Properties:

**Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time; includes protection and stabilization.

**Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. **Restoration** is undertaken

**MAINLAND GATEWAY**

**VISITOR SERVICES AND PARK FACILITIES EMPHASIS**

**HISTORIC PRESERVATION EMPHASIS**

**MANAGED LANDSCAPES EMPHASIS**

**NATURAL FEATURES EMPHASIS**

**SPECIAL USES EMPHASIS**

**Illustrations of Kinds and Levels of POTENTIAL MANAGEMENT ACTIVITY**

- Focus on visitor convenience and access to services
- Rehabilitation as primary treatment for historic resources (See Secretary's Standards for the Treatment of Historic Properties)\*
- Staff presence desirable to provide visitor services

- Focus on visitor convenience and access to services
- Intensely managed to handle the flow of large number of people
- Rehabilitation as primary treatment for historic resources\*
- Staffed during visiting hours for visitor services and at other times as needed for resource protection.

- Focus on historic integrity
- Interpretation, education, and other compatible visitor uses accommodated
- Preservation, restoration and reconstruction as treatments of choice for historic resources\*
- Natural resources managed according to the treatment chosen for historic resources which may include landscaping
- Staffed intermittently to meet programmatic and resource protection needs.

- Focus on features needed to perpetuate landscape
- Restoration of native species where appropriate
- Appropriate visitor uses allowed and minimal amenities provided
- Shoreline erosion prevented
- Preservation\* (or mitigation of negative impacts through appropriate documentation) as primary treatment of historic resources
- Critical or sensitive natural resources and habitats fully protected
- Staffed according to level of use

- Focus on naturally functioning systems and processes
- Restoration of native species and habitats where appropriate
- Invasive exotic species controlled (where appropriate and practicable)
- Some areas closed to general public access for resource protection
- Negative impacts on cultural resources mitigated through appropriate documentation
- Critical or sensitive natural resources and habitats fully protected
- Not regularly staffed

- Current activities continued (school, wastewater treatment, police and firefighter training, navigation aids, public health facility)
- Intermittently staffed to serve visitors (e.g. guided tours)
- Visitor safety and protection of resources provided for

**Illustrations of Kinds and Levels of POTENTIAL INFRASTRUCTURE**

- High level of development
- Transit stop and parking
- Pier
- Marina
- Wayfinding and information signs
- Shade shelter
- Restrooms
- Picnic tables and benches
- Basic food services (vending machines, snack bar)
- Interpretive media (wayside exhibits, brochure racks, audio tours, etc.)
- Ticket office
- Information kiosk or visitor contact station
- Visitor center
- Park-related retail (books, necessities, souvenirs, etc.)
- Recreational equipment rentals
- Paved trails and walkways
- Park offices and support (employee housing, maintenance, utilities, etc.)

- Predominantly a built environment
- Pier
- Marina
- Wayfinding and information signs
- Shade shelter
- Restrooms
- Picnic tables and benches
- Restaurant/snack bar
- Lodging
- Interpretive media (wayside exhibits, brochure racks, audio tours, etc.)
- Information kiosk or visitor contact station
- Visitor center
- Environmental education or cultural center
- Amphitheater
- Park-related retail (books, necessities, souvenirs, etc.)
- Recreational equipment rentals
- Paved trails and walkways
- Park offices and support (employee housing, maintenance, utilities, etc.)

- Minimum development necessary to provide fundamental visitor services
- Historic buildings adaptively reused in preference to new construction
- Pier
- Wayfinding and information signs
- Shade shelter
- Restrooms
- Picnic tables and benches
- Basic food services (vending machines, snack bar)
- Interpretive media (wayside exhibits, brochure racks, audio tours, etc.)
- Information kiosk or visitor contact station
- Museum or cultural center
- Paved trails and walkways

- Development limited to protect landscape integrity
- Pier
- Wayfinding and information signs
- Shade shelter
- Composting toilets
- Picnic tables and benches
- Formal campsites (grills, picnic tables, tent platforms)
- Interpretive media (wayside exhibits, brochure racks, audio tours, etc.)
- Formal trails

- Minimal development and human intrusion into naturally functioning systems and processes
- Minimal signs needed for resource protection and visitor safety
- Composting toilets
- Primitive campsites
- Primitive trails

- Existing development remains in support of special use

to depict a property at a particular period of time in history, while removing evidence of other periods. **Reconstruction** re-creates vanished or nonsurviving portions of a property for interpretive purposes.

# G O A L S                      A N D                      P O L I C I E S

## MISSION GOALS

Goals express the essence of the park’s mission and articulate the ideals that the Boston Harbor Islands Partnership is striving to attain in perpetuity. While they are not quantifiable, they do provide the basis for quantifiable long-term goals that are developed in the park’s five-year strategic plan. In short, the goals assert the ideals that the harbor islands are protected; that park visitors are satisfied and knowledgeable; and that the Partnership is effective. Following are six mission goals for the Boston Harbor Islands:

- **Resource Protection**

The Boston Harbor Islands as a whole, containing natural, geologic, cultural, and historic resources and associated values, are protected, preserved or restored, and managed within their broader marine and coastal ecosystem and their cultural context.

- **Research and Information**

The Boston Harbor Islands Partnership contributes to knowledge about the island system; management decisions about natural, geologic, cultural, and historic resources and visitors are based on adequate scholarly and scientific information.

- **Visitor Use, Access, and Enjoyment**

An expanded base of visitors enjoys and is satisfied with the facilities, services, commercial operations, and recreational opportunities offered on the Boston Harbor Islands and at associated mainland sites. The attributes of these offerings include their availability, accessibility, diversity, quality, and safety.

- **Education and Interpretation**

Park visitors and the general public understand and appreciate the resources and values of the island system, through the park themes: Islands on the Edge, Home in the Harbor, Portal to New England, and Renewal and Reconnection.

- **Management and Operations**

Each member of the Boston Harbor Islands Partnership is committed to the funding, operation, and development of the park using best management practices, systems, and technologies to accomplish the park’s mission.

- **External Cooperation**

Park management is coordinated by the Boston Harbor Islands Partnership in cooperation with Indian tribes and historical, business, cultural, civic, environmental, recreational, and tourism organizations. Cooperators and individuals support the park mission through contributions and creative initiatives.

## INTRODUCTION TO POLICIES

The federal enabling legislation for the park requires that the island system be administered in accordance with laws applicable to the national park system. The Boston Harbor Islands goals meet that requirement. The most important statutory directive for the national system is provided by interrelated provisions of the National Park Service Organic Act of 1916, and the NPS General Authorities Act of 1970, including amendments to the latter law enacted in 1978. Those provisions are discussed in Appendix 3.

Each of the six mission goals is restated in the following chapters in association with a context section that identifies critical issues for park management. The Partnership, the Advisory Council, park visitors, American Indian tribes, interested agencies and organizations, and the general public have identified and refined the issues addressed by this plan.

Policies to assist park managers in implementing this plan are presented after each goal. The policies provide direction for day-to-day management decisions and are expressed in the present tense as desired future conditions. The guidance provided by policy is general in some cases and specific in others: It may prescribe the process by which decisions are made, how an action is to be accomplished, or the results to be achieved. Clearly stated parkwide policies ensure consistent management throughout the island system and meet the mandates of the federal enabling legislation. Like policies for all national parks, policies for

## MANAGEMENT AREAS



(click graphic to enlarge)

Boston Harbor Islands originate in law. Some applicable legislation is general, such as the 1916 National Park Service Organic Act. Other legislation is specific, like the 1996 enabling legislation for Boston Harbor Islands that contains particular policy mandates.

The Boston Harbor Islands policies build on the park's legislated mandates and Park Service policy that applies to the national system. Other laws, regulations, and policies related to the administration of federal and state programs, although not cited in this plan, also apply. Where policies or guidelines have not been developed, the law serves as the only direction. Boston Harbor Islands Partnership agencies are already managing the islands in a manner congruent with national policy in most instances. This is certainly true within Boston Harbor Islands State Park.

# R E S O U R C E P R O T E C T I O N

## CONTEXT

**T**HE BROADER CONTEXT of the islands includes both natural and cultural resource systems that extend inland through the region, and offshore into Massachusetts Bay, part of the Gulf of Maine. On many islands these cultural and natural resources converge, resulting in layers of ethnographic, archeological, and historic resources laid over or lying underneath the natural landscape. This layering poses questions about balancing management emphasis, while always protecting and preserving park resources unimpaired.

Ever since their formation by glacial activity about 14,000–18,000 years ago the islands have been and continue to be shaped by natural processes that extend well beyond present-day Boston Harbor. Meteorological and coastal processes such as storms, tides, and winds rework the island landforms and bring airborne components. Plant and animal communities adapt to the environment and bring about their own changes to the system. Water flowing from the Boston Harbor watershed and the Gulf of Maine surrounds and influences the island system.

The Boston Harbor Islands have been shaped as well by human activities, such as dredging and filling, which continue to shape and reshape some of them. Nonnative species have found their way to the islands as a result of human activity and compete with native species for survival. Similarly, settlement of the country by Europeans fractured American Indian cultural systems. Other groups have been associated with the islands, such as Portuguese, Irish, farmers, lighthouse keepers, and fishermen. Today, contemporary groups including Indians, residents of urban Boston, and surrounding harbor communities interact with the islands to varying degrees. Sites important to contemporary cultural groups are in large part not identified and not specifically protected.

Remaining historic structures are in varying conditions; some, like Fort Andrews, stand vacant and are disintegrating, and others, like the older sea walls, are subject to loss as a result of natural processes. Museum collections from and relating to the islands, including

natural history specimens, archeological and historical artifacts, and archival materials, are held by a number of agencies and institutions. Each of those organizations exercises its curatorial responsibilities according to its own collections policies and regulations, some of which, in turn, are overlain by state and federal law. Although this decentralization complicates collections use and development, no guidelines have been developed for a unified scope of collections or collections management policy for the park or Partnership.

American Indian tribes have strongly expressed particular interest in protection of Indian burial grounds and sacred sites through their participation in the consultation process and involvement with the Advisory Council. In future, Indian tribes will be vigilant to ensure that protection measures and applicable laws and policies are enforced. Planning for Boston Harbor Islands national park area comes at a time when federal legal requirements demand more active involvement of American Indian tribes through consultation, through archeological and grave protection programs, as well as the interpretation and telling of the Native American story. Park managers have to be much more “culturally sensitive” to American Indians’ participation than managers have been in the past.

Staff archeologists and cultural and natural resource specialists with DEM, MDC, and the City of Boston have provided technical assistance and staff training. These staff, along with planning and engineering staff, monitor the islands to assess needed improvements or management actions. During the summer season, six islands have been staffed 24 hours a day to protect island resources and to provide visitor services. The islands have been maintained principally by seasonal staff. (See Current Conditions [2000] chart, page 22.)

Managing agencies have used various methods for determining the efficacy of development in light of resource protection. On Thompson Island, for example, no facilities may be built outside the central campus area. In general, resources are monitored, and planning is conducted before

developmental changes occur. The Town of Hingham owns and manages Langlee, Sarah, Ragged, and Button islands in Hingham Harbor as conservation land. These islands have been kept in their natural condition for passive recreational use. The public accesses these islands by small private watercraft.

The intensity of resource protection has varied depending on financial resources available to the managing agency. Some activities carried out by managers are: prohibiting access to fragile shoreline bluffs; signing and mulching designated trails to keep pedestrians away from vegetation; promoting environmental stewardship by direct and indirect educational techniques; horticultural maintenance of cultural landscapes; repair and stabilization of historic buildings.

Some island managers have established use limits for individual islands. The 1986 Boston Harbor Islands State Park Master Plan provided the most recent analysis of carrying-capacity criteria based on the combination of visitors' experience and an analysis of resource protection. Where they exist, use limits were not scientifically determined and have not been applied throughout the island system. In the case of Georges Island, for example, a limit of 5,000 visitors at a time for events has been established by MDC based on a combination of factors concerning impacts on resources, visitor safety, staffing levels, and management judgment. The level of visitor use is currently regulated largely by the capacity and frequency of passenger ferry and water shuttle service to the islands. Private boaters, however, have few management restrictions on access to the islands.

#### **MISSION GOAL FOR RESOURCE PROTECTION**

*The Boston Harbor Islands as a whole, containing natural, geologic, cultural, and historic resources and associated values, are protected, preserved, or restored, and managed within their broader marine and coastal ecosystem and their cultural context.*

#### **RESOURCE MANAGEMENT PLANNING**

Effective park stewardship requires informed decision-making about the islands' resources. This is best accomplished through a comprehensive planning process. As part of the overall planning framework for Boston Harbor Islands national park area, the Partnership prepares and periodically updates a long-range comprehensive strategy for resource management. This resource management strategy (implementation plan) describes a comprehensive program of activities needed to achieve the desired future conditions for the park's natural and cultural resources as well as provide for their enjoyment by visitors as specified for each management area. Each managing agency of the park is responsible for carrying out the plan to protect and preserve park resources unimpaired.<sup>8</sup>

The resource management strategy integrates the best available science and scholarship, and prescribes activities such as inventories, research, monitoring, restoration, mitigation, protection, preservation, treatment, education, and management of resource uses. The plan spells out activities required to perpetuate the park's natural and geologic, cultural and historic resources, and associated values. These include activities needed to identify, evaluate, manage, monitor, protect, preserve, and treat the park's resources, as well as provide for their enjoyment and understanding by the public. Cultural resource planning, and the resource evaluation process that is part of it, includes consultation with cultural resource specialists and scholars having relevant expertise; traditionally associated peoples; and other stakeholders.

#### **NATURAL RESOURCE MANAGEMENT—GENERAL**

The primary management objective for natural systems is the protection of natural resources and values for appropriate types of public enjoyment while maintaining them unimpaired for future generations. These values include "naturalness" or "natural conditions," which denote the condition of resources that would occur in the absence of human dominance over the landscape. Natural resources are managed with a concern for fundamental physical and biological processes, as well as for individual species, features, and plant and animal communities. In some cases biotic communities are managed to preserve vistas, retain cultural landscape characteristics, or reflect the

historic vegetative communities that once occupied the islands. Natural change is recognized as an integral part of the functioning of natural systems. These systems include:

- physical resources such as water, air, soils, topographic features, geologic features, and natural soundscapes
- physical processes such as weather and shoreline migration
- biological resources such as native plants, animals, and communities
- biological processes such as photosynthesis, succession, and evolution
- ecosystems
- highly valued associated characteristics such as scenic vistas.



Peddocks Island cove

All of these are collectively referred to as “natural resources.” Management of natural resources is based on the park’s management areas and includes upland and intertidal areas. Partnership natural resource management activities are complemented by regulatory tools of the many federal, state, and local agencies with which the park cooperates (see also Appendix 17 and Harbor Management, page 96).

The Partnership does not intervene in natural biological or physical processes, except:

- in some emergencies in which human life and property are at stake, or
- to restore natural ecosystem functioning that has been disrupted by past or ongoing human activities, or
- when a park plan has identified the intervention as necessary to protect other park resources or facilities.



Gull nest, Gallops Island

human activities may need to be actively managed to restore them to a natural condition or to maintain the closest approximation of the natural condition in situations in which a truly natural system is no longer attainable. The extent and degree of management actions taken to protect or restore park ecosystems or their components are based on clearly articulated, well-supported management objectives and the best scientific information available.

The Partnership reestablishes the biological and physical components of natural systems following human disturbance as necessary. Restoration efforts may take place in areas dominated by exotic species, and may include removal of contaminants and structures or facilities, or the restoration of areas disturbed by park management or infrastructure development.

Efforts may include, for example:

- removal of exotic species
- removal of contaminants and nonhistoric structures or facilities
- restoration of disrupted shoreline processes
- restoration of areas disturbed by park administrative, management, or development activities or by public use
- restoration of natural soundscapes
- restoration of native plants and animals.

## BIOLOGICAL RESOURCE MANAGEMENT

The Partnership agencies maintain, as part of the natural ecosystems of the park, all native plants and animals. The term “plants and animals” refers to all five of the commonly recognized kingdoms of living things and includes such groups as flowering plants, ferns, mosses, lichens, algae, fungi, bacteria, mammals, birds, reptiles, amphibians, fishes, insects, worms, crustaceans, and microscopic plants or animals. The Partnership agencies achieve this maintenance by:

- preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur
- restoring native plant and animal populations on islands when they have been extirpated by past human-caused actions
- minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.



Peddocks Island

“Native species” are defined as all species that have occurred or now occur as a result of natural processes on lands designated as units of the national park system. Native species in a place are evolving in concert with each other. “Exotic species” are those species that occupy or could occupy park lands directly or indirectly as the result of deliberate or accidental human activities. Exotic species are also commonly referred to as nonnative, alien, or invasive, species. Because an exotic species did not evolve in concert with the species native to the place, the exotic species is not a natural component of the natural ecosystem at that place.

## Native Plants and Animals

Whenever possible, natural processes are relied upon to maintain native plant and animal species, and to influence natural fluctuations in populations of these species. The Partnership may intervene to manage individuals or populations of native species only when such intervention does not cause unacceptable impacts to the populations of the species or to other components and processes of the ecosystems that support them, and when at least one of the following conditions exists.

Management is necessary

- because a population occurs in an unnaturally high or low concentration as a result of human influences (such as loss of seasonal habitat, or the extirpation of predators) and it is not possible to mitigate the effects of the human influences
- to protect specific cultural resources of the park
- to accommodate development in the Visitor Services and Park Facilities or Special Uses emphasis management areas
- to protect federally listed threatened, endangered, or candidate species or state and locally listed threatened, endangered, rare, declining, sensitive, or candidate species that are present in the park
- to protect human health as advised by a public health official
- to protect property in cases in which it is not possible to change the pattern of human activities or
- to maintain human safety in cases in which it is not possible to change the pattern of human activities.

Or, removal of individuals or parts thereof

- is part of a Partnership research project described in an approved implementation plan, or is part of research being conducted by others who have been issued a scientific research and collecting permit
- is done to provide plants or animals for restoring native populations in parks or cooperating areas without diminishing the viability of the park populations from which the individuals are taken
- is specifically permitted by state or local laws
- meets specific park management objectives.

The Partnership assesses the results of managing plant and animal populations by conducting follow-up monitoring or other studies to determine the impacts of the management methods on nontargeted, as well as targeted, components of the ecosystem.

### **Genetic Resources**

The Partnership strives to protect the full range of genetic types (genotypes) of native plant and animal populations in the park by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.

### **Protected Species**

In cooperation with appropriate state and federal agencies, the Partnership identifies and actively promotes the conservation of all federally listed threatened, endangered, or candidate species within park boundaries and their critical habitats. The Partnership also identifies and protects all state and locally listed threatened, endangered, rare, declining, sensitive, or candidate species that are present in the park, and their critical habitats.

### **Nonnative Plants and Animals**

Exotic species are not allowed to displace native species if displacement can be prevented. In general, new invasive exotic species are not introduced into the park. Exotic plant and animal species may be removed wherever it is determined that their presence poses a threat to other park resources or to public health and safety. Control of pest species is accomplished using integrated pest management (IPM) procedures, a process that ensures the most effective, economical, and environmentally sensitive methods of control.

### **Pest Management**

Under integrated pest management, “pests” are regarded as organisms that interfere with the purposes or management objectives of the park or that jeopardize human health and safety. Depending on its activity, an organism can be a pest in one area but not at another site. Management techniques include a full range of mechanical, biological, and chemical tools.

Strategies for managing pest populations are influenced by whether the pest is an exotic or native species. Many fungi, insects, rodents, diseases, and other species that may be perceived as pests are native plants and animals existing under natural conditions as natural

elements of the ecosystem. Integrated pest management (IPM) is the coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property, and the environment. IPM procedures are used by the Partnership to determine when to control pests in the park and whether to use mechanical, physical, chemical, cultural, or biological means.

### **FIRE MANAGEMENT**

The Partnership takes measures to prevent human-caused wildfires and their potential adverse impacts on human life, facilities, or park cultural or natural resources. Methods to accomplish this are those minimally necessary, commensurate with effective control. Prescribed fires may be employed to accomplish resource management objectives in accordance with implementation plans approved by the Partnership.

### **WATER RESOURCE MANAGEMENT**

The Partnership seeks to perpetuate surface and ground waters as integral components of park aquatic and terrestrial ecosystems. Park waters—either surface waters or ground waters (including fresh, estuarine, and marine waters)—are withdrawn for consumptive use only where such withdrawal is absolutely necessary for the use and management of the park and when studies show that it does not significantly alter natural processes and ecosystems. The Partnership seeks to restore, maintain, or enhance the quality of all surface and ground waters within the park consistent with the Clean Water Act and other applicable federal, state, and local laws and regulations. Adequate sewage treatment and disposal is provided for all public use and administrative facilities. Human activities are managed to control erosion into surface waters. Fuel-burning watercraft and marina operations and other activities with high potential for water pollution are regulated and controlled as necessary. Toxic substances, such as pesticides, petroleum products, and heavy metals, are managed to minimize the risk of water contamination. The intensity of use may be regulated in certain areas and at certain times if water quality monitoring studies indicate overuse.

The Partnership, in consultation with local conservation commissions, avoids the occupancy and modification of floodplains and wetlands whenever possible. Where no practicable alternatives exist, mitigating measures are implemented to minimize potential harm to life, property, and the natural values of these important resources. The Partnership inventories wetlands and those floodplains subject to or potentially subject to public use or development. Activities that involve the use of floodplains and wetlands are identified, and implementation plans for wetland and floodplain protection are prepared. When natural wetland characteristics or functions have been



Peddocks Island

degraded or lost due to previous or ongoing human actions, the Partnership restores them to their pre-disturbance condition, to the extent practicable.

Since the park's boundary excludes harbor waters from the Partnership's jurisdiction, the Partnership cooperates with others holding responsibilities for protecting harbor waters.

### AIR RESOURCE MANAGEMENT

The Partnership seeks to perpetuate the best possible air quality in Boston Harbor Islands national park area, assuming an aggressive role in promoting and pursuing measures to safeguard park resources from the adverse impacts of air pollution. Air quality-related values of the park are inventoried, monitored, and evaluated periodically to identify pollution sources and enable managers to take effective corrective measures in collaboration with other regional and national authorities.

### NOISE AND LIGHT MANAGEMENT

The Partnership, while recognizing that the park is located in an urban environment containing human-generated noise and light, discourages the production of excessive noise caused by mechanical or electronic devices and of artificial lighting not needed for security, safety, cultural resource requirements, or interpretation.

Natural lightscapes are natural resources that exist in the absence of human-caused light; they vary with geographic location and season. The Partnership protects natural darkness and other components of natural lightscapes, recognizing the roles that light and dark periods play in the natural resource process and the visitor experience.

The natural ambient soundscape is the aggregate of all natural sounds that occur, together with the physical capacity for transmitting sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The Partnership preserves the natural ambient sounds of the islands to the greatest extent possible and restores degraded soundscapes to the natural ambient condition whenever practical.

### GEOLOGIC RESOURCE MANAGEMENT

The Partnership preserves and protects geologic resources as integral components of park natural systems. As used here, the term "geologic resources" includes both geologic features and geologic processes. The Partnership (1) assesses the impacts of natural processes and human-related events on geologic resources; (2) maintains and restores the integrity of existing geologic resources; (3) integrates geologic resource management into the park's operations and planning; and (4) interprets geologic resources for park visitors.

#### Shoreline Management

In areas of the park managed for natural resources emphasis, shoreline processes (erosion, deposition, dune formation, overwash, inlet formation, and shoreline migration) that are not influenced by human actions are allowed to continue without interference. Exceptions would be made in cases where a law requires control measures. In instances where human activities or structures have altered the nature or rate of shoreline processes, the Partnership, in consultation with appropriate state and federal agencies, investigates ways to mitigate the effects of such activities or

structures and for restoring natural conditions. The Partnership complies with provisions of state coastal zone management plans prepared under the Coastal Zone Management Act. Where erosion control is required by law, or where present developments must be protected to achieve park management objectives, the Partnership employs the most sustainable, sensitive, and effective methods feasible, while minimizing impacts outside the target area.

### Soil Resource Management

The Partnership actively seeks to understand and preserve the soil resources of the park and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources. Potential impacts on soil resources are routinely monitored, and management action is taken to mitigate adverse, potentially irreversible impacts caused by heavy visitor use.



Eroding slope

### CULTURAL RESOURCE MANAGEMENT—GENERAL

Cultural resources include archeological sites, collections and archives, historic structures, cultural landscapes, and ethnographic resources. The Partnership protects cultural resources against theft, fire, vandalism, environmental impacts, and other threats, without compromising the integrity of the resources.<sup>8</sup> With some differences by type, cultural resources are subject to several basic treatments, including, but not limited to, preservation in their existing states; rehabilitation to serve contemporary uses, consistent with their integrity; and restoration to earlier appearances by the removal of later accretions and replacement of missing elements (see Treatment of Historic Properties).

The preservation of cultural resources in their existing states always receives first consideration. All treatments comply with Section 106 of the National Historic Preservation Act and the Secretary of the Interior's Standards for Treatment of Historic Properties. Partnership cultural resource management activities are complemented by regulatory tools of the many federal, state, and local agencies with which the park cooperates (see Appendix 17).

Cultural resource management emphasizes preservation or rehabilitation. Stabilization may be done as an interim treatment until another treatment is selected. Completing historic structures reports for the most important resources is a high priority. Sea walls are repaired where important cultural resources are threatened.

### BURIAL SITES AND CEMETERIES

The park's enabling legislation directs that park managers include programs to protect Indian burial grounds and sites associated with the King Philip's War internment period and other periods. It is the Partnership's policy not to publicly identify burial sites so as not to draw attention to them or their probable location for fear of looting or pot hunting.

The Massachusetts Historical Commission maintains a list of burial grounds and has specific regulatory authority. As new sites are identified, historic and pre-contact burial areas—whether or not formally plotted and enclosed as cemeteries—are protected. They are not disturbed or archeologically investigated unless threatened with destruction by park infrastructure, operational activities, or natural forces. The Partnership follows its consultation policy (page 95) when identifiable human remains may be disturbed or are encountered on park lands. The Partnership confers with the Massachusetts State Archeologist and Commission on Indian Affairs consistent with Massachusetts Unmarked Burial Laws and other applicable provisions of law. Detailed operating procedures for the Boston Harbor Islands are developed in consultation with American Indian tribes, state historic preservation officer, tribal historic preservation officers, appropriate state and municipal agencies, such as the City of Boston archeologist, and professional archeologists.

## TREATMENT OF ARCHEOLOGICAL RESOURCES

Archeological resources are left undisturbed unless removal of artifacts or intervention is justified by protection, research, interpretive, or infrastructure requirements. They are preserved in a stable condition to prevent degradation and loss of research values or in-situ exhibit potential. Archeological investigations on islands owned by the Commonwealth of Massachusetts, including any of its agencies and political subdivisions, require consultation with and issuance of a permit by the State Archeologist (see Consultation, page 95). Archeological collections resulting from investigations under permit from the State Archeologist are property of the Commonwealth of Massachusetts. Under state law, the State Archeologist arranges for the curation and exhibit of state-owned collections. The State Archeologist keeps a record of artifacts and curation locations.

### Underwater Archeology

The Commonwealth of Massachusetts regulates underwater resources pursuant to the Abandoned Shipwrecks Act and the Underwater Archeological Resources Act to preserve and protect shipwreck sites for continued archeological research and public enjoyment. A permit is required from the Board of Underwater Archeological Resources for reconnaissance and excavation, regardless of whether it is an individual sport diver, commercial venture, or museum.

## TREATMENT OF ETHNOGRAPHIC RESOURCES

Park ethnographic resources are the cultural and natural features of the islands that are of traditional significance to traditionally associated peoples. These peoples are the contemporary park neighbors and ethnic or occupational communities that have been associated with the islands for two or more generations (40 years), and whose interests in the island's resources began prior to their acquisition for public recreation, education, and conservation purposes. The Partnership identifies the present-day people whose cultural practices and identities are closely associated with the islands. In the context of collaborative research, cultural anthropologists document the meanings that groups assign to traditional natural and cultural resources and the landscapes they form. The Partnership maintains this information, as well as data on the traditional knowledge systems that affect resource uses.



Lovells Island

## TREATMENT OF CULTURAL LANDSCAPES

The management of cultural landscapes recognizes and protects significant historic, archeological, ethnographic, and design values. All treatment decisions are based on a cultural landscape's significance, existing conditions, and use. Treatment decisions take into account both the natural and built features of the landscape, and the dynamics inherent in natural systems and continued human occupation.

## TREATMENT OF HISTORIC PROPERTIES

Along with evaluating the significance of historic structures and landscapes, resource managers and planners determine the approach to the treatment of historic properties from one of the following standards established by the Secretary of the Interior.

- **Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time; this treatment includes "protection" and "stabilization."
- **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- **Restoration** depicts a property at a particular period of time in its history, while removing evidence of other periods.
- **Reconstruction** re-creates vanished or nonsurviving portions of a property for interpretive purposes.

The factors that go into selecting a treatment are the property's historical significance, physical condition, proposed use, intended interpretation, and feasibility.

### Use of Historic Structures

Because unused structures are susceptible to neglect and vandalism accelerating their deterioration, compatible uses for historic structures are found where appropriate. All uses of historic structures are subject to preservation and public safety requirements. No administrative or public use is permitted that would threaten the stability or character of a structure.



Long Island Head Light

### New Construction

In preference to new construction, every reasonable consideration is given to using historic structures for park purposes compatible with their preservation and public appreciation. New construction harmonizes with historic features in scale, texture, and continuity but does not imitate them.

### MUSEUM COLLECTIONS

Partnership agencies collect, preserve, use, and provide access to museum objects, natural history specimens, and archival materials. Moreover, objects, specimens, and archives relating to Boston Harbor Islands are owned by and housed at a number of museums and repositories that have no formal affiliation with the park or Partnership. Collections relate to the disciplines of archeology, ethnography, history, biology, paleontology, and history. They are used to aid understanding among park visitors and to advance knowledge in the humanities and sciences.

Creation of the park and Partnership has not altered pre-existing ownership and responsibilities for museum collections. As appropriate, the Partnership agencies consult with culturally affiliated or traditionally associated groups before treating or reproducing items in museum collections. Archeological artifacts, recovered in investigations under permit from the State Archeologist, are the property of the Commonwealth of Massachusetts. The State Archeologist arranges for curation and exhibition of those state-owned collections and keeps a record of their locations. To facilitate research and exchange of information about Boston Harbor Islands, the National Park Service maintains a searchable database of museum and archival collections for the Partnership.

### CARRYING CAPACITY

Establishing, and then maintaining, appropriate types and levels of visitor use for the Boston Harbor Islands helps protect park resources and provide quality experiences for visitors. The question of how much public use is appropriate for a park area may be framed in terms of visitor “carrying capacity.” Carrying capacity is defined as:

The type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement, and are compatible with, the purpose and significance of the park and its management objectives.

The National Park Service has developed a scientific approach known as “Visitor Experience and Resource Protection” (see Appendix 10) to determine park carrying capacities. Carrying capacity is not simply a projection of the number of people expected to visit an area. It is a prescription of desired ecological and social conditions to be achieved.

This general management plan accomplishes the critical first steps toward establishing carrying capacities. Subsequently, the Partnership develops and activates an implementation plan, using the Visitor Experience and Resource Protection process, that is linked to the management areas. The visitor management plan (an implementation plan) includes qualitative descriptions of the desired resource conditions and visitor experiences to be achieved in each management area. Monitoring of conditions takes the place of estimating the maximum



Georges Island

number of users. The Partnership takes corrective management actions when needed to maintain standards established in the carrying capacity strategy.

Until the scientific standards are established parkwide or unless it becomes evident that significant damage to resources is due to overuse, Partnership agencies continue employing their existing administrative use limits. Visitor use is managed, and potentially limited, using indicators that favor visitor experience in the more developed areas of hub islands and indicators that favor resources elsewhere, always leaving resources unimpaired for the future.

<sup>8</sup> Within the limits of its authority, the National Park Service will not undertake, authorize, or fund any activities that would result in impairment of park resources.

# RESEARCH AND INFORMATION

## CONTEXT

THE PARTNERSHIP has fundamental needs for information in order to make decisions about managing natural, geologic, cultural, and historic resources within the island system. Extensive baseline data are needed on natural and cultural resources and visitor use of all the islands, and the islands as a system. Information is needed about park-associated groups, such as contemporary Indians, descendants of Portuguese fishermen, immigrants, and culturally affiliated sites. Most scientific, historical, and cultural research about the resources of the islands has been initiated by outside researchers based on their professional interest or the availability of funding. Research is carried out by a variety of institutions and agencies; coordination has been done largely through channels typical of academic exchange of information. Examples of research include long-term studies in archeology by professors at the University of Massachusetts, Northeastern University, and Boston University; various marine environmental research conducted by the Urban Harbors Institute of the University of Massachusetts at Boston; marine biotechnology, coastal management, nonindigenous species, ocean observation and modeling at Massachusetts Institute of Technology Sea Grant Program; marine environments at New England Aquarium; water quality by National Oceanic and Atmospheric Administration (NOAA); and bathymetry of the harbor by the U.S. Geological Survey at Woods Hole Oceanographic Institute. MWRA monitors the harbor's marine environment, including diversity of bottom-dwelling animal communities and sampling for disease and contaminants in fauna and flora.

Repositories of information and research are scattered throughout the region, in the libraries and offices of the Partnership agencies and universities, and even in the National Archives in Washington, D.C. Important local repositories of information about the islands include the Massachusetts State Archives, National Register documents at the Massachusetts Historical Commission, and the Metropolitan District Commission's extensive

archives and photograph collections. Uncataloged collections are not readily available for research, interpretation, or exhibit. Many collections are not easily accessible and require special permission for consultation and reproduction.

Until a visitor survey began in 2000, demographic data about visitors and the water transportation services that visitors use have been collected incidentally rather than by direction, and they have typically been analyzed to serve particular islands rather than the entire system. Scientific and scholarly knowledge is important in developing carrying capacities for the islands. Human impacts on erosion, for example, have not been systematically monitored or quantified.

## MISSION GOAL FOR RESEARCH AND INFORMATION

*The Boston Harbor Islands Partnership contributes to knowledge about the island system; management decisions about natural, geologic, cultural, and historic resources and visitors are based on adequate scholarly and scientific information.*

## STUDIES AND COLLECTIONS

The Partnership conducts and facilitates natural, cultural, and social science studies and scholarly research. These studies support the park mission by providing a cumulative and constantly refined understanding of park resources, along with an understanding of park visitors, the nonvisiting public, and human interactions with park resources. This approach provides a scholarly or scientific basis for planning, development, and management decisions. Baseline data on resources are compiled first, providing a comprehensive overview of park resources. Priorities for detailed studies are on the protection of resources in the areas of greatest visitor concentration, on the hub islands, or where baseline data identify sensitive resources.

The Partnership encourages a range of research needed for the park, disseminates research findings widely, and uses

those scholarly and scientific findings as a basis for resource protection and visitor use management. Studies include projects conducted by researchers and scholars in universities, foundations and other institutions, tribal colleges and organizations, other federal and state agencies, and Partnership agency staff. The Partnership promotes relationships with individuals and organizations qualified to perform research, and suggests research topics that further park goals.

The data and information acquired through studies conducted in the park are made available broadly—to park managers, the preservation and scientific communities, and the public—except when information must be withheld to protect sensitive park resources, or where legal restrictions apply. Independent studies are not required to address specifically identified Partnership management issues or information needs. However, these studies, including data and specimen collection, require a scientific research and collecting permit.

### SCIENTIFIC RESEARCH AND COLLECTING PERMITS

Permission for independent research that would allow the physical disturbance of cultural resources or provide for the collection of objects or specimens in the park, is granted only when there is compelling evidence that the proposed research is essential to significant research concerns and that the purpose of the research can be reasonably achieved only by using park resources. The National Park Service acts as the clearinghouse for research permit applications. After receiving a complete application, the NPS forwards the information to the appropriate owner(s) and remains the coordinator for research applications. The decision to issue permission for research is made by the owner.

### INVENTORY AND MONITORING OF NATURAL RESOURCES

The Boston Harbor Islands Partnership assembles baseline inventory data describing the natural resources under its stewardship, such as vegetation, fauna, and shoreline surveys, and monitors those resources at regular intervals to detect or predict changes. The resulting information is analyzed to detect changes that may require intervention and to provide reference points for comparison with other, more altered environments. The Partnership also uses this information to maintain—and, where necessary, restore—the integrity of natural systems, and to protect the public, the park staff, and the park infrastructure.

### INVENTORY AND EVALUATION OF CULTURAL RESOURCES

The Partnership identifies and evaluates the cultural resources of the park to complete the park's information base. The resulting inventories provide the data required for nomination of resources to the National Register of Historic Places; for general park planning and specific cultural resource management proposals; for land acquisition, development, interpretation, natural resource management, and maintenance activities; and for compliance with legal requirements. Inventory and evaluation includes, among others, historic structures reports for major structures, historic resource studies, cultural landscape studies of Long, Peddocks, and Thompson islands, archeological investigations, and ethnographic studies with emphasis on American Indian tribes.



Environmental teaching vessel, Boston Harbor

### SOCIAL SCIENCE STUDIES

The Partnership seeks greater understanding of park visitors and potential visitors, and their relations to park resources, through collaborative scholarly investigations. Social science surveys and research address the desire to expand the diversity of populations served by the Partnership.

### ETHNOGRAPHY

The Partnership facilitates a program of professional cultural anthropological research, designed to provide management with information about relationships between park resources and associated groups. Research is undertaken in cooperation with associated groups. Collaborative, interdisciplinary research on contemporary cultural systems and the resources of park-associated groups involves the groups in the design and

implementation of the research and the review of research findings to the fullest possible extent. The Partnership provides individuals or groups involved with, or directly affected by the research with copies or summaries of the reports, as appropriate.

#### **PRESERVATION OF DATA AND MUSEUM COLLECTIONS; PROTECTION OF RESEARCH POTENTIAL**

The Partnership takes or allows no action that would reduce the research potential of cultural resources without an appropriate level of research and documented data recovery. Because research involving physical intervention into cultural resources or removal of objects is a destructive process, research employs nondestructive methods to the maximum extent possible. In particular, for resources related to American Indian tribes, the Partnership seeks the views of tribal representatives as to a course of action. (Burial sites are treated separately in a resource protection policy on page 65.) All research data and objects collected become part of the park museum collection, which is held by various Partnership agencies, and others.

# VISITOR ACCESS, USE, AND ENJOYMENT

## CONTEXT

SEVERAL GOVERNMENT AGENCIES and nonprofit organizations offer the public a range of passive recreational and educational activities on the Boston Harbor Islands. During 2000, seven islands or peninsulas were staffed to serve park visitors: Georges, Lovells, Gallops, Bumpkin, Grape, and Peddocks islands; and Worlds End peninsula. Passenger ferry service is available to Georges, the hub island, from which water shuttle service is provided to the other five staffed islands. Other islands—Thompson, Deer, and Little Brewster—host visitors according to a schedule that depends on staff availability and scheduled boat excursions. (See Current Conditions [2000] chart, page 22.)

The overwhelming majority of ferry passengers remain at Georges Island, which has a small visitor contact station, a concession snack bar, interpretive signs, and ranger-led tours of Fort Warren. Peddocks contains a small visitor contact facility in a former military guard house. Of the eight islands and peninsulas routinely open for park visitors, only Georges has potable water (though not consistently reliable), along with a generator for electricity to run equipment and serve the resident island staff. All islands managed for visitors have toilets (mostly composting). All the staffed islands offer piers, picnic areas, trails, and guided interpretive walks. During the summer season, DEM and MDC have island managers who stay overnight on the islands.

Although The Trustees offer visitor access 365 days a year at Worlds End, mainland experiences for Boston Harbor Islands visitors exist primarily at seasonal visitor contact stations located at a kiosk on Long Wharf and at the John Joseph Moakley Federal Courthouse at Fan Pier on the Boston waterfront. Park information is available at the Hingham terminal, Hewitts Cove. DEM has its state park headquarters in a former shipyard building in Hewitts Cove; the facility has not been used to encourage visitors to gather and enjoy the waterfront or learn about the shipyard.

When Spectacle Island opens in 2003, with facilities designed to be fully accessible, it will have a handicapped-accessible pier; a small day-use marina; two beaches; five miles of trails; and a visitor information center of approximately 8,500 square feet including a cafe, exhibits, a souvenir stand, a caretaker apartment, and space for programs, lectures, and films (see Appendix 8). The island will be managed by a public-private partnership which will be contracted to operate island services on behalf of the City of Boston and DEM.

A total of approximately 60 campsites are available on Lovells, Peddocks, Bumpkin, and Grape for use under a reservation system. The campsites on the DEM islands (Bumpkin and Grape) are available through a computerized statewide system of reservations, whereas those on the MDC islands are reserved directly by phone with MDC.

Several tours of Boston Light by reservation have been offered by the Volunteers and Friends of the Boston Harbor Islands each summer since 1986. In 1999 the USCG and several Partnership agencies (NPS, Massport, Island Alliance) cooperated to start a pilot program to bring interpretive excursions to Boston Light on a more frequent basis. Volunteers from the Friends and the U.S. Coast Guard Auxiliary helped staff the program. Excursion visitors, together with visitors in groups that came by small craft, totaled approximately 1,000 in 2000.

Currently each managing agency determines the appropriate types of recreational and educational uses for the islands based on its respective organizational mission. The level of visitor use is regulated largely by the capacity and frequency of ferry and water shuttle service to the islands. With the desire to increase visitation to some islands, the potential for overcrowding and resource degradation exists. Notwithstanding the above issues, the park offers visitors a retreat within an urban environment and provides opportunities for the public to participate in appropriate resource-based recreational activities that satisfy a range of interests and skill levels

consistent with resource protection goals. It should be recognized that some appropriate uses may nonetheless have negative impacts on park resources. Uses in which mitigation measures (including closure) may be necessary may include: entering historic structures, which accelerates degradation and loss of historic fabric; and developing visitor service facilities and access terminals, which degrades natural habitat.

Surveys and focus groups were conducted in 2000 to begin to better understand park visitors and their desires, but detailed visitor profiles are not available to help managers provide quality visitor experiences. (Preliminary findings are presented in Appendix 17.) In general, current visitation reflects the region as a whole, but many types of residents, particularly urban residents, are not being served.

### ***Transportation***

From early May to mid-October, a passenger-ferry company under agreement to the state provides service for the public to Georges Island from three mainland points: downtown Boston, the south shore, and on the north shore. Historically the northern departure point was Lynn Heritage State Park, though in 2000 island service was provided from Salem. In 2000 south shore departures were from Hingham, Hull, and Quincy. Georges is the long-standing water transportation hub of the island system. The round-trip fare is \$8 for an adult and includes free water shuttle service among Georges, Bumpkin, Gallops, Grape, Lovells, and Peddocks islands. Vessels used for ferries hold 350 to 500 passengers, whereas water-shuttle vessel sizes range from 49 to 150 passengers. The current park water transportation system to the Boston Harbor Islands is confusing to visitors and inadequate for expected demand.

More than 80 percent of ferry passengers leave from Long Wharf in downtown Boston, where the Boston Redevelopment Authority leases space to boat operators. Most of the remainder leave from Hingham. Many municipalities around the harbor have expressed keen interest in having sites designated as departure points in the future.

Water-based recreation is currently incidental in managing the islands, but it may become a more important component of the islands' use. Moorings, for example, are desired by some groups but opposed by others. Cleaner harbor water is making fishing popular again, but recreational fishing facilities are limited. An undetermined percentage of island visitors, with estimates up to 50 percent, arrive by private boat and tie up at piers, or anchor offshore, or haul their craft onto beaches. Currently Boston Harbor has few public boat ramps with adjacent parking spaces, yet there is a growing demand from private boaters for these landings.

The region has a diverse transportation system that includes roads, rail, air, bicycle, pedestrian, and water facilities. Almost 40 percent of Boston residents live within a half mile of rapid-transit rail; more than 98 percent live within a half mile of public transportation. Hewitts Cove in Hingham is a water transportation node not only for island service but also for commuter boat service between the south shore and Boston, 26 trips carrying approximately 3,600 commuters daily in 2000.

Access for disabled people, which is not universally available throughout the system, is a provision made especially difficult by the steep grade changes that occur on boarding vessels in the daily fluctuations of tide of Boston Harbor. In a harbor with tides in excess of 10 feet, with predominantly antiquated piers, and many older vessels in the ferry fleet, there is minimal handicapped access throughout the island park. To accomplish universal access, retrofitting would be needed on mainland piers, island piers, and the vessels themselves.

Over the years of state park operations, several water transportation systems have been tried. In the 1980s, a state subsidy (no longer available) supported the water shuttle, and multiple private boat operators established services from a number of points on the mainland while state park managers coordinated docking among them. More recently, a sole operator was under contract to DEM and MDC to provide passenger service from the three mainland points and to provide free inter-island water shuttle service.

For the 2000–2001 period, the state has an agreement with the flexibility to add mainland departure points. The opening of Spectacle Island in 2003 will add another hub to the water transportation system. Additional islands that could potentially be connected to the ferry system with the opening of Spectacle include Deer and Thompson, with the possibility of adding mainland departure points from the north and south shores. Financial feasibility issues are ever present in a system that aims to keep fares affordable for families and to provide frequent service.

Road access is the only means available to Worlds End. Other islands accessible to the public by road are Deer and Nut, although policies by MWRA discourage park visitors from using automobiles out of concern for traffic through adjacent neighborhoods. Some islands are closed to casual recreational use because the managing agencies use them for other public purposes—in particular, Long, Moon, and Thompson islands.

### MISSION GOAL FOR VISITOR ACCESS, USE, AND ENJOYMENT

*An expanded base of visitors enjoys and is satisfied with the facilities, services, commercial operations and recreational opportunities offered on the Boston Harbor Islands and at associated mainland sites. The attributes of these offerings include their availability, accessibility, diversity, quality, and safety.*

### VISITOR ACCESS, USE, AND ENJOYMENT—GENERAL

The Partnership seeks to protect and preserve park resources unimpaired, while providing for public enjoyment of those resources. Because public enjoyment cannot be sustained if park resources are damaged or compromised, resource protection must necessarily be the Partnership’s paramount responsibility. Within that constraint the Partnership encourages increased visitation with appropriate distribution of visitors. Despite an expected increase in the number of visitors on the islands, managing visitors helps assure resource protection. People are encouraged to visit specific islands, and to pursue appropriate recreational, educational, and inspirational activities related to the resources found in these special environments. The use of the park is essentially resource

based, but nonconsumptive of resources. Particular effort is made to engage the public in stewardship of resources.

Visitor enjoyment and safety are affected by the quality of park programs, facilities, and services, whether provided by the Partnership or others. Diversity of facilities and services refers to a range of appropriate educational and recreational opportunities at various levels of expertise and interest for park visitors. Quality of facilities and services includes their being well presented, and orientation, interpretation, and education are knowledge-based.

Activities such as picnicking, hiking, exploring historic ruins, swimming, sailing, and kayaking are allowed in certain designated areas. Equipment for water sports may be available for rental, and instruction may be available at some hub islands and gateways. Fragile islands, such as Snake, Sheep, Green, Calf, Little Calf, and Hangman, are highly restricted to protect habitat.

Islands with regular shuttle boat service have park staff, visitor programs, guided and self-guided tours, orientation signs, interpretive signs, and composting toilets. Hub islands, served by ferries, have potable water, toilets, food service, and staff. On islands with camping, there are composting toilets and potable water. Islands not on the water shuttle circuit and served by excursions have few amenities and offer more adventurous visitation.

Because surveys have shown that the park is an unfamiliar, and unsought, destination for many people, even for longtime residents of the region, a park identity and marketing program (logo, park signage system, directional signage, incentives, etc.) is developed to raise the public’s awareness of the park. Youth, in particular, might be encouraged to visit.

### USE MANAGEMENT



Kayaking, Hingham Bay

Visitors are given appropriate information to encourage safe and lawful use of the Boston Harbor Islands and to minimize any resulting adverse impacts on natural, geologic, cultural, and historic resources. Each managing agency manages visitor use and whenever necessary regulates the amount and kind, and the time and place, of visitor activities following policies and standards embodied in this general management plan and subsequent implementation plans. The Partnership coordinates overall management planning within the park, including the distribution of visitors among islands to minimize resource impacts. Any restrictions on visitor use are based on a determination that such measures are consistent with the Boston Harbor Islands' enabling legislation and are needed either to prevent impairment of the values and purposes for which the park was established or to minimize visitor use conflicts. The park's enabling legislation states that recreational uses shall be consistent with the general management plan.

Conflicts in uses within the park are handled by the managing owner with guidance found in the management area descriptions and established carrying capacities.

To the extent practicable, public use management is based on the results of scholarly and scientific research, studies, and other support data, including public surveys and resource monitoring programs as part of the process of determining carrying capacity (see Carrying Capacity policy, page 67, and Appendix 10).

## ACCESSIBILITY

Accessibility includes affordability and convenience for diverse populations. Park facilities, services, and recreational opportunities are available at a sufficient number of mainland locations, at times of operation that fit visitors' schedule needs, and include multiple-season water transportation. The Partnership fosters access to the islands for residents of urban neighborhoods from departure points in or near their neighborhoods, where gateways can be established.

For special populations accessibility refers to their accommodation, where appropriate, when visiting park facilities or when participating in authorized recreational activities. The Partnership makes every reasonable effort to



Button Island

make the facilities, water transportation systems, programs, and services of the Boston Harbor Islands usable by all people, including people with disabilities. Visitor and management facilities and water transportation systems are made as physically accessible as practicable (depending on the nature of the area and the facility) to persons with visual, hearing, mobility, and mental impairments. One primary tenet of disability requirements is that, to the highest degree feasible, persons with disabilities should be able to participate in the same programs and activities available to everyone else. Accessibility is provided consistent with preserving park resources and providing diverse, high-quality visitor experiences. The determination of what is reasonable is made only after careful consultation with disabled persons or their representatives.

## USER FEES AND AFFORDABILITY

The Partnership makes every reasonable effort to offer water transportation systems, programs, facilities, and services that are affordable to a diverse range of visitors. Basic park services are available free of charge. (Basic park services are resource management, the protection of visitors, information and orientation, maintenance of park facilities, and interpretation of the park's significance.) Reasonable and equitable fees may be instituted for water transportation to the islands and for special services, and may be applied parkwide or at specific locations in the park.<sup>9</sup> The reasonableness of island access costs takes into consideration the combined ferry and land transportation costs, such as parking. It is recognized also that keeping fares moderate and the level of service high is directly related to the volume of passengers.

### PARK ACCESS AND CIRCULATION SYSTEMS

One of the mandates of the park's enabling legislation is to improve access to the Boston Harbor Islands using public water transportation. In developing policy to address this mandate, several assumptions were made about water transportation:

- that passenger ferry service will be expanded in phases over time
- that additional mainland departure points and routes are added when there is demonstrated demand
- that island docks, which are controlled by park managers, are open for commercial ferries under regulation by the park (dock) manager
- that ferry service is intended to be self-sustaining over time.

Consistent with preserving park resources and providing diverse, high-quality visitor experiences, the Partnership seeks to provide reasonable access to the park and to ensure that the means of circulation within the park and on the surrounding lands and waters foster convenient enjoyment of park resources.

The Partnership cooperates with the many agencies working to provide greater access to the harbor for the public. Special efforts are made to coordinate with public transit authorities for access improvements to land routes for visitors in inland communities to reach mainland gateways easily.



Boston Light tour, Little Brewster Island

### Gateways

Access to the islands is offered from many locations on the mainland. The level of services offered at these locations varies based on visitor demand and ability of the market to

respond. Some departure points provide a level of service that qualifies them to be designated as official gateways and included in the Mainland Gateway park management areas by the Partnership. Others feed visitors to the official gateways or, in some cases, directly to the islands.

The Partnership reviews requests for new gateways using the criteria established for Mainland Gateway management areas. A public process assures community input.

Mainland gateways are, by definition, ferry departure points with attendant information, orientation, and services for park visitors. The Partnership ensures that each official gateway is a scheduled stop on the park water transportation system; that it is promoted as a departure point or "entrance" for the national park area; and that there is park orientation and interpretation for visitors. Facilities are developed in collaboration with the facility owners. In exchange, the official gateway operators enter into agreements that provide revenue to the park through the Island Alliance (see Park Financing on page 86). Local municipal endorsement is a prerequisite for being designated a Boston Harbor Islands gateway.

### Park Water Transportation

The public water transportation system provides most visitors with access to the park. Water transportation contributes to the overall visitor experience. The ferry trip is pleasurable and educational, introducing the visitor to the harbor and to the islands. The service is comfortable, safe, and reliable. The system has sufficient infrastructure to handle a higher volume of visitors as the park grows.

Passenger ferries travel from mainland gateways to hub islands, where water shuttles operate in loops to several other islands. Ferries operate frequently in the summer, less frequently in spring and fall, with special trips in the winter.

Water shuttles make regular circuits once or several times a day among Georges, Spectacle, Deer, Gallops, Lovells, Grape, Bumpkin, and Peddocks. Less frequent boat service might become available to Rainsford, and Long islands.

Dock facilities, ferries, and water shuttles meet performance standards set by the Partnership. Dock facilities accommodate various sizes of vessels and provide safe access on and off the vessels. Performance criteria for ferry and water shuttle services address reliability of service

and schedules, guidelines to ensure resource protection, vessel wake and wash limitations, public safety, and standards for serving visitors with disabilities. The park water transportation system continues to be operated by private boat operators under agreement to the Partnership or its member agencies. It is monitored and evaluated periodically and adjusted as needed.

### Other Water Access

Public excursions to certain islands, such as Little Brewster and Great Brewster, may operate directly from a mainland gateway as well as from hub islands to



Ferry to the islands

supplement the park water transportation system. Privately operated water taxi service serving the islands is available to visitors on call.

Private boaters, who may account for nearly half of some islands' visitors, have appropriate facilities available such as moorings and dinghies.

### COMMERCIAL VISITOR SERVICES

Collaboration with the private sector is a basic tenet of the Partnership's management coordination of Boston Harbor Islands. Members of the Partnership may encourage commercial services that support the park mission and that provide appropriate recreational opportunities for visitors, contribute to visitor enjoyment of park resources, and support or achieve management objectives. Such visitor services may be essential at select locations, both within and without the park, to meet some of the revenue-generating needs of the Partnership. Commercial services on the islands are guided by a commercial services plan that the Partnership develops, which coordinates procedures throughout the park.

The number, location, and sizes of sites assigned on the islands for necessary facilities will be the minimum necessary for proper and satisfactory operation of the facilities, emphasizing compatibility of design; preservation of esthetic values, and natural and cultural resources; and integration of sustainable design concepts.

### HARVEST OF PLANTS AND ANIMALS BY THE PUBLIC

Park resources are not to be harvested without specific authorization. Permits from the managing agency may be issued for scientific and scholarly studies. Low-impact consumptive uses of park resources, such as berry-picking or the collection of empty shells for personal use, may be allowed by the managing agency. The Commonwealth of Massachusetts regulates hunting, fishing, and trapping throughout the state generally, and holds the responsibility for the management of fish and wildlife within the park specifically. Shellfish harvesting is permitted by municipalities. The Partnership works with appropriate state authorities so that wildlife management within the park conforms with National Park Service policies and the management emphasis of the park general management plan.<sup>10</sup> The Partnership works with regulatory and public safety agencies to avoid conflicts between hunters and nonhunters and to ensure that all park visitors have quality experiences.

### VISITOR SAFETY

The Partnership and its contractors and cooperators seeks to provide a safe and healthful environment for all visitors and employees. The Partnership works cooperatively with federal, state, and local agencies, organizations, and individuals to carry out this responsibility. Educating visitors to observe safety precautions is an important adjunct to other park management activities.



Pier for Water Shuttle

## SPECIAL EVENTS

Special events, such as sporting events, pageants, regattas, public spectator attractions, entertainment, ceremonies, and large encampments, may be authorized under permit by the Partnership agencies when there is a meaningful association between the park and the event and the events do not damage resources. The Partnership does not allow the staging of special events on the islands that are conducted primarily for the material or financial benefit of participants, that involve commercialization or advertising by participants, or for which a separate public admission fee is to be charged, unless the event is directly related to the purposes for which the park was established.



Halloween on the harbor

organization, charges a nominal fee for admission to Worlds End, which includes parking.

<sup>10</sup> Park Service regulations that prohibit the taking of wildlife are not applicable in this case because they apply only on lands and waters under concurrent or exclusive jurisdiction of the United States.

# EDUCATION AND INTERPRETATION

## CONTEXT

VISITORS HAVE BEEN able to take part in a range of interpretation and education programs on a seasonal basis. Most programs promote understanding of particular natural and cultural resources on individual islands. There has been relatively little park-wide interpretation. Some important sub-themes, such as American Indian history, have not been presented at all. An attempt has been made over the last few years to better orient visitors to the overall significance of the park through brochures, visitor contact stations, narrated talks on the ferries, and a park web site. Still, there remains a general lack of awareness of the significance of the Boston Harbor Islands in surrounding communities and among the population at large.

For the past several years, the NPS has operated an information kiosk in downtown Boston from where the majority of visitors depart for the islands and, in cooperation with the Island Alliance, a discovery center at the John Joseph Moakley U.S. Courthouse on Fan Pier where excursions leave for Boston Light. Staff from the NPS project office, which includes several Partnership agencies, have also provided park-wide orientation services on the ferries to the islands.

State park islands have been staffed during the summer season with rangers and volunteers meeting arriving ferries and water shuttles. Several state park islands offer self-guiding visits with brochures and/or wayside exhibits. (See Current Conditions [2000] chart, page 22.)

On state park islands there have also been daily ranger-led tours. The most extensive program of activities has been offered by the MDC at Fort Warren on Georges Island. MDC offers ranger walks such as “Mysteries of the Fort” and “Mothers, Daughters, and Sisters—Women at Fort Warren.” Other MDC events have included a Harbor Defense weekend, a Civil War encampment, a children’s fest, a Halloween event, and an opening-day concert organized with the help of the Island Alliance. DEM has offered a number of nature tours ranging from their “Wild Walks,” which explore the islands’ natural beauty, to

“Kidleidoscope,” a nature-oriented program run for children four to eight years old throughout the summer. Most interpretive activities and events are offered on summer weekends or on an occasional basis. There is relatively little regular programming for the casual weekday visitor, aside from tours of Fort Warren.

Other nature, historic, and recreational programs have been presented throughout the year, primarily in the summer. Visitors have been able to tour a working United States Coast Guard lighthouse at Little Brewster Island and a working wastewater treatment facility on Deer Island. Thompson Island has welcomed the public on summer weekends, while programs at Worlds End have taken place throughout the year and included bird walks, geology explorations, a summer solstice celebration, a butterfly walk, and tree identification walks. Other activities, offered by organizations such as the City of Boston and the New England Aquarium, include summer camps, concerts, historic re-enactments, boating, swimming, sunset cruises, fishing derbies, and lighthouse cruises.

There has also been educational programming aimed at school-aged audiences. School programs at the state park islands have been offered by the agencies in April, May, and June, with classes reserving time mostly on Georges, but there also have been occasional programs at Bumpkin, Gallops, Grape, and Lovells, and at Worlds End. Also available has been the *EnviroLab II*, a private scientific vessel which runs two programs a day for school groups from a pier at the University of Massachusetts, Boston (see vignette, page 104).

On Thompson Island, *Outward Bound*, nationally known for sea- and land-based expeditions for youth, offers programming year round for the youth of Boston. These programs are geared to experiential learning and personal growth, challenging participants to go beyond their perceived limits, work in concert with others, and make responsible choices. Several types of programs have been offered—“Connecting with Courage” for girls,

“Passages” for boys, and “Outward Bound Environmental Expeditions”—addressing environmental stewardship, all using the Boston Harbor Islands as their classroom. The Willauer School, a private middle school for urban boys, is operated by the Thompson Island Outward Bound Education Center through the school year, serving day students as well as boarders. Also, in partnership with the Boston Public Schools, Outward Bound delivers a year-round program called “Choices.”

Several Boston area schools, along with the Island Alliance, have been developing middle school curricula that use the harbor and harbor islands as the basis for science and historical studies. Many educational programs have been offered on the harbor by organizations that work closely with the Partnership, such as the New England Aquarium and the Hull Lifesaving Museum. The “Harbor Visions Crew,” a collaborative program of MWRA, Save the Harbor/Save the Bay, Roxbury Multi-Service Center, and the Children’s Museum, trains 15 to 20 youths each summer to conduct outreach programs to their peers with a curriculum related to the Boston Harbor environment. The MWRA school education program has provided sewer treatment, harbor, and water-quality curriculum to elementary, middle, and high schools since 1990 as part of the Boston Harbor Project. The 10-year effort has educated more than 75,000 future rate-payers about continued harbor improvements and the Boston Harbor Islands. And, the Boston Harbor Association has worked with MWRA to educate students about the Deer Island treatment facility.

Dozens of other educational organizations have operated programs in the harbor and on the islands, and dozens more have included some aspect of the islands and harbor in curricula without providing on-site experiences. Multiple themes have been emphasized, leading to a lack of clarity about what the islands represent thematically.

The Boston Harbor Islands national park area has great potential for illustrating aspects of our history and culture and for bringing urban dwellers to a better understanding of and appreciation for natural and cultural history and resources. It offers the chance to teach about stewardship and the principles of sustainability. The opportunity for education in this new park is one of its touchstones.

## MISSION GOAL FOR EDUCATION AND INTERPRETATION

*Park visitors and the general public understand and appreciate the resources and values of the island system, through the park themes: Islands on the Edge, Home in the Harbor, Portal to New England, and Renewal and Reconnection.*

## EDUCATION AND INTERPRETATION—GENERAL

The purpose of the Partnership education and interpretation program is to provide memorable educational and recreational experiences, and foster the development of a personal stewardship ethic. Understanding why the park exists and the significance of its resources grows from a visitor’s enjoyable park experiences. Satisfactory visitor experiences build public support for the Boston Harbor Islands. Understandings gained help visitors become active stewards of the resources. Partnership programs do this by forging a connection between the park resources, the visitor, the community, and park management. They are successful when they use the right combination of original objects and places, firsthand experience, and effective media. As used in this plan, the terms “visitor” and “park visitor” include anyone who uses a park’s interpretive and educational services, regardless of where such use occurs.

The Partnership fosters the organizational capability to deliver high-quality interpretive services within and among the Partnership agencies that provide public programming. Such capability is achieved through interpretive and educational services, media, ongoing research, planning, technical excellence in implementation, a well-trained staff, broad public input, and continual reevaluation. An interpretive plan, the first of which was developed concurrently with the general management plan, coordinates the park themes and the delivery of interpretive services. See Appendix 18 for the implementing actions that accompany this policy. A fully developed park interpretive and educational program offers visitors a variety of opportunities to gain understanding and appreciation of park sites and the values they represent. Such opportunities provide knowledge of park resources and the care needed to protect them, and allow visitors to participate in a recreational activity or a dialogue about park resources.



Children's program, Bumpkin Island

## INTERPRETATION AND EDUCATION FOR PARK VISITORS

The interpretive program seeks to provide for each visitor an interpretive experience that is enjoyable and inspirational within the context of the park's tangible and intangible resource values. Interpretation also reaches out to park neighbors and community decision makers to stimulate discussions about the park and its values in a local, regional, national, and international context. Quality interpretation is based on research about the history, science, and condition of the resources, and on research about the needs, expectations, and behavior of visitors. The interpretive program is constantly reevaluated and improved. It is the shared responsibility of all levels of park staff to deliver high-quality interpretive services. And in turn, interpretive services help park employees better understand the park and its resources.

On- and off-site information, orientation, interpretation, and education (such as written materials, signs, exhibits, multimedia presentations, personal services, and the Internet) support the park-wide interpretive program which helps visitors discover the most significant meanings in the park—the park themes—and helps them make connections between natural, geologic, cultural, and historic resources and intangible values that are attributable to the resources.

The Partnership delivers a balanced interpretive program that addresses the following elements:

**Information and Orientation.** Provide all park users with easy access to the information they need to have a safe and enjoyable park experience.

**Understanding and Appreciation.** Provide visitors with a variety of services and information to foster a deeper

appreciation and understanding of the resources and values of Boston Harbor Islands as well as of its regional context, and the larger state and national park systems.

**Protection.** Provide visitors with a variety of opportunities to interact safely with and enjoy the resources of the park, while protecting those resources from overuse, unintentional damage, vandalism, and theft.

**Participation and Skill Development.** Provide a variety of services and opportunities to aid and motivate visitors to develop park-oriented recreational skills when appropriate.

**Dialogue.** Provide a means for the general public, park neighbors, and park managers to communicate their thoughts and desires to each other. Make available opportunities for dialogue among Indian tribes and nonnative people over the historic use of the harbor. Provide a means for open communication among the general public, park neighbors, and park managers over the use of the park.

**Education.** Provide interested users and educational groups with the information necessary to develop a thorough understanding of the park's resources, its regional, national, and international context, the roles of the owners, and the entire national park system's significance and values.



Island Studies

## OUTREACH, ENVIRONMENTAL EDUCATION, HERITAGE EDUCATION SERVICES

The Partnership encourages outreach services and employs them to disseminate park and resource information and interpretation beyond park boundaries, including members of the public who are unable to make on-site visits.

Environmental education and heritage education services also encourage and provide information and assistance to

local school students and teachers, organized groups, and educational institutions that wish to use park resources in their curricula. In all cases, the contents of special environmental education and heritage education programs are relevant to the park resources. Curriculum-based programs are developed through Partnership and Advisory Council members for regional and national audiences.

The Partnership uses electronic communications, such as the Internet and long-distance learning, to enhance the park's informational, orientation, interpretive, and educational programs. The Island Alliance maintains a site on the World Wide Web on behalf of the park and the Partnership. The world of electronic communications is rapidly and constantly changing, and the Partnership takes advantage of developing new technologies that have the potential for even greater service to the visiting public.



Marine researcher and educator

### **INTERPRETATION FOR SPECIAL POPULATIONS**

The Partnership seeks to ensure, to the greatest extent possible, that interpretive programs provide equal opportunities to all visitors including the disabled, senior citizens, children, nontraditional park users, and international visitors.

# PARTNERSHIP MANAGEMENT AND OPERATIONS

## CONTEXT

THE BOSTON HARBOR ISLANDS PARTNERSHIP brings together formally a dozen government and private entities for a common purpose. Along with a commitment to the islands, each entity brings its own culture, operating procedures, staff, and financial resources. The Partnership has begun to coordinate overall direction for park management, and its committees have been serving as information-sharing forums. Federal, state, and municipal jurisdictions overlap across the island system, however, and management actions have not yet become a cohesive parkwide system. The various planning, management, accounting, reporting, and resource information systems have been operating according to individual agency practices and preserve each land owner's responsibility to respond to particular circumstances. Lacking legal authority to compel actions, the Partnership has operated by consensus. At times, however, one land-owning partner could decline to accept the Partnership's overall policy for that owner's portion of the park. Binding commitments between partner agencies, such as memoranda of agreement, do not exist. Consensus is the Partnership's mechanism for achieving parkwide consistency.

Full-time permanent staff for park administration, visitor services, and resource protection have been employed by NPS, the U.S. Coast Guard, DEM, MDC, MWRA, Thompson Island, The Trustees, and the Island Alliance, and seasonal staff have aided most of these agencies. The approximate number of full-time equivalent park staff employed directly in operations and visitor services for the Boston Harbor Islands in 2000 was: NPS – 4, Coast Guard – 4, DEM – 6, MDC – 10, MWRA – 2, Thompson Island – 15, The Trustees – 1.5, Island Alliance – 2, for a total of approximately 45 full-time equivalent personnel. Seasonal employees added approximately 32 full-time equivalent staff. The Volunteers and Friends of the Boston Harbor Islands contributed their time to the Partners.

DEM, MDC, Thompson Island, MWRA, and The Trustees have maintained equipment for managing their properties. Most organizations have maintained boats for

transporting their employees, and MDC had two landing craft in 2000 for transport of vehicles and equipment and beaching on islands without piers.

Public safety has been handled by many entities: Massachusetts State Police, Massachusetts Environmental Police, agencies that manage islands, municipalities, harbor masters, and the U.S. Coast Guard. It is not clear to the public where responsibility and authority lie. While there is no central coordinator, an example of consensus at work is the Partnership committee on public safety, which has furthered coordination and communications among the nine island owners, ten law enforcement jurisdictions, and three counties, resulting in less duplication of effort.

Several Coast Guard organizations exist within the harbor area. Located on the North End waterfront, just north of Battery Wharf, is the Group Boston command which is responsible for Coast Guard-managed islands within the park. Also located at this site is the Coast Guard Marine Safety Office and the large Integrated Support Command. Large ships moor here along with aids-to-navigation servicing vessels. Located in Hull at Point Allerton is a multi-mission station where small Coast Guard response boats are located. In the harbor, the Coast Guard is responsible for oil spill response, navigation and marine traffic management, recreational boating safety, search and rescue, and enforcement of all laws and treaties on waters subject to federal jurisdiction.

The 1996 enabling legislation created a new method for funding this unit of the national park system that mandates a limit on federal funds in the ratio of three-to-one, nonfederal-to-federal dollars. The Partnership is developing a system to account for appropriate park expenditures, in keeping with the law's requirement for a combination of nonfederal and federal funding for the park. Approximately \$2 million has been spent for park purposes in federal funds, compared to just over \$39 million in nonfederal funds. (Amounts are for the period 11/17/96–12/31/99.) Of this nonfederal total,

approximately \$29.6 million was for public access related improvements to Deer and Nut islands as part of the Boston Harbor Project, \$6.2 million was from the Commonwealth of Massachusetts, \$1.1 million was from municipalities, and \$3.2 was from nonprofit organizations. The Island Alliance raised more than \$2 million in new funding to support the park between 1996 and 2000.

Although the Partnership does not have its own budget, there are costs associated with maintaining it, borne mostly by the NPS project office acting as staff to the Partnership. Each agency follows its own financial reporting requirements. Some members of the Partnership can identify all expenditures associated with the Boston Harbor Islands national park area, and some cannot. For instance, the Commonwealth funds DEM and MDC without a breakdown for the Boston Harbor Islands park because each state agency is responsible for and funds properties outside of the island system. This makes it difficult to identify precise funds for this park. Park accounting systems are also complicated by different fiscal years (the state fiscal year begins July 1, whereas the federal fiscal year begins October 1, and the not-for-profit agencies have other fiscal years). Typically, state funds for each summer season are not certain to be available to DEM and MDC until the budget is passed in the late spring or summer, making it difficult to hire seasonal staff with enough advance time to prepare for a full season.

It is estimated that the current annual operating cost for the Boston Harbor Islands national park area is approximately \$4 million. Existing agency practices and policies complicate the expenditure of funds on park-wide projects; agencies are legally bound to spend appropriated funds only on properties that they own.

Laws and policies on both the federal and state levels address land protection for the island system. The official map (see map, Boston Harbor Islands, page ix) shows the areas included in the park; landside points required for access, visitor services, and administration are named in the law. The park's 1996 enabling legislation leaves jurisdiction over harbor waters unaffected by the park and thus retains it in the purview of many federal, state, and local agencies.

### Partnership Management and Operations Goal

*Each member of the Boston Harbor Islands Partnership is committed to the funding, operation, and development of the park using best management practices, systems, and technologies to accomplish the park's mission.*

### PARTNERSHIP MANAGEMENT

The Boston Harbor Islands are owned by nine separate governmental or institutional landowners. Consistent with the enabling legislation (see Appendix 3), the park is managed in partnership in accordance with applicable state laws and federal laws applicable to the national park system. Islands continue to be managed by existing managers, with overall policy established by the Boston Harbor Islands Partnership. The policies identify standards for island management and the Partnership encourages all island owners to follow those standards in the spirit of collaborative park management.



New Visitor Kiosk, Long Wharf

Each island open to the public has resource protection, interpretive, maintenance, and administrative staff necessary to maintain parkwide standards. Over time, more islands will become available for visitors, as funds increase to operate more areas, and as the demand grows from the public. Being consistent with management areas and carrying capacities, the Partnership, in the long term, works with individual owners to remove obstacles to opening new sections of the park to the public.

Coordination among island managers is done by the Partnership, operating largely through committees. To be responsive, efficient, and accountable, the Partnership integrates its planning, management, research, accounting,

reporting, and other communications systems. Systemwide initiatives, including revenue sharing, regardless of the jurisdiction within which the activity takes place, are encouraged. Partnership agencies pursue maximum public benefit through contracts, cooperative agreements, contributions of time and money, and other alternative approaches to support park operations.

Staff support for the Partnership and the Advisory Council is provided primarily by NPS with support by Partnership agency personnel as available.

The Partnership approaches decision making through discussion and cooperation among members and is committed to an open and publicly accountable method of conducting its business. The Partnership makes best-faith efforts to develop memoranda of agreement defining management principles that the Partnership agencies would follow, including a mechanism for dispute resolution.

## **MANAGEMENT PLANNING**

The Partnership adopts the four park planning processes applied to all units of the national park system: general management planning, strategic planning, implementation planning, and park annual performance planning. General management planning is the first phase of tiered planning and decision making. It focuses on why the park was established and what resource conditions and visitor experiences should be achieved and maintained over the long term. Like the general management plan, strategic and implementation plans are developed under the review of the Partnership. The Partnership also assists with individual owners' long-range planning for their islands. Since the Advisory Council of the Boston Harbor Islands serves as the main outreach arm of the park, that body participates in or leads public reviews of park plans.

### **General Management Plan Review**

The Partnership reviews this general management plan every 10 years, or sooner if conditions change more rapidly. Periodically reassessing the plan gives stakeholders the opportunity to reaffirm the park's role in the nation and in the region, and to reevaluate whether the kinds of resource conditions and visitor experiences being pursued are the best possible mix for the future. If conditions and management prescriptions governing most of the area covered by the plan remain essentially unchanged,

then the general management plan may be amended or revised, rather than a new plan prepared. Approval of amendments or revisions follows the process stipulated in the park enabling legislation for approval of the general management plan. Proposals for plan changes are accompanied by supplemental environmental analysis and public involvement.

### **Strategic Plan**

The park strategic plan builds on the general management plan—the park mission, goals, and management areas. This process analyzes the park's capability to set and meet long-term goals in the foreseeable future through an assessment of its fiscal and human resources. The plan identifies anticipated funding sources for proposed actions. The assessment also includes a description of the condition of the natural and cultural resources in the park and the capability of the park's infrastructure to meet long-term goals. Through the park's strategic planning process changing conditions of the islands can be evaluated periodically as new opportunities emerge for resource protection and visitor use. Should the Partnership decide, through its strategic planning process, that a major shift in direction of emphasis is needed, then the strategic plan identifies the need for a new general management plan, or a general management plan addendum or amendment. Strategic planning may also identify the need for more detailed implementation planning. (The park's first strategic plan is being developed concurrently with the general management plan.)

### **Implementation Plans**

Implementation planning focuses on how to implement activities and projects needed to achieve the management prescriptions identified in the general management plan and in the complementary long-term goals of the park strategic plan. The contents of implementation plans may vary widely, depending upon whether the plan is directing a specific project (e.g., reintroducing an extirpated species or developing a trail) or an ongoing activity (e.g., maintaining an historic structure or setting and maintaining a standard for a quality visitor experience). Implementation planning is generally deferred until it is clear that the activity or project is to be undertaken within two to five years.

Deferring implementation planning helps ensure that decisions about how to best achieve a certain objective are relevant, timely, and based on current data. Implementation

plans are developed with active participation of relevant Partnership agencies.

Development of an implementation plan may overlap strategic planning, if appropriate for the purposes of planning efficiency or public involvement. However, the decisions needed at the general and strategic planning levels precede—and direct—more detailed decisions regarding projects and activities to accomplish goals. Any decisions calling for actions having the potential to significantly alter the human environment require environmental analysis. Because many issues involving environmental quality and cultural resources will be resolved through implementation planning, the environmental analysis begun during the general management planning may continue as part of implementation planning.

### EVALUATING ENVIRONMENTAL IMPACTS

The park operates under many laws that require consultation and review by outside parties, notably the National Environmental Policy Act of 1969 (NEPA), the Massachusetts Environmental Policy Act, and Section 106 of the National Historic Preservation Act of 1966. In compliance with environmental laws, the Partnership ensures that the environmental costs and benefits of proposed management actions are fully and openly evaluated before actions are taken that may impact the human environment. Under the National Historic Preservation Act proposed actions are evaluated as to their potential effects. These evaluations include appropriate participation by the public; application of scholarly and technical information in the planning, evaluation, and decision-making processes; use of Partnership knowledge and expertise through interdisciplinary teams and processes; and aggressive incorporation of mitigation measures, pollution prevention techniques, and other principles of sustainable park management. (Specific park policies also address the federal Native American Graves Protection and Repatriation Act [NAGPRA], and appropriate state and tribal laws regarding Indian burial sites and funerary objects.)

### PARK FINANCING

The Partnership does not have its own budget; rather, it relies on the individual Partnership agencies and cooperators to fund park operations and development.

Funds to carry out the park's mission are from government appropriations, philanthropy, use fees, income from commercial operations, and revenue-generating activities (such as sales of island-related products).



Digesters, Deer Island

When the Congress created the Boston Harbor Islands national park area, it also created a new funding method. The park operates under the requirement that federal funding for the park be matched by nonfederal funding. The nonfederal share may be in the form of cash, services, or in-kind contributions. Federal funds that may be appropriated over time must equate to a ratio of one federal dollar to at least three dollars from other sources. This does not mean that there is an automatic federal contribution of one dollar for every three nonfederal dollars spent on the park. The effect of the legislation is to require nonfederal spending at Boston Harbor Islands (in contrast to traditional national parks), and limit federal support to no more than one-quarter of the total. (See Appendix 11, Financial Accountability Guidelines.)

It is explicit in the 1996 law establishing the park that the jurisdiction of the Commonwealth of Massachusetts, or any of its political subdivisions, remains unchanged. Therefore, responsibilities to protect park resources and provide visitor services that existed prior to establishing the national park area continue as part of the partnership management of the park. All federal monies spent in support of the park count toward the federal spending limit of one-quarter of the total. Federal appropriations are primarily through the National Park Service. Also included is U.S. Coast Guard spending for resource protection and visitor services on Little Brewster Island.

Each of the other Partnership agencies, except the Advisory Council, provides the nonfederal portion of park financing. Appropriations from the Commonwealth are primarily through the Department of Environmental Management and Metropolitan District Commission

budgets. Public agencies are expected to fund large infrastructure projects throughout the system. Municipal support is also part of the nonfederal portion of park financing. This includes spending by the City of Boston for Rainsford Island and portions of Spectacle and Long islands.

Partnership members support each other to obtain additional financing. It is understood that new sources of revenues will not offset base level support provided by appropriations. New funding is sought through fund raising, fee retention, and revenue generation to support the mission and operation of the park, as allowed by law. The Island Alliance is the preferred vehicle for revenue generation, expenditure, and management in support of the other Partnership members. The Partnership follows the relevant regulations of the Office of Management and Budget, which cover cost and auditing principles for state, local, and Indian tribal governments, and nonprofit organizations.

Given the nature of the funding sources, no firm public commitments can be obtained in advance. Typically legislative bodies do not make long-term commitments, and no federal or state funding is set aside for the park beyond appropriations. Although anticipated funding sources may be identified in the park's five-year strategic plan, projects are initiated when funding is assured.

### **Donations and Fund Raising**

The Partnership recognizes that the park requires funds from philanthropic sources for park operations and capital improvements, and that the Island Alliance has been established to raise such funds. Fund raising is carried out in support of the park's general management plan and strategic plan. The Partnership reviews and approves advertising, promotional, and marketing materials associated with corporate donations for appropriateness and accuracy.

### **Revenue Generation**

Successful implementation of this plan is contingent upon increasing the financial contributions from all private sources, not just donations. The park funding model requires a more entrepreneurial approach to programming than that employed in traditional parks. The Island Alliance is charged by the Partnership with generating private revenue to support the park. Overall policy coordination and priorities are set by the Partnership. The Partnership supports the Island Alliance's initiative in developing an

economic plan for the park in concert with the National Park Service. It is recognized, however, that revenue generation builds over time and that in the early years, the park is nearly completely dependent on public funds and private donations.

Revenue is expected from sales in visitor centers and gateway areas, rentals of equipment for interpretation or recreation, boat excursions with interpreters, food sales, and events such as concerts. Additional sources of funds might be available through contributions of private developers with onshore developments that exceed permitted limits, by having mitigation, or "offsets," directed to, for example, subsidies for water transportation or other island-related improvements.

When revenues are being generated on the islands, each island owner uses revenue first to maintain its own island-related operations. "Excess" revenues are pooled in a parkwide fund for the Partnership to be administered by the Island Alliance acting as the fiscal agent. Legislation at the state level is necessary to enable the creation and retention of fees by state and local agencies as well as for the opportunity for long-term leases to attract private investment.

The following criteria are used to evaluate proposed revenue generating activities on the islands. They inform decisions regarding mainland proposals.

- **resource protection and preservation** – will not impair park resources or associated values
- **management areas** – will not impinge on areas of natural features or managed landscape emphasis
- **construction standards** – both new construction and adaptive reuse of existing structures adhere to Partnership development guidelines
- **carrying capacity** – consistent with the carrying capacity of the proposed location
- **program relevance** – activities with a direct thematic relationship to the islands are preferred
- **linkage or synergy** – activities with potential for direct linkage or synergy with other projects and programs affecting the islands are preferred
- **impact on cost of basic park services** – complies with the Partnership policy of providing basic park services free of charge to visitors

- **affordable access** – basic water transportation fees to the islands will be consistent with the Partnership policy that such services be affordable to a diverse range of visitors
- **park water transportation** – future contracts with water transportation providers are structured to ensure that as visitation increases, so does funding to the park
- **program affordability** – most revenue generating programs and projects are affordable to most citizens of the region
- **constituency building** – revenue generating programs enhance the park’s identity and expand its constituency



Lobster boat, Boston Harbor

### PRIVATE ECONOMIC ACTIVITY

In financing a portion of the park with private funds, the Partnership recognizes the vital role of private enterprise. It supports existing economic activities within and immediately beyond the park. The Partnership encourages minority- and women-owned businesses, consistent with all programs receiving federal or state funding. The kind of private economic activity supported include water transportation services, park-related sales items at gateways, appropriate interpretive excursions by the private sector, and relevant small-business activities in surrounding communities, as well as other means. Through the Partnership’s leadership the private sector supports the principles of resource stewardship and adherence to the principles contained in the general management plan.

### PARK DEVELOPMENT

Park infrastructure is the only development envisioned for the Boston Harbor Islands national park area; it should be consistent with at least one of the purposes below and leave park resources unimpaired.

Infrastructure (park facilities) is built for the following purposes:

- to protect and preserve park resources
- to support park programs and education
- to provide visitor safety or amenities
- to accommodate an increasing number of visitors
- to generate revenue for park programs and operations
- to support park management and maintenance

Any park development supports park goals. Development costing more than \$500,000, which the National Park Service funds or for which it is expected to assume operational or maintenance responsibility, is reviewed by the nationwide NPS Development Advisory Board.

### Development Guidelines

The following infrastructure development guidelines meld National Park Service policy with more specific guidance for the Boston Harbor Islands national park area. They guide all new construction in the park. “Infrastructure” includes structures, paving, program facilities, administrative facilities, and utilities.

### LOCATION

In general, new construction takes place in the park where infrastructure already exists or previously existed. Major facilities are placed only in appropriate management areas established by the general management plan and after consideration of carrying capacities.



Spectacle Island under development

## SCALE

Scale of the islands is respected. Facilities are integrated into the park landscape and environs so as to cause minimum impact. Development does not compete with or dominate park features or seem out of scale with individual islands. A cohesive design theme reflects the purpose and character of the park as a whole. Standard designs and components may be used, but they are adapted as appropriate to the specific site and conditions as part of the design process.

## PLANNING AND DESIGN

Planning and design of park infrastructure is accomplished by interdisciplinary, inter-agency teams constituted to meet the environmental, programmatic, and technical requirements of the project, and to help unify the park visually and thematically. In areas of historic preservation emphasis, new visitor or administrative structures harmonize with the area and its cultural resources in proportion, color, and texture. No attempt is made to duplicate or mimic a historic design, nor is any modern construction to be portrayed to the public as historic. Any decisions calling for actions having the potential to significantly alter the environment require formal analysis of alternatives based on reliable data about the natural and cultural resources of the park. Public input is sought at the earliest practical stage of planning and design.

## SUSTAINABILITY

Any development is programmatically and physically sustainable, with principles of conservation applied. Uniform standards for piers and water transportation contribute to sustainability by encouraging the use of standardized vessels.

## LIFE-CYCLE COSTS

All costs, including initial construction costs, ongoing maintenance costs, and operating costs, are considered in the planning, design, and construction of facilities.

## ADAPTIVE USE

Adaptive use of historic and nonhistoric buildings for uses such as visitor centers, hostels, and administrative offices is generally considered before new construction, assuming that an existing building can meet park objectives and its use is not an intrusion on significant natural or cultural resources. Use of historic buildings complies with all laws, regulations, and policies regarding the treatment and use of cultural properties.

## RESTORATION

Natural, cultural, and historic features of the park are restored only after research and planning have determined the appropriateness of restoration.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Visitor and management facilities and water transportation systems are made as accessible as is practicable, depending on the nature of the area and of the facility, to persons with visual, hearing, mobility, and mental impairments. In conforming to the policy of accessibility, emphasis is placed on ensuring that disabled persons are afforded experiences and opportunities with other visitors to the greatest extent practicable.

## UTILITIES

Utilities are as unobtrusive as possible and pose the least possible resource impact; municipal or other utility systems outside the park are used whenever economically and environmentally practicable; where possible and authorized, cost-sharing with municipalities and others is done in meeting new, expanded, or replacement park utility needs. An exception to unobtrusive utilities are those that might be highlighted to reveal their function, such as those using renewable energy, an important aspect of education.



Grape Island interpretive sign

## Sign System

The Boston Harbor Islands Partnership presents a unified sign system to Boston Harbor Islands national park area visitors. This policy integrates the following aesthetic and functional principles:

- provide clear, concise, and consistent communication to visitors in order to improve the quality of the park experience
- help establish the identity of the national park area with the public, while at the same time recognizing the essential role of the island-owning Partnership agencies
- employ quality graphic design that is legible, timely, and inviting
- be sensitive to the park environment by avoiding sign proliferation and using minimal sign size, harmonious colors, and an overall simplicity
- accommodate systematic change and simultaneously retain continuity for visitors
- procure, manage, and maintain signs cost-effectively over their life cycle
- demonstrate sustainable design by selecting materials for long life and utilizing reusable and recyclable materials whenever possible

The Boston Harbor Islands sign system is divided into five groups based on function.

- Orientation panels for park entry portals and major island destinations — help visitors plan their trip to the park and their visit to a particular location in the park through text and graphics.
- Dock-side identity signs for islands with docks — display the island name in order to reassure visitors that they are about to land on the island at which they expected to arrive.
- Island welcome signs on islands that are served by park water transportation — identify the park, the island, and the owner or managing agency in a single unit near the dock.
- Wayside interpretive exhibits for islands with regular visitation — inform and educate visitors about island resources with minimal text and powerful graphics at significant island features.
- Visitor guidance panels are planned on islands as appropriate — they consist of small postings of information, directions, and instructions; rules and regulations; and resource protection and visitor safety messages.

More specific sign standards implement this policy. Owners and managers utilize Partnership standards for new signs as they are needed on individual islands; new signs are installed as funding becomes available. The standards deal with graphic design, sign architecture or hardware, and the general purpose of the five groups described above. The standards apply only to content regarding the park-wide elements of the orientation signs. The content of island-specific messages is the purview of the responsible agency. Specific location of signs is also the responsibility of individual island owners/managers, consistent with the purpose of each sign.

### **SUSTAINABILITY AND ENVIRONMENTAL LEADERSHIP**

The Boston Harbor Islands Partnership demonstrates environmental leadership and a commitment to the principles of sustainability. The Partnership agencies lead by example in all aspects of park management including policy development; park planning; park operations; natural and cultural resource management; interpretation and education; facilities design, construction, and management; and commercial services. Infrastructure, programs, and functions are models for the use of sustainable design, planning, construction, development, access, resource use, and maintenance. To ensure appropriate commitment, the Partnership agencies adopt sustainable practices on the islands over time. Collaborations foster environmentally, socially, and economically compatible solutions.

### **MAINTENANCE**

The Partnership conducts a program of preventive and rehabilitative maintenance and preservation to protect the physical integrity of facilities so as to provide a safe, sanitary, and aesthetically pleasing environment for park visitors and employees and to preserve or maintain those facilities.

### **SOLID WASTE MANAGEMENT**

The Partnership encourages environmentally sound solutions to solid waste management. All waste management decisions are based on a consideration of economics, proper use of resources (both personnel and physical), safety, effect on the total environment, and other factors of sound engineering and are in compliance with all federal, state, and local regulations regarding avoidance, amelioration, or elimination of environmental pollution.

## HAZARDOUS MATERIALS AND TOXIC WASTE

The Partnership makes efforts to avoid hazardous material incidents and to control or minimize them should they occur. Prevention includes acquisition of minimum quantities of hazardous materials; selection of the least toxic materials; implementation of safe use, storage, and disposal practices; recycling of spent materials; and development of emergency response programs.

## ENERGY MANAGEMENT AND RECYCLING

The Partnership conducts its activities in a manner consistent with the principles of sustainability with reference to energy use. It demonstrates a preference for, and promotes, renewable energy as well as ensuring that energy is used wisely and economically. It encourages energy upgrades to include renewable technologies. Appropriate measures, such as use of biodegradables, recycling, and reuse, are taken to minimize solid waste.



Battery Jewel, Outer Brewster Island

## PUBLIC HEALTH AND SAFETY

The Partnership reduces the risk of illness and disease by protecting the health and well-being of park employees and visitors through the elimination or control of disease agents and modes of their transmission to humans.

## PARK BOUNDARY AND LAND PROTECTION

The Partnership agencies use all appropriate state and federal authorities to ensure that lands within park boundaries are protected. No federal funds may be used for land acquisition, except “to acquire, in partnership with other entities, a less than fee interest in lands at Thompson Island. . . .”<sup>11</sup>

Boston Harbor Islands national park area is “comprised of the lands, waters, and submerged lands generally depicted on the map” incorporated in the 1996 enabling legislation. The extent of island land included in the boundary is to mean low water unless otherwise specified in the deed for a particular property. The law’s reference to “lands and waters” refers to “waters” occurring within the land areas, such as ponds or wetlands, rather than the waters of Boston Harbor. There is language as well allowing the expenditure of federal funds on the mainland for park infrastructure (like piers and information kiosks) that may be needed for access, visitor services, or administration. The landside points specifically mentioned in the law are:

- in the City of Boston—along its Harborwalk (a walkway along the water’s edge); at Long Wharf, Fan Pier, Old Northern Avenue Bridge, the Custom House, and the John F. Kennedy Library; and at Charlestown Navy Yard,
- in the City of Quincy— at Squantum Point, Marina Bay, the Fore River Shipyard, and Town River
- in the Town of Hingham—at Hewitts Cove
- the Town of Hull
- in the City of Salem—at Salem National Historic Site
- in the City of Lynn—at the Heritage State Park.

Several of these locations are controlled by members of the Partnership.

The park’s enabling legislation leaves jurisdiction over harbor waters unaffected by the park and retains it in the purview of many agencies.

### Boundary Adjustments

The Partnership evaluated the boundary of Boston Harbor Islands national park area and determined that minor boundary adjustments are necessary and desirable to carry out the purposes of the park. As specified in the 1996 enabling legislation, minor revisions of the national park area boundary may be made, after advising Congress, by publishing a revised drawing or other boundary description in the Federal Register.

The following properties are legitimate components of the island system and contribute to the overall goals of the park: Nixes Mate, Shag Rocks, Snake Island, and Webb State Memorial Park (see map, page 93). The total acreage in these four areas is less than two one-hundredths the size of the existing Boston Harbor Islands national park area.

Each of these sites is topographically similar to and proximate to other islands in the park and contains resources that are related to the park's purpose and should be protected. All owners support the inclusion of these properties, and none of them would be purchased.

**Nixes Mate**, once 12 acres and now a fraction of an acre, is a channel marker with a distinctive black-and-white buoy. It is the site of sea lore, including legends of captured pirates, and its image forms the logo for the Volunteers and Friends of the Boston Harbor Islands. It is maintained by the Coast Guard solely as a channel marker.

**Shag Rocks** is a 1.3-acre cluster of bedrock ledges lying east of Little Brewster Island. It contains bird nesting areas and is physically inaccessible but visually prominent from the other Brewsters. Shag Rocks, with no deed of ownership, is regarded as within the purview of the Coast Guard at Little Brewster, and has no maintenance needs.

**Snake Island** is a largely inaccessible eight-acre island in Winthrop containing mud flats and rich bird habitat. It is owned by the Town of Winthrop, which supports its inclusion in the national park area.

**Webb Memorial State Park** is a 15.5-acre site on a peninsula adjacent to Hewitts Cove containing one drumlin, a gravel beach, a meadow, small scrub growth, trails, and a parking lot for fewer than 25 cars. It is the site from which American patriots fired on British troops in the "Battle of Grape Island" in 1775. It was acquired by the Department of Environmental Management in 1977 from the federal surplus property program, as a former Nike missile site. DEM administers Webb, which receives approximately 50,000 visitors per year, as part of its Boston Harbor Islands properties.

11 16USC §460kkk

## PROPOSED BOUNDARY



(click graphic to enlarge)

# EXTERNAL COOPERATION

## CONTEXT

TWO MEMBERS OF THE BOSTON HARBOR PARTNERSHIP come from the Boston Harbor Islands Advisory Council, which was authorized by the park's enabling legislation to represent constituents of the island system. Another Partnership member, the Island Alliance, which has responsibility to generate private funds for the park, brings in representation from the private sector. Tourism organizations, museums, cultural institutions, environmental groups, local governments, public schools, and more than 100 colleges and universities in the metropolitan area also possess skills and services to assist the Partnership. Volunteers, both as individuals and through organizations, can contribute to successful management of the park. Activities that take place outside of park boundaries, and are not managed by the Partnership, may have profound effects on resources within the park.

A number of cities and towns surrounding the harbor, including Quincy, Hingham, Hull, Revere, and Winthrop, are listed in the legislation or have expressed interest in working with the park. Several municipalities on the harbor rim have important, long-standing relationships with Partnership agencies. Although only Worlds End has been fully open to park visitors in all seasons, the managers of islands that will open after 2000, such as Deer and Nut, have agreed to encourage water rather than road access and thus lessen traffic impacts to neighborhoods. DEM, which has had a long-term presence at Hewitts Cove, where a large-scale mixed residential and commercial development is proposed, has been working closely with the community on the planning.

In addition to municipalities, the Partnership maintains important relationships with many nongovernment and other government entities (see the list in Appendix 2). Among them is the Volunteers and Friends of the Boston Harbor Islands. Celebrating 21 years on the islands, the Friends is a nonprofit environmental and educational organization that encourages public use of the islands, balanced with the need to protect the natural and historic environment.

Members of the public, some representing yacht clubs and boating organizations, suggested during the planning process that access for small craft should be provided in the park. Suggestions for improvements were typically outside the jurisdiction of the Partnership. Yet, the Partnership can cooperate with others to improve recreational boating access by increasing the number of small-craft launch sites and by providing public moorings near the islands.

### EXTERNAL COOPERATION GOAL

*Park management is coordinated by the Boston Harbor Islands Partnership in cooperation with Indian tribes and historical, business, cultural, civic, environmental, recreational, and tourism organizations. Cooperators and individuals support the park mission through contributions and creative initiatives.*

## CONSULTATION

The Partnership is committed to the open and meaningful exchange of knowledge and ideas to enhance (1) the public's understanding of park resources and values, and the policies and plans that affect them and (2) the Partnership agencies' ability to manage the park by learning from others. Open exchange requires that the Partnership seek and employ ways to reach out to, and consult with, all those who have an interest in the Boston Harbor Islands.

Toward this end, the Partnership establishes and maintains continuing relationships with outside parties to facilitate future collaboration, formal consultations, and the ongoing informal exchange of views and information on park matters. Park-specific protocols and formally adopted procedures guide consultation between the Partnership and the federal, state, and local authorities that administer laws and regulations within the park boundary. These agreements take into account the unique management structure of the Boston Harbor Islands national park area.

In anticipating park actions, the Partnership consults, at the earliest practicable time, with federal agencies, state and local governments, potentially affected communities, Indian tribes, interest groups, and entities specified by law or regulation, including the state historic preservation officer and the Advisory Council on Historic Preservation.

The Partnership actively consults with traditionally associated peoples and other cultural and community groups in the planning, development, presentation, and operation of park interpretive programs and media relating to their cultures and histories. Consultation with diverse constituencies is essential to the development of effective and meaningful interpretive and educational programs. Acknowledging multiple points of view does not require that each point of view be given equal time in park presentations (e.g. interpretive and educational programs, exhibits, publications, etc.) or that the weight of scientific or historical evidence be disregarded.

#### **Advisory Council and Public Participation**

Public participation in planning and decision making ensures that the Partnership fully understands and considers the public's interests in the park, which is part of their national heritage, cultural traditions, and community surroundings. The Partnership actively seeks out and consults with existing and potential visitors; neighboring communities; people with traditional cultural ties to park lands; scientists and scholars; historical, business, cultural, civic, environmental, recreational, and tourism organizations; and other cooperators.

The Boston Harbor Islands Advisory Council is the primary mechanism of the Partnership to consult with the public on matters of park planning and management, doing so through public meetings, workshops, and other general public forums. Notwithstanding the Council's role, the individual Partnership members also conduct public consultation independently on matters within their jurisdiction.

The Advisory Council, which operates under provisions of the Federal Advisory Committee Act, has 28 members appointed by the director of the National Park Service to represent seven distinct interest groups: municipalities; educational and cultural institutions; environmental organizations; business and commercial entities;

Boston Harbor advocacy organizations; Native American interests; and community groups. The Council's role is to advise the Partnership in the planning and operation of the park through public involvement, and it helps facilitate the public process in connection with planning documents. It has two seats on the Partnership.

#### **Native American Consultation**

The park's 1996 legislation highlights the importance of understanding the history of American Indian use and involvement with the Boston Harbor Islands and calls for protecting and preserving Native American burial grounds, particularly those connected with the King Philip's War. The law further provides a mechanism to consult with American Indians by requiring that the Advisory Council include representatives of organizations representing American Indian interests. In addition, numerous other federal and state laws establish policy regarding much broader and more comprehensive consultation with Indian tribal governments and individuals. Consistent with Department of the Interior and National Park Service policy, the Boston Harbor Islands Partnership consults regularly and actively with traditionally associated American Indian individuals or groups or tribes, which have cultural affiliation with the Boston Harbor Islands and King Philip's War, regarding park management including efforts to:

- conduct planning and prepare environmental assessments
- develop a park information base, recognizing the need to protect highly sensitive religious or cultural information
- manage natural, cultural, and historic resources, including archeological resources and museum collections
- prepare and deliver educational and interpretive programs
- develop park infrastructure
- develop programs to protect and preserve Indian historic sites.

The National Park Service, as a member of the Partnership, carries out the responsibility of the United States to operate within a government-to-government relationship with the federally recognized tribes in relation to the Boston Harbor Islands.

#### **HARBOR MANAGEMENT**

Individually, several Partnership agencies—U.S. Coast Guard, Massport, MWRA, and the City of Boston, for

instance—have responsibilities for harbor resources and use (other than the islands). Since the Boston Harbor Islands park lies within the municipal boundaries of a major city and four other municipalities as well as in a harbor with a range of jurisdictions, many other governmental entities hold roles that relate to the Boston Harbor Islands. The Partnership recognizes the limitations of its jurisdiction and areas of responsibilities as an entity and maintains communications with other agencies having responsibility in the harbor (see Appendix 17). The Partnership cooperates with all appropriate agencies to protect and preserve unimpaired the resources and values of the park. Furthermore, the Partnership cooperates with others to protect harbor resources and provide visitor services that support the mission of the park. This includes efforts related to water transportation, recreational use, and water quality.

### Water-based Recreation

Despite the lack of jurisdiction over the waters of Boston Harbor, the Partnership cooperates with others to provide recreational experiences on the water sheet when they are consistent with preserving park resources unimpaired and with providing diverse, high-quality visitor experiences. Such activities could include fishing and recreational boating, for instance.

Water-based recreation around the Boston Harbor Islands requires knowledge of tides, currents, and other elements of an urban harbor. New high-speed vessels and a high volume of marine traffic create potential hazards that park managers may have to deal with. The protection of visitors is accomplished by cooperative arrangements with relevant law enforcement and safety agencies in the harbor.

The Partnership cooperates with the many agencies working to provide greater access to the harbor for the public. Small-boat launches or piers with floats on Boston Harbor are developed by other agencies to offer direct access to the islands for visitors with their own craft such as kayaks, canoes, or motorboats. Consistent with park management areas, services such as moorings are provided to small boaters. Moorings near the islands are offered to the boating public through a commercial operator. The Island Alliance represents the Partnership in developing the mooring program in cooperation with island owners, municipalities and their harbormasters, and others having jurisdiction such as the Army Corps of Engineers. Mooring placement takes into consideration sensitive fishing

habitat. Necessary water navigation aids are planned in collaboration with the U.S. Coast Guard, and are installed and used in conformance with Coast Guard standards.

### LOGAN INTERNATIONAL AIRPORT

Provisions regarding Logan Airport in the 1996 federal legislation apply to the present and future maintenance, operation, improvement, and use of the airport and associated flight patterns. When the national park area was established, Congress stipulated that use of Logan Airport shall not constitute the use of publicly owned land. Therefore, the U.S. Secretary of Transportation may approve a transportation program or project without the normal requirement to demonstrate that there is no prudent and feasible alternative; and that the program or project includes all possible planning to minimize harm.

The use of Logan International Airport does not have a significant effect on natural, scenic, and recreation assets for Boston Harbor Islands national park area. This determination was made by Congress in a provision of the park's enabling legislation which means that the Secretary of Transportation need not consult with the Secretary of the Interior and the Administrator of the Environmental Protection Agency about grant projects involving the location of an airport or runway, or a major runway extension, that may have a significant effect on natural, scenic, and recreation assets of the park.

### VOLUNTEERS

Volunteer services are a vital part of various aspects of park operations. The oldest and largest volunteer group is the Volunteers and Friends of the Boston Harbor Islands, which in its service routinely contributes more than 10,000 hours per year to the park. Volunteers provide visitor information in several locations, greet and assist visitors and campers on the islands, and assist Partnership agencies with resource management.