

Chapter 1



John Hollingsworth Memorial Trail Shoreline, Petit Manan Point Division
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The Purpose of and Need for Action

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Introduction

This final Environmental Impact Statement (EIS) for Maine Coastal Islands National Wildlife Refuge (Refuge) (formerly called Petit Manan National Wildlife Refuge Complex) combines two documents required by Federal laws: a CCP, required by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) (Refuge Improvement Act) and an EIS required by the National Environmental Policy Act of 1969 (NEPA). The final decision from this document will result in a CCP for the Refuge. The CCP will guide management decisions and actions on Refuge lands over the next 15 years. It will also be used as a tool to help the State of Maine natural resource agencies, our conservation partners, Tribal governments local communities, and the public understand and support Refuge priorities.

This document has six Chapters and eleven Appendices. Chapter 1 is the Purpose of and Need for the Action and it sets the stage for Chapters 2 through 4. It...



Petit Manan Island
USFWS photo

- describes the purpose and need for a CCP for the Refuge;
- identifies national and regional mandates and plans that influenced this document;
- highlights the purposes for which each of the five refuges in the Refuge were established and their land acquisition histories;
- identifies the status of refuge management plans;
- presents the vision and goals for the Refuge;
- explains the planning process used to develop this document; and,
- describes the issues and concerns addressed during the planning process.

Chapter 2, Description of the Alternatives, presents four management alternatives, including current management and the Service's Preferred Alternative, which offer different strategies for meeting goals and objectives and responding to issues.

Chapter 3, Description of the Affected Environment, describes the existing physical, biological, and human environment.

Chapter 4, Environmental Consequences, evaluates the environmental consequences of implementing each of the four proposed management alternatives.

Chapter 5, Consultation and Coordination with Others, summarizes public and partner involvement in the planning process.

Chapter 6, List of Preparers, credits Service and non-Service contributors.

Eleven appendices provide additional documentation and reference information used in compiling this document.

The Purpose of and Need for the Action

Our proposed action is to develop a CCP for the Refuge that best achieves the Refuge's purposes, vision, and goals; contributes to the National Wildlife Refuge System (Refuge System) mission; adheres to Service policies and mandates; addresses significant issues; and incorporates sound principles of fish and wildlife management.

NEPA regulations require an evaluation of a reasonable range of alternatives, including the proposed action and *no action*. This final EIS evaluates four alternatives designed to represent different ways of achieving all or most of the criteria noted above. We generated each alternative assuming its potential to be fully developed into a final CCP. Our analysis includes the predicted socioeconomic, physical, cultural, and biological benefits and consequences of implementing each alternative. For the remainder of this report, the Service's Preferred Alternative, described in detail as Alternative B in Chapter 2, defines the proposed action.

Developing a CCP with partner and public involvement is vital to the future management of every national wildlife refuge. A CCP's *purpose* is to provide the Refuge with strategic management direction for the next 15 years by:

- providing a clear statement of desired future conditions for habitat, wildlife, visitor services, staffing, and facilities;
- providing State agencies, refuge neighbors, visitors, and partners with a clear explanation of the reasons for management actions;
- ensuring refuge management reflects the policies and goals of the Refuge System and legal mandates;
- ensuring the "compatibility" of current and future public use;
- providing long-term continuity and direction for Refuge management; and,
- providing direction for staffing, operations, maintenance, and annual budget requests.

The present *need* to develop the Refuge CCP is manifold. First, the 1997 Refuge Improvement Act requires that all national wildlife refuges have CCPs in place by 2012 to help fulfill the mission of the Refuge System. Second, the Refuge lacks a master plan to accomplish the actions noted above in an environment that has changed dramatically since the Refuge was first established. For example, its island holdings have more than tripled, significant mainland acquisition has also occurred, staffing has increased, a second office has opened, pressures for increasing public access continue to grow, and new ecosystem and species plans have been developed with direct bearing on Refuge management. Third, we also

want to evaluate the need and establish criteria for a proposed new Refuge Headquarters and Coastal Education Center. Proposed site criteria are presented in Chapter 3 under Refuge Administration. Fourth, we have developed strong partnerships, vital to our continued successes. We feel it is our responsibility to clearly develop our priorities through this plan. Finally, we need a CCP to guide us in future land protection that promotes the conservation of nationally significant coastal habitats and Federal trust species.

Our planning process allows Maine State agencies, Tribal governments, the public, and our partners to actively engage in its development so we are better able to resolve management issues and concerns. All of these reasons clearly underscore the need for the strategic direction provided in a CCP.

Project Area

“...is comprised of five separate refuges: Cross Island, Petit Manan, Seal Island, Franklin Island, and Pond Island.”

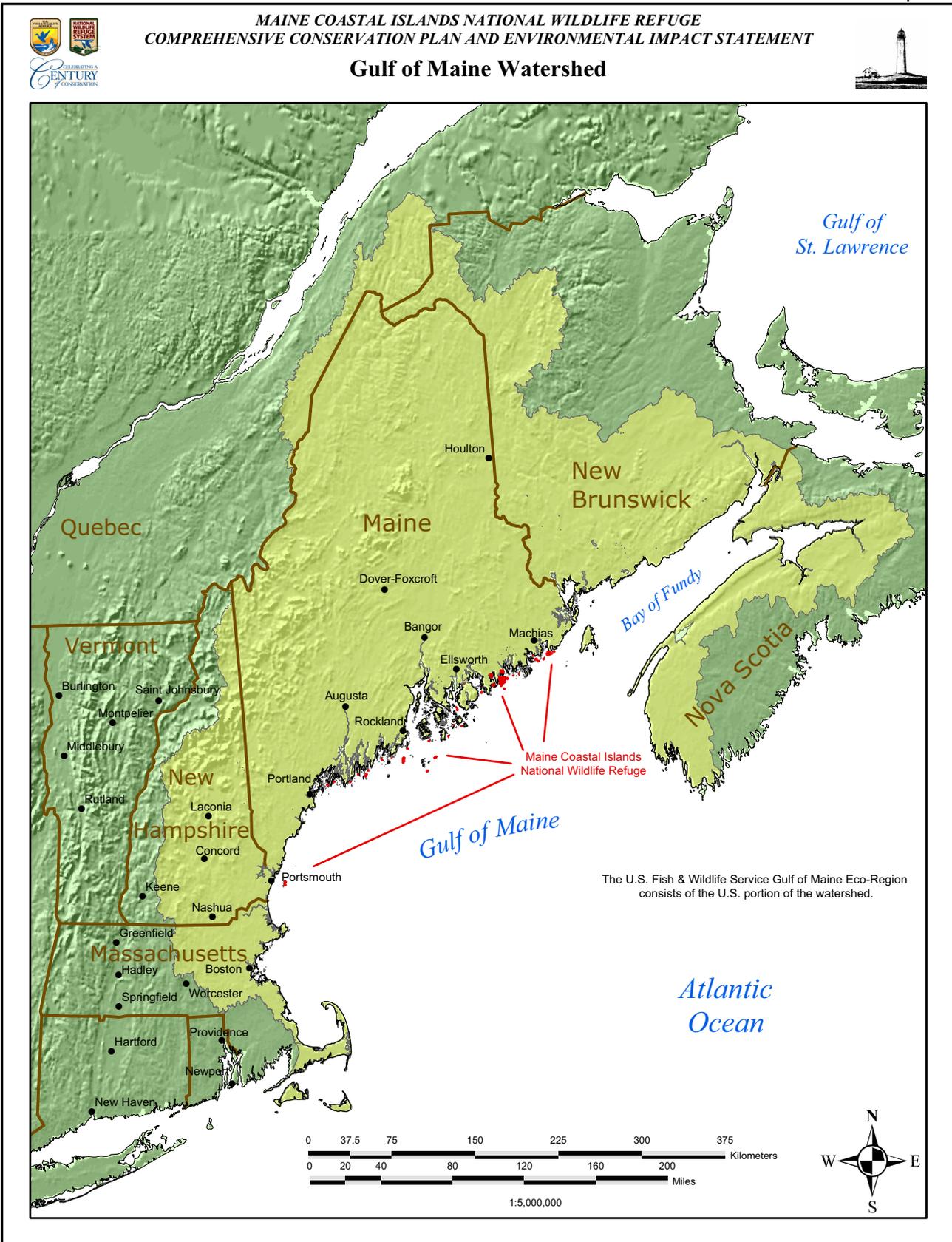
The Refuge lies within the Gulf of Maine Watershed in the State of Maine (Map 1-1). It is comprised of five separate refuges: Cross Island, Petit Manan, Seal Island, Franklin Island, and Pond Island. Each have separate establishment histories and refuge purposes as described below, but are referred to collectively as the “Maine Coastal Islands National Wildlife Refuge.” Seal, Franklin, and Pond islands are single island refuges. Cross Island Refuge is a six island complex, while Petit Manan Refuge includes 33 islands and 3 mainland divisions: Petit Manan Point (2,195 acres), Sawyers Marsh (933 acres), and Gouldsboro Bay (607 acres) divisions. One additional division, Corea Heath (400 acres), is a pending transfer from the U.S. Navy to Petit Manan Refuge. All totaled, the Refuge includes approximately 7,961 acres of diverse coastal Maine habitats including forested and non-forested offshore islands, coastal salt marsh, open field, and upland mature spruce-fir forest. The acreage is considered approximate because of the variability in the accuracy of our sources. We use surveyed acres, the most accurate, where available; otherwise, we may

use less accurate deed acres or GIS-generated mapping acres. Also, it is important to note that Service acquisition of approved islands has been on-going during development of this EIS. Refuge Headquarters would have the most up-to-date ownership information.

The project analysis area includes lands owned by the Service, as well as lands evaluated for future Service acquisition. As such, all 42 Refuge islands, the four mainland divisions, and Machias Seal Island which is managed by the Service under a Memorandum of Understanding (MOU) with the State of Maine, are included. In addition, a mainland parcel in the town of Cutler called “Sprague Neck,” and 151



Cross Island with Double Head Shot islands in the background
USFWS photo



Maine coastal nesting islands considered nationally significant, but currently not in permanent protection (see the Maine Coastal Islands Project discussion below) are included.

Given the geographic distribution of the lands evaluated in this plan, the project analysis area stretches along the entire 200 air-miles of the Maine coastline, from approximately the New Hampshire border, downeast to Cobscook Bay (Refer to Maps 1-2 to 1-12 at end of chapter).

Service Policies, Mandates, and National and Regional Conservation Plans Guiding the Project

The U.S. Fish and Wildlife Service and its Mission

This section presents hierarchically, from the national to the local level, highlights of Service policy, legal mandates and regulations, and existing resource plans and conservation initiatives which directly influenced development of this draft CCP/EIS.

The U.S. Fish and Wildlife Service (Service) administers the National Wildlife Refuge System. The Service is part of the Department of Interior. Its mission is:

“Working with others, to conserve, protect, and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.”

By law, Congress entrusts national resources to the Service for conservation and protection: migratory birds and fish, Federal-listed endangered and threatened species, inter-jurisdictional fishes, wetlands, certain marine mammals, and national wildlife refuges. The Service also enforces Federal wildlife laws and international treaties on importing and exporting wildlife, assists with state fish and wildlife programs, and helps other countries develop wildlife conservation programs.

The Service manual contains the standing and continuing directives to implement its authorities, responsibilities, and activities. This manual can be accessed at:

<http://www.fws.gov.directives/direct.html>

Special Service directives which affect the rights of citizens or the authorities of other agencies are published separately in the Code of Federal Regulations (CFR) and are not duplicated in the Service manual. Most of the current regulations that pertain to the Service are issued in 50 CFR parts 1-99. CFRs can be accessed at:

<http://www.access.gpo.gov/nara/cfr/index.html>

The National Wildlife Refuge System and Its Mission

The National Wildlife Refuge System (Refuge System) is the world’s largest collection of lands and waters set aside specifically for the conservation of wildlife and ecosystem protection. Over 540 national wildlife refuges are part of the national network today. They encompass more than 95 million acres of lands and waters in all 50 states and several island territories. At least 40 million visitors hunt, fish, observe and photograph

wildlife, or participate in environmental education and interpretive activities on refuges across the nation each year.

In 1997, the National Wildlife Refuge System Administration Act of 1966 was amended by the National Wildlife Refuge System Improvement Act (Refuge Improvement Act; Public Law 105-57). This legislation established a unifying mission for the Refuge System, a new process for determining compatible public use activities on refuges, and the requirement to prepare CCPs for each refuge. The Refuge Improvement Act states that first and foremost, the Refuge System must focus on wildlife conservation. It further states that the Refuge System mission, coupled with the purpose(s) for which each refuge was established, will provide the principal management direction on that refuge.

The mission of the Refuge System is:

“To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (Refuge Improvement Act; Public Law 105-57)

The Refuge Improvement Act declares that all existing or proposed refuge uses must be “compatible” with the refuge’s purpose and consistent with public safety. “Compatibility” is determined by the refuge manager after evaluating an activity’s potential effect on refuge resources and determining it supports the Refuge System mission and does not interfere with or detract from the refuge purposes and goals. Six wildlife-dependent public uses were designated in the legislation to receive enhanced consideration on refuges and in CCPs. The six priority uses are: hunting, fishing, environmental education and interpretation, and wildlife observation and photography.

The Refuge System manual provides a central reference for current policy governing the operation and management of the Refuge System not covered by the Service manual, including technical information on implementing refuge policies and guidelines. This manual can be reviewed at Refuge Headquarters.

Fulfilling the Promise

This report on the National Wildlife Refuge System is the culmination of a yearlong process involving teams of Service employees who examined the Refuge System within the framework of Wildlife and Habitat, People and Leadership. The report was the result of the first-ever System Conference held in Keystone, Colorado in October 1998, attended by every refuge manager in the country, other Service employees, and scores of conservation organizations. The heart of the report is the collection of vision statements and 42 recommendations. Many “Promises Teams” have been formed to develop strategies for implementing the recommendations. We utilized

information from such teams as Wildlife and Habitat Goals and Objectives, Strategic Growth of the Refuge System, Invasive Species, and Inventory and Monitoring. Their recommendations helped guide the development of goals, strategies and actions in this draft CCP/EIS.

Other Mandates

While Service and Refuge System policy and each refuge's purpose provide the foundation for management, national wildlife refuges are administered consistent with a variety of other Federal laws, executive orders, treaties, interstate compacts, and regulations pertaining to the conservation and protection of natural and cultural resources. The *Digest of Federal Resource Laws of Interest to the USFWS* lists them and can be accessed at:

<http://laws.fws.gov/lawsdigest/indx.html>

Chapter 4, Environmental Consequences, specifically evaluates compliance with the Clean Water Act, Clean Air Act, the National Historic Preservation Act, the Archeological Resources Protection Act, and the Endangered Species Act. This final EIS is written to fulfill compliance with NEPA.

National and Regional Plans and Conservation Initiatives Guiding Project

North American Waterfowl Management Plan (NAWMP; update 2004)

This plan outlines the strategy among the United States, Canada, and Mexico to restore waterfowl populations through habitat protection, restoration, and enhancement. Implementation of this plan is accomplished within 15 habitat "Joint Venture" partnerships in the U.S. and Canada and 3 species Joint Ventures: Arctic goose, black duck, and sea duck. Our project area lies within the Atlantic Coast Joint Venture which includes all the Atlantic Flyway states from Maine to Florida and Puerto Rico. Six priority focus areas are identified for Maine. Five of these areas are coastal and consist of 51,831 acres of wetlands and associated uplands in need of protection and management. Most of the Refuge mainland lies in the Downeast Focus Area. A map of focus areas in Maine can be viewed at:

<http://www.acjv.org>

The waterfowl goal for the Atlantic Coast Joint Venture is to:

"Protect and manage priority wetland habitats for migration, wintering, and production of waterfowl, with special consideration to black ducks, and to benefit other wildlife in the joint venture area."

Both the Black Duck and Sea Duck joint venture plans are also relevant to our project. Black ducks utilize the Refuge during fall migration, and many sea duck species winter in Maine's coastal waters. Specifically, many islands in our project area are important common eider nesting sites.

We used these plans as we developed goals and objectives for waterfowl and their habitats, and for land protection. The 2004 update for the North American Waterfowl plan can be accessed at:

<http://northamerican.fws.gov/NAWMP/nawmphp.htm>

The Black Duck Joint Venture Plan (Final Draft - Strategic Plan, April 1993) can be accessed at:

<http://www.pwrc.usgs.gov/bdjv/bdjvback.htm>

The SeaDuck Joint Venture can be accessed at:

<http://seaduckjv.org>

North American Waterbird Conservation Plan (Version 1, 2002)

This plan is an independent partnership among individuals and institutions with interest and responsibility for conserving waterbirds and their habitats. The plan is just one element of this multifaceted conservation program. The primary goal of the plan is to ensure the distribution, diversity, and abundance of populations and habitats of breeding, migratory, and non-breeding waterbirds are sustained or restored throughout the lands and waters of North America, Central America, and the Caribbean. The plan provides a framework for conserving and managing colonially nesting water-dependent birds. In addition, it will facilitate continent-wide planning and monitoring, national- state-provincial conservation action, regional coordination, and local habitat protection and management. Regional planning information is being prepared for the Mid-Atlantic New England Working Group.

We used the plan in the development of objectives, actions and strategies for protecting and managing waterbirds. This plan can be accessed at:

<http://www.nawcp.org>

Additional information is available at the following web site:

<http://birds.fws.gov/regionalplanninginternal/MANEM/>

U.S. Shorebird Conservation Plan (2001 Update) and Northern Atlantic Regional Shorebird Plan (Draft 2002)

This plan is a partnership effort being undertaken throughout the United States to ensure that stable and self-sustaining populations of all shorebird species are restored and protected. Collaborators include local, state, and Federal agencies, non-governmental organizations, business-related sectors, researchers, educators, and policy makers. The plan was closely coordinated with NAWMP and Joint Venture professionals, as well as the Partners In Flight and North American Waterbird Plan teams as they concurrently developed their revised national plans. These experts helped set conservation goals for each region of the country, identified critical habitat and research needs, and proposed education and outreach programs to increase awareness of shorebirds and the threats they face. The partnerships responsible for development of the plan are remaining active and are working to improve and implement the plan's many recommendations.

The U.S. Shorebird Plan identifies three primary objectives:

1. Development of a standardized, scientifically-sound system for monitoring and studying shorebird populations that will provide practical information to researchers and land managers for shorebird habitat conservation;
2. Identification of the principles and practices upon which local, regional and national management plans can effectively integrate shorebird habitat conservation with multiple species strategies;
3. Design of an integrated strategy for increasing public awareness and information concerning wetlands and shorebirds.

Regional plans, such as the North Atlantic Regional Shorebird Plan, are being developed as part of the overall strategy. The North Atlantic Plan is in draft, but provides detailed information on shorebird species of high conservation concern within the region. Once completed, the plan will enhance shorebird diversity and individual species' populations through regional population, habitat, research, and education goals and objectives, and identifying specific management needs and projects to implement.

We used this regional plan in developing our Species of Concern List (Appendix B). The national plan can be accessed at:

<http://shorebirdplan.fws.gov/USShorebird.htm>

The website for accessing the regional plan is:

<http://shorebirdplan.fws.gov/RegionalShorebird/RegionalPlans.htm>

Regional Wetlands Concept Plan – Emergency Wetlands Resources Act (1990)

In 1986, Congress enacted the Emergency Wetlands Resources Act to promote the conservation of our nation's wetlands. The act directed the Department of Interior to develop a National Wetlands Priority Conservation Plan identifying the location and types of wetlands that should receive priority attention for acquisition by Federal and state agencies using Land and Water Conservation Fund appropriations. In 1990, the Service's Northeast Region completed a Regional Wetlands Concept Plan to provide more specific information about wetlands resources in the Northeast. A total of 850 wetland sites were identified for protection because of their value, scarcity, and vulnerability. In Maine, 71 wetland sites were identified, with 34 sites (43,445 acres) located within 10 miles of the coastline. We used this information as we developed our land protection strategies.

Roseate Tern Recovery Plan, Northeastern Population (First Update 1998)

This revised roseate tern (*Sterna dougallii*) recovery plan was completed in 1998. The plan summarizes life history, ecology, population status, and



Roseate tern with fish

Photo courtesy of Gil Lopez-Espina

known threats to the recovery of this Federal-listed endangered species. The following recovery objectives were established:

Primary objective: To increase the Northeast nesting population of roseate terns (U.S. and Canada) to 5,000 breeding pairs. This total should include at least six large colonies with high productivity within the species current geographic distribution.

Secondary objectives:

1. To expand the number of roseate tern breeding colonies to 30 or more sites; and,
2. To expand the breeding range to historically occupied areas south of the current range.

Over 50 specific tasks are identified that need to be undertaken to meet recovery objectives. We used this plan as we developed management goals and objectives for roseate tern.

Northern States Bald Eagle Recovery Plan (1983)

This plan describes actions believed necessary to assure the survival and recovery of bald eagles in the 24 states encompassed by the plan. The primary objective is to reestablish self-sustaining populations of bald eagles throughout the Northern States Region. The initial tentative goal is to have 1,200 occupied breeding areas distributed over a minimum of 16 states with an average annual productivity of at least 1.0 young per occupied nest. Specific recovery tasks fall into four general categories:

1. Determine current population and habitat status;
2. Determine minimum population and habitat needed to achieve recovery;
3. Protect, enhance, and increase bald eagle populations and habitats; and
4. Establish and implement a coordination system for information and communication.

A proposal to de-list the bald eagle nationally is pending, but the Service remains concerned with permanent habitat protection.

We utilized this plan as we developed goals and objectives and our land acquisition proposal.

Partners In Flight Landbird Conservation Plans

In 1990, Partners in Flight (PIF) was conceived as a voluntary, international coalition of government agencies, conservation organizations,



academic institutions, private industry, and other citizens dedicated to reversing the population declines of bird species and “keeping common birds common.” The foundation of PIF’s long-term strategy for bird conservation is a series of scientifically-based bird conservation plans, using physiographic provinces as the planning units. There are two physiographic plans that cover our Project Area, and they are described in more detail below.

The goal of each PIF plan is to ensure long-term maintenance of healthy populations of native birds, primarily non-game birds. Within each physiographic area, the plans rank bird species according to their conservation priority, describe desired habitat conditions, develop biological objectives, and recommend conservation measures. Habitat loss, population trends, and vulnerability of a species and its habitats to regional and local threats all factor into the priority ranking. Many of the top ranked species in the two plans below either breed or migrate through the Refuge.

At this writing, final plans are not yet available; however, we referenced the draft plans as we developed habitat goals and objectives.

These plans can be accessed at:

<http://www.partnersinflight.org>

Physiographic Area 27 - Northern New England (October 2000)

The scope of this plan covers some of our inland Refuge lands. Northern hardwood and mixed forest objectives emphasize maintaining stable populations of wood thrush, black-throated blue warbler, Canada warbler, northern goshawk, sharp-shinned hawk, and Cooper’s hawk. The plan assumes that maintaining habitat for species such as goshawk, sharp-shinned and Coopers hawks, which typically have larger home ranges, will adequately provide habitat for most other landbirds of conservation concern dependent on this forest type.

Objectives for early successional forest/edge habitat emphasize golden-winged warbler, chestnut-sided warbler, and American woodcock. Objectives for mature conifer (spruce-fir) forest habitat emphasize Blackburnian warbler, bay-breasted warbler, and black-backed woodpecker.

Physiographic Area 28 - Eastern Spruce-Hardwood Forest (Draft June 2000)

The scope of this plan covers most of the Refuge mainland and all the islands. Maritime marsh and estuary objectives in this plan emphasize

maintaining stable populations of Nelson's sharp-tailed sparrow and American black duck. Northern hardwood and mixed forest objectives emphasize maintaining stable populations of Canada and black-throated blue warbler.

Mature conifer (spruce-fir) forest objectives emphasize maintaining stable populations of black-throated green, Northern parula, and Blackburnian warbler; spruce grouse; olive-sided flycatcher; boreal chickadee; pine grosbeak; and red crossbill. Objectives for early successional forest/edge habitat emphasize species such as American woodcock, olive-sided flycatcher, and Nashville and chestnut-sided warbler. Objectives for freshwater emphasize the American black duck.

Tern Management Plan (June 2002)

The Tern Management Plan provides historic background, a review of factors limiting populations, life history information, and techniques for managing and monitoring the tern species nesting from New York to Newfoundland. The plan also identifies research needs and assesses the size and distribution of tern populations within the region. Primarily, it focuses on coastal populations of common, Arctic, roseate, and least terns. The document provides specific management techniques to help achieve the goals set forth in several previous planning approaches that have been developed across the Northeast region. We used this plan in developing our tern objectives and strategies.

Birds of Conservation Concern 2002 Report and the Atlantic Northern Forest Bird Conservation Region Blueprint (draft 2003)

This report was developed by the Service in consultation with the leaders of ongoing bird conservation initiatives and partnerships such as Partners In Flight, the North American Waterbird Conservation Plan, and the U.S. Shorebird Conservation Plan. It fulfills the mandate of the 1988 amendment to the Fish and Wildlife Conservation Act of 1980 (100 Public Law 100-653, Title VIII) requiring the Secretary of the Interior, through the Service, to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973." The report is actually a series of 45 lists that identifies bird species of conservation concern at national, regional, and landscape scales. Essentially, these are the birds deemed to be the highest priority for conservation action. It includes a principal national list, seven regional lists corresponding to the Service's seven regional administrative units, and species lists for each of the 37 Bird Conservation Regions in the U.S. designated and endorsed by the North American Bird Conservation Initiative (NABCI)

These bird conservation regions are ecologically-based units, as defined by NABCI for planning, implementing, and evaluating bird conservation



Common tern chick

Photo courtesy of Gil Lopez-Espina

efforts. The Refuge lies in the Atlantic Northern Forest Bird Conservation Region (BCR). In this BCR, sixteen bird species were listed. A draft blueprint for this region presents a strategic design of the key components to implement in order to maintain healthy populations of birds native to the BCR. Specifically, the blueprint establishes a series of goals for the partnership to help move towards its vision of sustained bird populations; it presents the biological foundation upon which recommendations are based; and it lays out a framework for implementing and evaluating the recommended actions.

It is hoped that these regional and national reports will stimulate coordinated efforts by Federal, state, and private agencies to develop and implement integrated approaches for the conservation and management of these birds deemed to be in the most need of conservation action.

We considered each of these species in developing our Species of Management Concern List (Appendix B) and to help us focus our habitat objectives, actions and strategies.

Gulf of Maine Rivers Ecosystem Plan (1994)

Implementing an ecosystem approach to resource management is one of the Service's national priorities. Nationally, and within the last decade, the Service has initiated new partnerships with private landowners, State and Federal agencies, corporations, conservation groups, and volunteers to form 52 ecosystem or ecoregional teams across the country, typically using large river watersheds to define ecosystems. Each team works on developing goals and priorities for research and management within their ecoregion.

The Gulf of Maine Ecosystem team, composed of Service personnel and representatives from several State natural resource agencies, developed a Priority Resources Plan (September 1994) for this ecoregion which is depicted on Map 1-1. The following seven priorities were identified in the plan, each involving numerous action strategies:

1. Recover populations and habitats of the following endangered/threatened species: Karner blue butterfly, bald eagle, piping plover, roseate tern, and Plymouth redbelly turtle.
2. Restore, protect and enhance habitats for migratory birds, anadromous fishes and listed/candidate species in the following watersheds: Penobscot River, Kennebec/Androscoggin River.
3. Restore, protect and enhance coastal habitats for Federal trust resources of concern, (for example: common loon, Atlantic puffin, common eider,

osprey, terns, black duck, American woodcock, bald eagle, piping plover, American shad, river herring, and Atlantic salmon) in the following areas: Plum Island Sound, Great Bay, Southern Maine (York to Cape Elizabeth), Mid-Coast Maine (Casco Bay to Muscongus Bay), Eastern Maine (Schoolic to Cutler), and Cobscook Bay.

- 4 Restore, protect and enhance populations of migratory bird species of special emphasis, for example: common loon, Atlantic puffin, Arctic tern, common eider, common tern, harlequin duck, least tern, black duck, and American woodcock.
5. Rebuild American shad and river herring populations in the following rivers: Merrimack, Saco, Kennebec/Androscoggin, Penobscot, and St. Croix.
6. Restore and rehabilitate Atlantic salmon populations in the following rivers: St. Croix, Dennys, Pleasant, East Machias, Machias, Narraguagus, Ducktrap, Sheepscoot, and Penobscot.
7. Manage Service lands to protect, enhance, and restore native communities to maintain biodiversity.

Maine Coastal Nesting Islands Project

The Maine Coastal Nesting Islands Project is a partnership established to identify and protect seabird, wading bird, and eagle nesting habitat on Maine's coastal islands. The partnership is sponsored by the Service's Gulf of Maine Coastal Program and the Refuge. Federal, State, and non-governmental organization biologists share data on historic and active seabird, wading bird and eagle nesting sites and the ownership status of nesting islands. Partners include MDIFW, Maine Coast Heritage Trust, The Nature Conservancy (Maine Chapter), National Fish and Wildlife Foundation, Maine State Planning Office's Coastal Program and Land For Maine's Future Program, local land trusts, National Audubon Society, and private land owners. Information is shared among these entities on an annual basis. Approximately every three years, data from Maine's 4,617 coastal islands is analyzed to determine species distribution and population trends and to update island protection status.

The most recent analysis used data from 2002. Six hundred and sixteen islands were determined to have nesting populations of seabirds, wading birds, or bald eagles, or a combination of the three. Of these 616 islands, 377 were determined to be "nationally significant" because they met one or more of the following criteria established by the partnership:

- One percent or more of the State population of a seabird species – common, roseate, or Arctic tern; Atlantic puffin; razorbill; black guillemot; black-backed, herring, or laughing gull; common eider; great or double-crested cormorant; or Leach's storm-petrel – nests on the island; or



Atlantic puffin
USFWS photo

- One percent or more of the State population of a wading bird species – great blue heron, black-crowned night heron, snowy egret, glossy ibis, little blue heron, tri-colored heron, or cattle egret – nests on the island; or
- Federal-listed (endangered) roseate terns nest, or historically nested, on the island; or
- Federal-listed (threatened) bald eagles have productively nested on the island for several years (on larger islands only the immediate area around the nesting site, approximately 125 acres, is considered nationally significant); or
- the island population of any one nesting seabird species does not meet the 1% criteria, but it is important because it supports a diverse population of seabird species, including:
 - four or more seabird species nest on the island; or
 - three species nest on the island, at least one of which represents >0.5% of the statewide nesting population; or
 - the island has important seabird, wading bird, or eagle nesting habitat based on an annual biological review of the data.

The 377 nationally significant coastal nesting islands identified represent 8% of the total number of Maine islands and less than 4% of the total island acreage. They include 170 islands with nesting seabirds present (including five with roseate terns). Many of these species spend the majority of the year at sea and occur nowhere else in the United States. Twenty islands have nesting wading birds present, and 119 islands support bald eagle nesting.

The current level of protection afforded these 377 nationally significant coastal nesting islands falls into three categories:

- A. Two hundred twenty-six (226) have permanent or long-term protection. The majority are managed by either the U.S. Fish and Wildlife Service or the Maine Department of Inland Fisheries and Wildlife, both of whom have the legislative authority and responsibility to maintain and enhance populations of seabirds, wading birds, and eagles. This category also includes three islands managed by the National Audubon Society, with a primary objective of protecting and restoring seabird populations.
- B. Twenty-five (25) are in Federal, municipal, or private ownership and presently have some degree of protection but may not be permanently

protected or managed to maintain and enhance populations of seabirds, wading birds, or eagles; and

C. One hundred twenty-six (126) are in private ownership and lack permanent or long-term protection and/or management to maintain and enhance seabird, wading bird, or eagle populations.

We used the information from this project to develop our Land Protection Plan for the Refuge (Appendix A). Our primary focus for acquisition is on nationally significant islands in categories B and C.

Maine Department of Inland Fisheries and Wildlife Species Assessments

Maine Department of Inland Fisheries and Wildlife (MDIFW) is developing species assessments and management plans for more than 70 species and species groups within the state. The plans will cover all hunted, trapped, and threatened and endangered species, as well as several additional species of management concern. The purpose of these assessments is to assemble the most current information and professional judgements available into one document. Each plan serves as a basis for selecting management goals, objectives, and strategies over a 15-year time-frame, with abbreviated updates compiled every five years. At least 10 completed assessments relate to seabirds, waterbirds, or migratory landbirds of interest to the Refuge. We used these plans in developing our Species and Habitats of Conservation Concern List (Appendix B) and our management objectives and strategies.

Refuge Purposes and Land Acquisition History

As described above under the section titled “Project Area”, the Refuge spans the entire Maine coastline. It includes lands in the towns of Cutler, Machiasport, Jonesport, Roque Bluffs, Addison, Milbridge, and Steuben in Washington County; the towns of Gouldsboro, Winter Harbor, Swan’s Island, Tremont in Hancock County; the towns of Vinalhaven, Saint George, and Friendship in Knox County; the towns of Boothbay, South Bristol, and Southport in Lincoln County; the town of Phippsburg in Sagadahoc County; the town of Harpswell in Cumberland County; and the town of Kittery in York County. The Refuge Headquarters is currently located in Milbridge, with a staffed, satellite office in Rockport.

The Service has acquired lands for the Refuge through a variety of acquisition methods. These include gifts from private individuals, land trusts, statewide and national conservation groups, and transfers of title from the U.S. Coast Guard and U.S. Navy. In addition, when funds are available, we have purchased through fee title acquisition or conservation easement, important mainland and nationally significant coastal nesting islands. All acquisitions have been from willing sellers or donors. Most of the land within our approved acquisition boundary has been acquired. Those lands not yet acquired within our approved boundary, and lands we propose for

an expansion of the current boundary, are described in our Land Protection Plan (Appendix A).

Historically, our land acquisition funds come from two sources: the Land and Water Conservation Fund, appropriated annually by Congress, and the Migratory Bird Conservation Fund, which is replenished through the sale of Federal duck stamps. Annual expenditures for the Refuge’s land acquisition program have recently averaged approximately \$1 million/year.

The rate of our coastal island acquisition began a steady increase in 1993, and since that time, the Service has acquired an interest in 31 islands. All of these have become part of the Refuge, although they may lie closer to Rachel Carson or Moosehorn refuges. This allows us to concentrate our expertise and the logistical resources needed to manage seabirds on off-shore islands.

The purposes and land acquisition history for each of the five individual refuges in the Maine Coastal Islands Refuge are presented below. All acreages presented are rounded to the nearest whole number and represent U.S. Geological Survey (USGS) land acres above the mean high water mark.

Seal Island National Wildlife Refuge

This refuge is 65 acres and was established in 1972 because of its “...particular value in carrying out the national migratory bird management



Aerial view of Seal Island
USFWS photo

program.” It was established under authority of 16 U.S.C. 667b, an Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C.667b-667d, as amended. It was acquired in transfer from the U.S. Navy.

Franklin Island National Wildlife Refuge

This refuge is 12 acres and was established in 1973 because of its “...particular value in carrying out the national migratory bird management program.” It was established under authority of 16 U.S.C. 667b, an Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C.667b-667b, as amended. It was acquired in transfer from the U.S. Coast Guard.

**Pond Island National
Wildlife Refuge**

This refuge is 10 acres and was established in 1973 because of its “...particular value in carrying out the national migratory bird management program.” It was established under authority of 16 U.S.C. 667b, an Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C.667b-667d, as amended. It was acquired in transfer from the U.S. Coast Guard.

**Petit Manan National
Wildlife Refuge**

This refuge is currently 5,771 acres and consists of 33 islands and three mainland divisions. The fourth mainland division, Corea Heath, is a pending U.S. Department of Navy transfer. The Petit Manan National Wildlife Refuge was originally established in 1974 “...for use as an inviolate sanctuary, or any other management purposes, for migratory birds.” It was established under authority of the Migratory Bird Conservation Act, 16 U.S.C. 715d. In addition to the Migratory Bird Conservation Act, the succession of islands and mainland parcels acquired after 1974 were acquired with one or more of the following purposes:

“...suitable for - (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species” (Refuge Recreation Act, 16 U.S.C. 460k-1); or

“...particular value in carrying out the national migratory bird management program” (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes, 16 U.S.C. 667b-667d)

“...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” (Emergency Wetlands Resource Act of 1986, 16 U.S.C. 3901(b), 100 Stat. 3583).

Its acquisition history is described in Table 1-1.

**Cross Island National
Wildlife Refuge**

This six island refuge is 1,703 acres and was established in 1980 “...for use as an inviolate sanctuary, or any other management purposes, for migratory birds.” It was established under authority of the Migratory Bird Conservation Act, 16 U.S.C. 715d. Its acquisition history is described in Table 1-2.

Table 1-1 History of acquisition at Petit Manan Refuge

Calendar Year*	Acres**	Acquisition Method	Parcel Acquired
1974	10	transfer of island from Coast Guard	Petit Manan Is.
1976	2,166	3 donations, 2 fee purchases, and 1 transfer; includes both islands and mainland	Petit Manan Pt Div.
1978	5	1 island transfer from Coast Guard	Little Nash Is (portion of)
1979	1,130	1 donation of an island	Bois Bubert Is (portion of)
1987	25	1 land exchange for tract on mainland	Bois Bubert Is (portion of)
1992	13	1 donation of tract on mainland	Sawyers Marsh Division (portion of)
1993	33	2 fee purchases; 1 island, and one tract on mainland	Bois Bubert Is (portion of)
1994	252	3 donations and 3 fee purchase; includes both islands and mainland	Metinic (portion of), E&W Barge, Bar, Ship and Trumpet Is; Goulds. Bay Div (portion of)
1995	322	2 donations and 7 fee purchase; includes both islands and mainland	Metinic (portion of), Halifax, Outer White, Lt Roberts, Roberts, Lt Thrumcap Is; Goulds. Bay Div (portion of)
1996	31	2 donations and 1 fee purchase; includes both mainland and islands	Metinic (portions of), and Abbot, Sally Is
1997	12	2 fee purchases of islands	Bois Bubert Is (portion of); E Brothers Is
1998	1008	2 donations and 4 fee purchases; includes both islands and mainland, and 2 conservation easements	Upper Flag, John=s Is; Sawyers Marsh Div (portion of), and Goulds. Bay Div (portion of); Inner White Is (easement) and Lower Mark Is (easement)
1999	187	4 islands transferred from Coast Guard, and 3 fee purchases of islands	Ram, Lt. Libby, Inner Sand, Matinicus Rock, Two Bush, Outer Heron Is, and Egg Rock
2000	39	3 fee purchases; includes both island and mainland	Schoppee and Lt Marshall Is; Goulds. Bay Div (portion of)
2001	366	2 fee purchases; includes both islands and mainland, and 1 conservation easement on an island	Crane Is (easement); Sawyers Marsh and Goulds. Bay Div (portions of)
2002	60	2 conservation easements on islands	Smuttynose and Malaga Is (easements)

* Acquisition is ongoing; check with the Refuge Headquarters for latest island purchases.

** Island acres are approximate, as many were not surveyed, but are based on original deed acres or GIS mapping.

Table 1-2 History of acquisition at Cross Island Refuge

Calendar Year	Acres*	Acquisition Method	Parcel Acquired
1980	1,538	donation of 6 islands	Cross Is (portion of); Old Man, Mink, Outer and Inner Double Head Shot, Scotch Is.
1986	165	land exchange for tract on island	Cross Is (portion of)

* Island acres are approximate, as many were not surveyed, but are based on original deed acres or GIS mapping.

Existing Refuge Operational Plans (“Step-down” plans)

The Service Manual, Part 602, Chapter 4 (Refuge Planning Policy) lists over 25 step-down management plans that are generally required on refuges. These plans contain specific strategies and implementation schedules for achieving refuge goals and objectives. Some plans require annual revisions, others are on a 5-to-10-year revision schedule. Some require additional NEPA analysis, public involvement, and compatibility determinations before they can be implemented. Below we provide the current status of step-down plans needed for the Refuge. Those that are currently up-to-date are incorporated by reference into this final EIS. Additional step-down plans needed for the Refuge are further identified in Chapter 2.

These step-down plans are current and up-to-date:

- Fire Management Plan (includes prescribed fire and wildfire management direction; annual burn plans are also completed), 2002
- Continuity of Operations Plan, 1999
- Safety Program and Operations Plan, 2000
- Hunt Plan, 2001

These step-down plans are being prepared or are in draft form:

- Habitat and Species Inventory and Monitoring Plan (HSIMP)
- Land Protection Plan (LPP)

These step-down plans will need to be completed and are scheduled in Chapter 2:

- Habitat Management Plan (HMP; highest priority)
- Visitor Services Plan
- Law Enforcement Plan
- Invasive Species Management Plan
- Cultural Resources Management Plan

Compatibility Determinations

Federal law and Service policy provide the direction and planning framework to protect the Refuge System from incompatible or harmful human activities, and to insure that Americans can enjoy Refuge System lands and waters. The Refuge Improvement Act is the key legislation regarding management of public uses and compatibility. The compatibility requirements of the Refuge Improvement Act were adopted in the Service’s Final Compatibility Regulations and Final Compatibility Policy published October 18, 2000 (Federal Register, Vol. 65, No. 202, pp 62458-62496).

The regulations require that an affirmative finding be made of an activity’s “compatibility” before such activity or use is allowed on a national wildlife refuge. A compatible use is one, “. . .that will not materially interfere with or detract from the fulfillment of the mission of the Refuge System or the purposes of the refuge” (Refuge Improvement Act). Six priority,

wildlife-dependent uses that are to be considered at each refuge are defined by the Act and Regulation. These are: hunting, fishing, wildlife observation and photography, and environmental education and interpretation. These priority uses may be authorized on a refuge when they are compatible (as defined above), and not inconsistent with public safety. Not all uses that are determined compatible may be allowed. The Refuge Manager has the discretion to allow or deny any use based on other considerations such as public safety, policy and available funding. However, all uses that are allowed must be determined compatible. Except for consideration of consistency with State laws and regulations as provided for in subsection (m) of the Act, no other determinations or findings are required to be made by the refuge official under this Act or the Refuge Recreation Act for wildlife-dependent recreation to occur (Refuge Improvement Act). Appendix C includes new and/or revised compatibility determinations for Refuge activities. They will be approved with the final CCP.

Refuge Vision Statement

Very early in our planning process our team developed this vision statement to provide a guiding philosophy and sense of purpose for our planning effort.

“We envision the future Maine Coastal Islands National Wildlife Refuge epitomizing the mission of the National Wildlife Refuge System; conserving in perpetuity an incredibly rich tapestry of coastal islands, intertidal estuaries, freshwater wetlands, maritime forests and open fields; and, enabling nesting and migrating seabirds, and other wildlife of conservation concern in the Gulf of Maine, to thrive here.”

“With the help of our conservation partners, we will apply sound, scientific principles and adaptive management strategies to sustain the long-term health and integrity of coastal Maine habitats; expand community outreach and environmental education and interpretation programs; and, stimulate visitors to embrace stewardship of natural resources.”

Refuge Goals

These goals were developed after consideration of our refuge purposes, the Service and Refuge System missions, our vision, and the mandates, plans, and conservation initiatives described above. They are intentionally broad, descriptive statements of purpose. They highlight elements of our vision statement that are emphasized in future refuge management. The biological goals take precedence, in particular Goal 5, but otherwise, the goals are not presented in a particular order.

Goal 1: Perpetuate the biological diversity and integrity of upland communities on the Refuge’s mainland properties to sustain high quality habitat for migratory birds.

Goal 2: Maintain high quality wetland communities on the Refuge’s mainland properties, primarily to benefit migratory birds of high conservation

priority, while also supporting other native, wetland- dependent species of concern.

Goal 3: Perpetuate the biological diversity and integrity of upland communities on the Refuge’s islands to sustain high quality habitat for nesting bald eagles and migratory songbirds and raptors, and to protect rare plant sites.

Goal 4: Protect the high quality wetland communities on the Refuge’s islands to benefit nesting and migrating shorebirds and waterfowl.

Goal 5: Protect and restore nesting seabird populations on the Refuge’s islands to contribute to regional and international seabird conservation goals.

Goal 6: Promote enjoyment and stewardship of coastal Maine wildlife and their habitats by providing priority, wildlife-dependent recreational and educational opportunities.

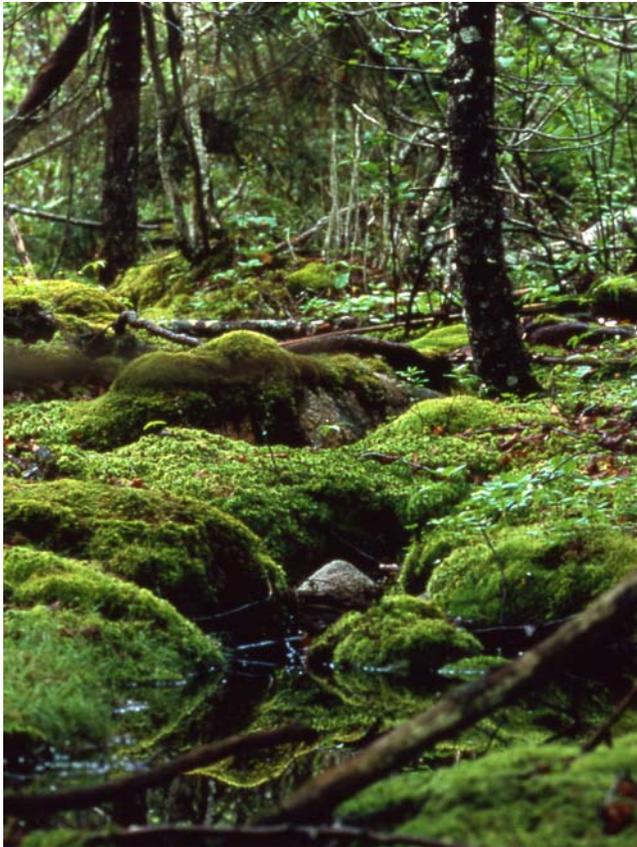
Goal 7: Protect the integrity of coastal Maine wildlife and habitats through an active land acquisition and protection program.

Goal 8: Communicate and collaborate with local communities, Federal, State, local, and Tribal representatives, and other organizations throughout coastal Maine to further the mission of the National Wildlife Refuge System.

**The Comprehensive
Conservation
Planning Process
An Early Planning Effort**

In 1993, the Service began to evaluate the need for additional protection of Maine coastal nesting islands. In 1995, the Service’s plans to prepare an EIS to study the protection of significant seabird, wading bird, and eagle nesting islands on Maine’s coast was officially announced through a Federal Register Notice of Intent.

Throughout 1995, four public forums and six public scoping meetings were held in Ellsworth, Machias, Owls Head, Rockport, Brunswick, Freeport, Wells, and Augusta, Maine. The locations, dates, and times for these meetings were announced in local newspapers, as well as through special mailings. Over 250 people attended the public forums, co-sponsored by the Service and 33 additional groups interested in promoting protection of coastal islands. More than 60 people attended the scoping meetings, the purpose of which was to let people know what the Service was doing and share what we have learned about coastal nesting island wildlife and their habitats. Also during 1995, over 1,100 copies of an Issues Workbook were distributed. These workbooks asked people to share what they valued most about the islands, their vision for island protection in the future and the Service’s role in that future, and any other island issues they wanted to raise. One hundred and forty copies of the workbooks were returned to us. We summarized the information and shared the results in a Project Update newsletter in May 1996.



A view from the John Hollingsworth Memorial Trail, Petit Manan Point Division
Myer Bornstein, SEMASS Photos

Also in May 1996, the Service held a two-day facilitated workshop at the Bar Harbor Inn in Bar Harbor, Maine. The 24 participants included island owners, local land trusts, conservation organizations, town officials, sea kayaking companies, tour boat operators, representatives from the aquaculture industry, property rights supporters, and State and Federal agency representatives. The participants discussed the information gathered on seabird, wading bird, and eagle populations and island ownerships, as well as the results of the workbook. Work groups were formed to identify potential management actions and strategies available for protecting, managing, and restoring coastal nesting islands, and to establish a consensus action plan that workshop participants could support.

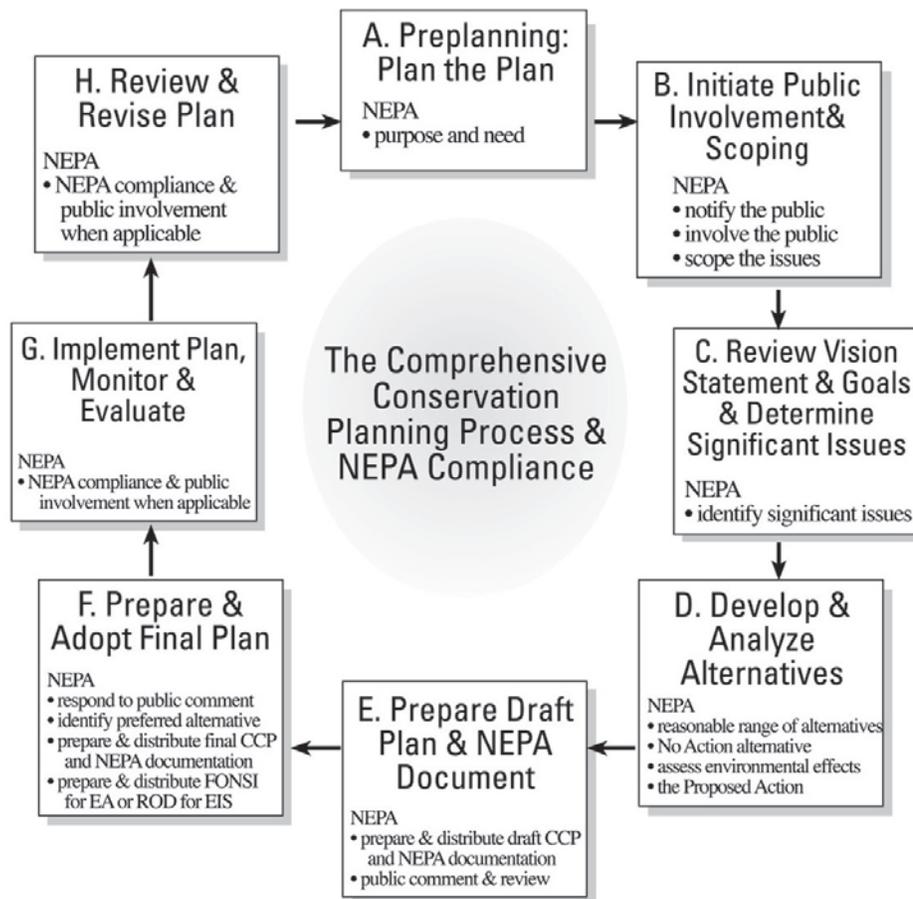
During 1997 and 1998 further planning on this project was delayed pending passage of the Refuge Improvement Act and new Service planning policy. During this time, we determined that the focus of our planning should be expanded to include not only Service acquisition of Maine coastal nesting islands, but all other aspects of refuge management as well. This expanded effort would better comply with the intent of the new Service planning policy.

Our Recent Planning Effort

The planning process was restarted in the summer of 1999, and a new planning team was formed to produce a draft CCP/EIS. Our core planning team consists of the Refuge staff, Regional Office planning, visitor services, and cultural resources staff, and one staff from the Maine Department of Inland Fisheries and Wildlife (MDIFW). We regularly consult with the Regional Refuge Biological Program staff, Migratory Bird program staff, Gulf of Maine Program Ecological Services staff, and program specialists with MDIFW.

Service planning policy establishes an eight-step process (Figure 1-1) which we followed in developing this final EIS. Individual steps are described in detail in the planning policy and CCP training materials. As part of “Step A: Preplanning,” we developed a preliminary Refuge vision statement and Refuge-wide goals and identified issues and management concerns. We reviewed the 1995 list of issues and concerns for the project, expanded them to include issues on existing refuge lands, and prepared to gather additional comments from the public. The revised list of issues and concerns is presented below.

Figure 1-1 Steps in the comprehensive conservation planning process and their relationship to National Environmental Policy Act compliance



During this step, we also initiated a wilderness review of existing Refuge lands. This review is the process we use to determine if we should recommend Refuge System lands and waters to Congress for wilderness designation. The wilderness review process consists of three phases: (1) inventory, (2) study, (3) recommendation. Our Refuge Planning Policy requires us to conduct a wilderness review concurrent with the CCP process and incorporate the summary of the review into the CCP (602 FW 3.4 C. 1(c)). The process we followed for this CCP is described in Appendix D.

Next, we completed “Step B: Initiate Public Involvement and Scoping,” which provided an opportunity for the public to critique, or add to, the vision, goals, and issues for the Refuge. We held public meetings and open houses in Augusta, Milbridge, and Rockport in 2000. A newsletter shared the comments from the open houses with the people on our mailing list.

Following the public meetings, the planning team met a few times, and individual members drafted and refined elements of our management alternatives. Our next newsletter, published at the end of 2001, shared our draft alternatives with the public. At publication, we presented five management alternatives, but after further analysis, we determined that one of

the alternatives was not significantly different than the others. All the significant components of this alternative were included in at least one of the other four alternatives. Therefore, we reduced our analysis to four alternatives.

During 2002, we concentrated on completing the analysis for “Chapter 2: Alternatives” and “Chapter 4: Environmental Consequences.”

The Draft CCP/EIS

We published our Draft CCP/EIS and released it for 68 days of public review and comment from April 30 to July 6, 2004. We notified everyone on our project mailing list of the document’s availability and published a notice in the “Federal Register” on April 30, 2004. The document is also posted on our National Conservation Training Center Library website (http://library.fws.gov/CCPs/petitmanan_index.htm). In addition, we held four formal public hearings on the following dates and locations:

- June 1, 2004, 7-9:00 p.m., Rockland Public Library, Rockland, ME
- June 2, 2004, 7-9:30 p.m., Milbridge Town Hall, Milbridge, ME
- June 8, 2004, 7-9:00 p.m., Pine Tree State Arboretum, Augusta, ME
- June 9, 2004, 7-9:00 p.m., Falmouth Public Library, Falmouth, ME

Eighty-five people attended the public hearings: 28 in Rockland; 35 in Milbridge; 9 in Augusta; and 13 in Falmouth. Thirty gave oral testimony: 12 in Rockland; 7 in Milbridge; 4 in Augusta; and 7 in Falmouth. Some submitted their comments in writing instead of giving oral testimony, while others did both. More comments arrived later by post or electronic mail.

We received a total of 594 public responses in oral testimony at public hearings, in phone calls, or in written or electronic documents. Appendix I is a summary of the comments we received and our response to them. In some cases, our response resulted in a modification to alternative B, our preferred alternative. Our modifications include additions, corrections, or clarifications of our preferred actions in this Final EIS.

In conjunction with publishing this EIS, we are also publishing the Final CCP. The CCP separately portrays our preferred alternative in a stand-alone implementation document. If approved along with the Final EIS, it will be the reference used for determining refuge management direction and priorities and will serve as an outreach tool to inform others of our priorities.

Our Regional Director will issue a Record of Decision (ROD), the final decision document in the planning process approving the final EIS and CCP, after:

- Our Service Director has reviewed and approved our Land Protection Plan; and,

- We have provided the final documents to interested or affected parties for a 30-day waiting period, which will start when we publish a notice in the “Federal Register” that we have prepared a Final EIS and CCP.

Once our Regional Director has signed the ROD, the planning phase of the CCP process is complete, and its implementation phase begins.

Issues, Concerns, and Opportunities

From the Issues Workbook, public and focus group meetings, comments on the draft CCP/EIS, and planning team discussions, we developed a list of issues, opportunities, or any other item requiring a management decision. We concentrated further on the issues, as these drive the analysis and comparison of alternatives. Issues were sorted into three categories:

1. Significant issues – these issues formed the basis for the development and comparison of different management alternatives. A range of opinions on how to resolve these significant issues and meet objectives generated the different alternatives presented in Chapter 2. These issues are resolved differently among the alternatives. Significant issues are discussed in detail below.
2. Other issues to address - these issues and management concerns are also presented in Chapter 2, but are not considered “significant.” These issues are often resolved in a similar manner in all of the alternatives.
3. Issues and concerns outside the scope of this EIS – these issues do not fall within the scope of the purpose of and need for action as we described for this EIS. They are identified below, but will not be further addressed in this document.

Significant Issues

The following issues were generated by the planning team or brought to our attention by our State or other partners, or the public, during scoping activities. These issues generated a wide range of opinions including those in support of, to those fully against the particular activity involved. The issues matrix in Chapter 2 shows how we deal with these issues through actions and strategies in the four alternatives. We provide a summary of the different opinions we heard in each discussion of significant issues below.

1. *How will we protect the coastal nesting islands, given the finite number of islands suitable for seabird, wading bird, and eagle nesting?*

There are a limited number of coastal nesting islands providing seabird, wading bird and eagle nesting habitat. Of the more than 4,617 Maine coastal islands, 377 are considered to be nationally significant coastal nesting islands. Only 226 of these nationally significant islands are currently protected by either the Service, MDIFW, or the National Audubon Society, all of whom have either legislative authority or a management mission to maintain and enhance seabird, wading bird, or eagle nesting habitats. Each of these entities has ongoing seabird restoration projects which are very expensive and challenging to undertake.

Many people have expressed concern about the remaining 151 nationally significant coastal nesting islands, which do not have permanent, long-term protection and are subject to development pressures; pressures which continue to increase with the population on Maine's coastal islands. Some noted that the obvious threat is the direct loss of nesting habitat when construction occurs. They commented that residential development near nesting areas can indirectly result in disturbances during construction activities and from the influx of summer residents and their pets. Other concerns include the removal of potential bald eagle nesting trees through logging, and the harvest of other native vegetation or overgrazing by domestic animals which alters vegetation so it is no longer desirable to nesting seabirds.

On the other hand, we heard from some private island owners who feel they manage their islands with a conservation ethic and achieve the desirable habitat objectives. Some expressed the opinion that we "should just let nature take its course" and not intervene. Other people fear Federal ownership will result in a greatly diminished local voice in how the islands are used, and they expect the result will be additional restrictions on traditional activities on or near the islands. These respondents believe the Service will not be responsive to local concerns and that the islands will no longer be subject to local influences. Some expressed the opinion that market forces should dictate the status of land protection. Others recommended that either State agencies or national and local conservation organizations take the lead in land protection, and that the Service act only in a support role. Still others suggested that the Service pursue conservation easements instead of fee simple purchases as a means of protection. In their opinions, this would lessen the impact on local property tax revenues.

The alternatives evaluate different levels of land protection, including the number of islands recommended for Service acquisition.

2. *How will we deal with increased recreational and commercial uses promoted by others on or near coastal nesting islands?*

Tourism is an important component of the State and local economies, providing many seasonal jobs, and affecting many industry sectors. A great deal of revenue is generated from the millions of visitors who come to enjoy coastal Maine in the summer. The coastal nesting islands provide an important niche in the "eco-tourism" industry, at least partly because of the wildlife viewing opportunities they provide. Commercially provided seabird viewing activities are experiencing rapid growth. The total dollar volume of sales in this activity is approximately \$1,000,000 per year, with at least 20,000 participants. Many people also regularly enjoy seabird viewing without paying a commercial venture; they motor or paddle out to islands in their own canoes or kayaks. The total dollar value attributed to this activity in coastal Maine is approximately \$525,000 per year, with at least 10,500 annual visits (Colgan, 2002).



Seabird-watching cruise
USFWS photo

We heard concerns about the growth of this eco-tourism industry, specifically the increased number or frequency of tour boats visiting coastal nesting islands, resulting in an increased potential for disturbing nesting seabirds, wading birds, and eagles. Yet other respondents expressed an interest in seeing this wildlife observation opportunity continue, commercially provided or otherwise. Some mentioned an increased outreach and education campaign might ensure visitors become aware of the disturbances created and seek ways to minimize it. Others recommended that the islands be off-limits and that we enforce a wide no-access zone around the islands during the nesting season to preclude boat activity.

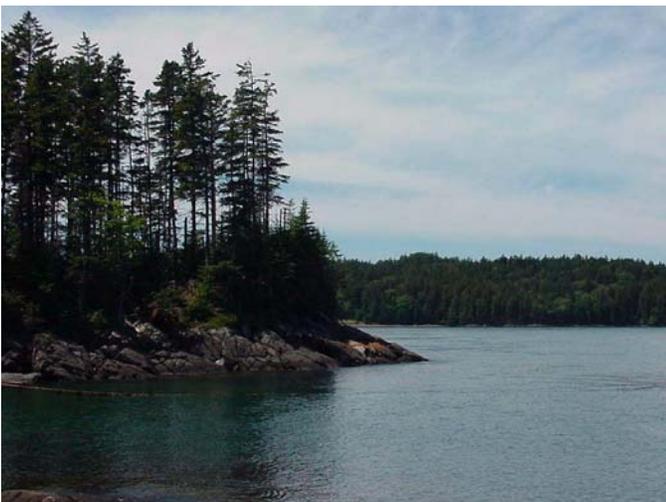
The alternatives consider various levels of outreach to user groups such as canoeists, kayakers, and commercial touring operations.

3. How will our management activities affect public access to coastal nesting islands?

Under the Colonial Ordinance of 1641-1647 as clarified by Title 12 M.R.S.A. 571 et seq., people have a right to use the intertidal zone around islands for “fishing, fowling, and navigation.” The intertidal zone is the area between mean low and mean high water. Use of the island above mean high water, however, is controlled by the property owner(s). Most people recognize that Service acquisition of nesting islands will result in a seasonal closure to protect the nesting seabirds, wading birds, or bald eagles. Opinions vary on this restriction.

Some people want increased opportunities for public access to coastal islands and would not support any additional restrictions. They believe that allowing people to experience the islands first-hand will contribute to their understanding and appreciation of these national resources. Many commented that access should especially be allowed for historic and traditional activities, such as berry picking, waterfowl hunting, camping, and annual family picnics.

Others are concerned that increased public access will only lead to increased disturbance to nesting birds, and sensitive plant and cultural areas. Some expressed concern with the potential for increased vandalism and trespass on private property when access on adjacent



A view of the shore of Cross Island
USFWS photo

Federal lands is allowed. A few suggested that the islands be off-limits year round to ensure full protection of the special resources found there. Others believe access should be allowed, but tightly controlled.

The alternatives compare different levels of public access, including variations on the seasonal closure period and the types of uses allowed.

4. *How will we manage habitats to protect threatened or endangered species, or other species of management concern?*

Several Federal-listed species, including the threatened bald eagle and the endangered roseate tern, are found on some of Maine's coastal islands. Several of these islands are part of the Refuge. A number of State-listed species, including several plants, are also present on these islands. Active management, to avoid habitat loss or degradation and sustain or increase populations, is one of the best ways to ensure the long-term survival of these species of concern. Several Refuge islands have active seabird habitat restoration programs in place.

The Service is responsible for protecting Federal-listed endangered and threatened species and keeping additional species off of the Federal list. In addition to these, there are other species of management concern warranting protection, including anadromous fish, certain marine mammals, State-listed and other rare or declining species as identified in Appendix B.



Arctic tern in flight
USFWS photo

Many people expressed their interest in protecting these species and, where possible, increasing populations through management. Their reasons ranged from a fear of losing a species entirely to an interest in maintaining overall biological diversity on coastal islands. Some are particularly interested in increasing well-distributed populations throughout the Gulf of Maine to protect against catastrophic losses. Others expressed the view that many unique natural communities and species of plants and animals, both terrestrial and marine, are found on coastal nesting islands. Protecting this diversity is the key to a healthy island environment. The emphasis on coastal nesting islands for seabirds, wading birds, and eagles will have direct and indirect benefits for many other species.

A few people are concerned that refuge management is focusing too much on protecting nesting habitat at the expense of the other habitat needs for a given species. They argue that it is equally important to protect the feeding, roosting, and migratory areas used by the birds. Feeding areas located on mudflats or open water may be subject to disturbance or overharvesting of resources upon which the birds depend. Habitat in feeding areas may be

disturbed or altered by dredging and dragging, deposition of sediments or dredged materials, or other activities. Others point out the need to learn more about what the birds feed on and where they feed.

Some people expressed fear that the presence of endangered or threatened species will severely restrict their ability to continue using and enjoying the islands. They do not support increased Federal acquisition of islands. Other respondents want us to “let nature takes its own course” without any intervention in managing these populations.

Several people wanted a clearer understanding of our management goals and objectives before they formed an opinion. They asked how we will decide on population goals for species of management concern, and how this translates into habitat management on coastal islands.

The alternatives compare different objectives and strategies for managing the species of management concern identified in Appendix B.

5. *How will we control the impacts of predators on species of management concern?*

We identified the need to control predators at seabird nesting sites as an important management concern. Herring and great black-backed gulls are highly effective at preying on the eggs and young of several nesting seabird species of concern. In addition, these two gulls often out-compete less common species, such as terns and laughing gulls, for nesting space on islands. In our current management, we generally remove nesting herring

and black-backed gulls before we restore colonies of the less common seabirds. Mammals like rats, raccoons, mink, cats, and birds like owls and night-herons can also create serious predation problems on islands. Some people recognize the importance of controlling predators to help maintain and restore diversity on nesting islands. Others are concerned about lethal predator control techniques, including trapping and the use of avicides, and adamantly oppose their use on the Refuge. Some people support predator control only if there is a threat to human life.

The alternatives compare and contrast different levels and techniques of predator control.



Great back-backed gull preys on tern
Photo courtesy of the Cornell Laboratory of Ornithology

6. *How will we manage sheep grazing on refuge lands?*

We identified the amount and timing of sheep grazing on Refuge islands as a management concern. Sheep currently graze on Nash and Metinic islands, where they have grazed for over 100 years. Grazing also occurs on

other islands proposed for Service acquisition in the Land Protection Plan (Appendix A). Grazing is considered a traditional and historic island activity by many people. Others, however, feel that grazing is inconsistent with the “wildlife first” mission of the Refuge System and oppose this activity on refuge lands.

Our observations on Nash and Metinic islands, and on other grazed private islands, indicate that when sheep graze too long in one area, or their numbers exceed foraging capacity, their presence can have a serious impact on nesting seabirds and their habitat. Overgrazing destroys the grasses and shrubs needed by nesting terns and eiders and forces nesting birds to use lower-quality habitat elsewhere on the island. In addition, sheep can directly disturb the birds by trampling their nests and eggs, or by forcing adult birds to flush from the nest, making their eggs or young more susceptible to predation by gulls.



Grazing sheep dot the Metinic Island landscape
USFWS photo

On the other hand, our staff and sheep owners feel that grazing can be used as an effective vegetation management tool when the number of animals, time of year, and length of grazing season are properly managed. In general, the vegetation on tern nesting islands must be managed to promote shorter grasses and other herbaceous vegetation, and not allow shrub or other woody growth, such as raspberry. It is challenging to get equipment to these islands, and prescribed fire is not always a viable option. As such, sheep grazing is considered by many to be a practical solution if managed properly to meet specific objectives.

The alternatives evaluate different levels of sheep grazing in support of seabird habitat management.

7. How will we manage non-native, invasive species on refuge lands?

Most people recognize that non-native, invasive plants and animals can displace native species, degrade wetlands and other natural communities, and reduce natural diversity and wildlife habitat values. Non-native plants outcompete native species by dominating light, water, and nutrient resources. We are concerned that, once established, invasive plants are expensive and labor-intensive to eliminate; they are able to establish easily, reproduce prolifically, and disperse readily, making eradication difficult. Preventing new invasions is extremely important for maintaining biological diversity and native plant populations.

Fortunately, the Refuge has very few non-native plant or animal species on its mainland divisions. In these areas, monitoring is all that has been warranted to date. On Refuge islands, however, little information is available.

The alternatives consider different levels of effort to determine the presence of invasive plant species and establish management strategies to deal with them.

8. *How can we effectively monitor and inventory wildlife populations and habitat on refuge lands?*

We are challenged each year by the staffing, funding, and logistical requirements of an effective resource monitoring and inventory program. We must make difficult choices regarding priorities because of limited available resources, which can vary widely between years. Unfortunately, our budget does not include a dedicated source of permanent funding for carrying out important habitat and population inventory and monitoring activities. We rely on competitive sources of funding – Challenge Grants, Cooperative Agreements, the National Fish and Wildlife Foundation, habitat funds, etc., to supplement Service funding. The uncertain availability of funding from year to year has always hampered our long-term planning.

Everyone we spoke with encouraged the continued partnership with the Gulf of Maine Coastal Program, where resource information is shared among many groups. The Coastal Program compiles and analyzes scientific resource data collected by the Service, State, and private conservation organizations. Through their analysis, they identify significant fish and wildlife habitats in need of protection, monitor population trends for certain species in the Gulf of Maine, identify existing information gaps for species of concern, and, consequently, determine future research needs. Many people feel this effort fills an important need and must be continued as an ongoing and long-term project. Others pointed out that other partnerships, for example with universities and colleges, conservation organizations, private landowners, or aquaculture industry representatives may be available to support implementation of Service inventory and monitoring priorities and encouraged us to explore these possibilities.

The alternatives consider different levels of inventory and monitoring effort and pursuit of partnerships to accomplish priority activities.

9. *How will we build partnerships to protect coastal wildlife habitats and support priority wildlife-dependent uses?*

We have established many valuable partnerships working to protect wildlife and habitats along the Maine coast. Partners are integral to virtually every program on the Refuge. Our partners assist us in activities including environmental education and interpretive programs, habitat evaluations, species inventories, nest site monitoring, and seabird restoration. In Chapter 3 we describe these partners and their missions in greater detail.

Due to the cyclical nature of funding for government agencies and the consistent membership support in conservation organizations, partnerships among public agencies and private organizations are vital to accomplishing

Refuge goals. Many people believe the only way to protect Maine's islands is for all parties – private island owners; Federal, State and local agencies; and private industry and organizations – to voluntarily join forces, form partnerships, and pool resources to accomplish the common good. There is a great deal of support for an approach that focuses on voluntarily working together in the spirit of cooperation, combining resources, sharing information, keeping people informed, and simply being good neighbors.



Arctic terns
USFWS photo

Partnerships can also help us provide high-quality, wildlife-dependent, public use opportunities. Non-consumptive uses such as environmental education are especially amenable to partnerships.

The alternatives compare different levels of effort towards pursuing partnerships.

10. How will we provide and maintain high-quality programs for the six priority public uses (hunting, fishing, environmental education and interpretation, and wildlife observation and photography)? Also, how will we manage traditional uses?

Local residents have expressed concern about the possible loss of opportunities to participate in many of the traditional activities they have enjoyed on, or adjacent to, coastal nesting islands. These include picnicking, camping, berry picking, shell fishing, fin fishing, trapping, and waterfowl hunting. They fear that any conservation or protection measures taken on nesting islands will result in additional restrictions on opportunities to pursue these activities. Others point out that these activities, when carried out during the nesting season, can disturb the birds. They believe that use of the islands during the nesting season must be restricted or very tightly controlled.

Many people identified environmental education and interpretation opportunities as their highest priority for public use at the refuge. They expressed concern that there are both local residents and frequent visitors who are unaware of the importance of the nesting islands and the role they play in the coastal ecosystem. It is a concern to some that most people are not familiar with the less visible and more uncommon species that inhabit the islands. In order to instill a sense of wonder regarding the special habitats and populations found on the nesting islands and encourage ethical practices, many people believe that more environmental education opportunities should be provided. In particular, they want us to increase our outreach efforts to local schools and communities.

As a priority, we will continue to promote the wildlife-dependent uses stipulated in the Refuge Improvement Act (e.g., hunting, fishing, wildlife observation and photography, environmental education, and interpretation) to the extent they are determined compatible with refuge purposes. It is only after the Refuge Manager determines that the use is compatible that we will open for any new use, or expand, renew, or extend an existing use.

The alternatives evaluate different levels of providing compatible public use programs, emphasizing the six priority, wildlife-dependent public uses identified in the Refuge Improvement Act. Appendix C includes the compatibility determinations completed for the Service's Preferred Alternative.

11. How will we manage activities that are not compatible on refuge lands?

Many people have expressed concern about the vandalism, trespass, intertidal harvesting, and other collecting occurring on Refuge islands. They point out that a Service presence is limited on most islands during the year, and that many of these activities are undetected. A few people mentioned that only a few islands have signs or notices alerting people to allowed activities and seasons of use. Another concern identified is that

people often bring pets ashore when visiting islands, which can cause serious problems to wildlife during the nesting season.

In general, it is very difficult to enforce trespass laws on islands. Also challenging is the fact that the Service does not have jurisdiction in the intertidal areas unless a Federal law is violated or Federal trust resources may be impacted. Generally, the intertidal areas are under the jurisdiction of the State.

The alternatives evaluate different strategies for dealing with activities already occurring on the Refuge that have been determined incompatible with refuge purposes. The strategies include various levels of outreach and law enforcement capability.



An illegal campsite on Schoppee Island
USFWS photo

12. How will we improve communications, raise the visibility of the Service and Refuge System, and build working relationships with local communities?

Local residents are becoming more aware of Refuge activities and benefits to their local communities. However, we are striving for even stronger ties to local communities to gain increased understanding and support for the Refuge System and our Refuge programs. Through increased communications, listening and sharing information, we believe we can make great

strides toward conserving the nationally significant resources along coastal Maine.

Some people suggested regular contacts with Tribal representatives, State and local elected officials, and conservation planning efforts at State and local levels. Others would like us to be more involved in Chamber of Commerce and local community events. A Friends Group, Friends of Maine Seabird Islands, has been initiated in the mid-coast area, which shows great promise as an advocacy group for the Refuge.

Other ideas were shared to increase the Service's visibility and Refuge activities. Some people noted that not all Refuge islands have boundary, informational, or regulatory signs to make visitors more aware of the importance of the islands to nesting birds and their vulnerability to disturbance. These respondents believe that more people need to understand that the islands are closed during the nesting season solely for the protection of the birds. Others suggested that informational brochures be developed to educate people and build public support for island protection.

The alternatives compare different levels of community involvement and ways of raising the Service's visibility.

13. What funding, staffing, and infrastructure will we need to manage a refuge that spans the coast of Maine and includes coastal islands?

Many who support Refuge management activities appreciate the logistical challenges of managing 42 islands scattered over 200 air-miles of the Maine coast. When carrying out management or law enforcement activities, we must haul boats by trailer from the Refuge offices in Milbridge or the satellite office in Rockport to public launch sites on the mainland. In good weather, it can take as long as 1 to 2 hours to reach those islands

farthest out once the boat is launched. Often, in periods of high seas and fog, it is virtually impossible to reach the islands. Setting up and supplying summer base camps on the islands to support research and management activities can be time consuming, costly, and dangerous. Many islands are difficult to land on, even in good weather. A few people noted that more staff located centrally in the mid-coast area might alleviate some of this problem.

Some people expressed their concern with the lack of law enforcement capabilities on Refuge lands. We currently have no law enforcement officers on the staff. Adequately patrolling Refuge mainland areas and widely scattered islands and responding to incidents has become



Transporting people and equipment on the Refuge is often a challenge
USFWS photo

an impossible task. As public use of the Refuge increases, current law enforcement difficulties will be compounded, especially during the critical nesting season, when the potential for disturbance is greatest.

The alternatives compare different funding and staffing levels needed to support respective objectives and strategies.

14. Which lands will be studied for their wilderness potential and recommended for inclusion in the National Wilderness Preservation System?

Service planning policy requires us to review current Refuge lands for their wilderness potential during the CCP planning process. A wilderness review consists of three phases: 1) inventory; 2) study; and, 3) recommendation. A wilderness inventory is conducted first to see if refuge lands meet the minimum criteria established in Section 2(c) of the Wilderness Act. Lands that meet the criteria are called wilderness study areas (WSAs). In the study phase, we evaluate the WSA's values (e.g., ecological, recreational, cultural, economic, and symbolic), resources (e.g., wildlife, water, vegetation, minerals, and soils), and existing and proposed public uses, and analyze whether we can manage the wilderness values and character over the long-term.

Basically, we determine if the WSAs are suitable for wilderness designation. The inventory and study phases are incorporated into the CCP process. In the recommendation phase, we forward the suitable recommendations on to our Director. Our Director must concur with the wilderness study findings and suitable recommendations before they are forwarded or reported through the Secretary of Interior and the President of the United States, to Congress for final approval.

We conducted an inventory and study of existing Refuge lands and determined that 13 islands met the minimum criteria for wilderness. These islands were then grouped into eight WSAs. At this stage, the issue thus becomes whether we can manage for wilderness values and character long-term, without jeopardizing our management to achieve each affected refuge's establishment purposes and the Refuge System mission.

We have heard mixed support for wilderness designation. Some people were simply unsure how this would affect current management of Refuge islands; namely, how such a designation would impact public use and access. Several other people supported wilderness designation for as much refuge land as possible to prevent land uses, such as timber harvesting or grazing, that they believed could potentially degrade natural values. Others felt that wilderness designation would actually harm the character of coastal Maine by attracting additional visitors to the islands. Some of these same people felt that the Service could manage for wilderness character while not officially designating it as such. In addition, we heard from

others who expressed concern that designation could impact commercial or recreational opportunities on adjacent lands.

The alternatives range from proposing none to all eight WSAs for inclusion into the National Wilderness Preservation System. Chapter 4 analyzes the consequences of each alternative's proposal.

Other Issues to Address

1. How will refuge activities affect the local economy and tax base?

Many people expressed the opinion that refuge lands affect the local economies primarily by increasing the potential for eco-tourism (see issue #2, "Increased recreational and commercial uses on or near coastal nesting islands").

Some people are concerned that refuge lands reduce the local tax base, since the Federal government does not pay property taxes. They believe this places an additional financial burden on town residents who own land and pay taxes on their property. They note that, in addition to Federal lands, those owned by the State and some land trusts are tax-exempt, which has a cumulative impact on the tax base. On the other hand, others noted that Refuge Revenue Sharing payments to towns help offset, and sometimes more than compensate for, these tax losses.

A few people value the open space protection provided by refuges and believe the tangible and intangible benefits to the community are much greater when these islands are protected and kept as open space. They noted that open space benefits local economies by raising property values, lowering infrastructure needs, and maintaining lower costs for community services compared to developed areas.

The alternatives have differing impacts on the local economy as described in Chapter 4: Environmental Consequences.

2. How will we protect historic resources on refuge lands?

Some people expressed their interest in protecting the lighthouses and associated structures. A few people represented national organizations dedicated to this preservation effort. Eight refuge islands have lighthouses: Libby, Petit Manan, Egg Rock, Matinicus Rock, Two Bush, Franklin, Pond, and Nash islands. Except for the Nash Island light, these lighthouses have been automated. The U.S. Coast Guard maintains the aids to navigation within the lighthouses.

All the lighthouses except Two Bush are on the National Register of Historic Places. However, the Service is responsible only on Libby Island, Egg Rock, and Matinicus Rock for maintaining the lighthouses to national historic standards. The Service is also responsible for maintaining these standards on the Petit Manan Island lightkeeper's house and outbuildings. The historic lighthouses on Franklin, Pond, and Petit Manan Islands are the responsibility of the Coast Guard.



Lighthouse on Libby Island
USFWS photo

Historically, we have lacked adequate funding to maintain all the lighthouses and historic structures found on these islands. Without adequate funding and the assistance of lighthouse Friends Groups or other agencies and organizations, it will be difficult, if not impossible, for us to meet these legislated responsibilities.

While all alternatives include a requirement to maintain the registered historic lighthouses to standard, the alternatives compare different levels of promoting their use and enjoyment.

3. *How will we promote volunteer opportunities and a Friends Group?*

At public scoping meetings, we heard a lot of interest in volunteer opportunities and initiating a Friends group for the Refuge. We began a formal volunteer program in 2000 and currently have 25 volunteers. Volunteers help with administrative, biological, and public use activities. In the fall of 2002, a Refuge Friends

Group, Friends of Maine Seabird Islands, officially formed in the mid-coast area. Their community outreach efforts have tremendously benefitted the Refuge.

The alternatives evaluate different levels of support for volunteers and establishing other Friends groups in downeast Maine.

4. *How can we provide technical assistance to others interested in managing for wildlife and habitats?*

The need to provide technical assistance to interested island owners, land trusts, and private organizations was identified by many as an important issue. Those who own coastal nesting islands aren't always certain of their significance and what needs to be done to maintain the values that make the islands so special for wildlife. The Service's Gulf of Maine Program helps provide technical assistance and routinely identifies and distributes information about potential sources of funding. Many people feel this fills

an important need and should be continued. Our staff could complement this effort by providing technical assistance more specifically on habitat management techniques.

The alternatives evaluate different levels of providing technical assistance.

Issues Outside the Scope of this EIS

These issues were brought up by the public or by the planning team during the scoping process. In some instances, the Service does not have any, or only limited, regulatory or jurisdictional authority over the issue. Other issues may be covered under other Service programs, initiatives, or planning projects. Some of the concerns implicit in these issues are addressed in Chapter 4: Environmental Consequences. However, all of these issues are considered outside this document's stated purpose and need for action and, thereby, do not fall within its scope of analysis.

1. How will we affect aquaculture operations adjacent to coastal nesting islands?

Aquaculture is important to the local and State economies in Maine. In Chapter 3, Affected Environment, we provide a summary of the current state of Maine's aquaculture industry.

Many people expressed opinions on the benefits of this industry to local communities and the coastal ecosystem. Some people are concerned that Service ownership of islands will adversely impact present and future aquaculture operations by imposing restrictions. Industry supporters are particularly concerned about increased Service acquisition of islands coupled with the Federal-listing of wild Atlantic salmon as an endangered species in several Maine rivers. In their opinion, Federal acquisition will only continue to reduce the economic viability of an industry impacted by the salmon listing.

Some respondents suggested that aquaculture pens are beneficial as they can provide feeding, roosting, and loafing sites for birds. Fish-eating birds are commonly seen "pirating" fish reared in the pens. Other people, however, are concerned that the noise and activity from aquaculture operations at off-shore facilities may disturb nesting birds on nearby islands. In addition, they feel that disease control, feeding, and waste products at facilities cause pollution.

Some people were not opposed to aquaculture operations per se, but they believe care should be taken to select suitable sites away from known bird nesting islands. Finally, there are some people who do not believe there is any impact on the ecosystem.

The aquaculture issue is complicated and by no means inconsequential; however, we do not believe it warrants a detailed analysis within the context of this EIS. The industry is faced with many challenges, none of

which are the direct result of Refuge programs. These challenges include a combination of health and environmental problems, such as infectious salmon anemia, the Federal-listing of Atlantic salmon as an endangered species, competition from foreign producers, and the lengthy lease process.

A prospective aquaculture operator must undergo both a State and Federal review and permitting process prior to obtaining the necessary leases. The State review is generally initiated first. Both the Maine Department of Marine Resources (DMR) and Department of Environmental Protection (DEP) review and decide on whether to issue State permits. In addition, the Maine DEP has been delegated authority by the Federal Environmental Protection Agency (EPA) to insure operations comply with the Clean Water Act. Unless a Federal-listed species is involved, the Service may not be consulted at this stage.



Aquaculture pens at Libby Islands, 1994
USFWS photo

The Federal permits in Maine are then reviewed and approved by the U.S. Army Corps of Engineers (ACOE). When a permit application is submitted, the ACOE shares the permit application with the Service's Ecological Service's Maine Field Office for a review and recommendation. This review is required under the Fish and Wildlife Coordination Act and the Endangered Species Act. The Service does not have jurisdiction or management authority over coastal waters or the intertidal zone unless, as noted above, it is determined that a Federal-listed species may be impacted.

Typically, the Maine Field Office recommendation is for the aquaculture facility to be located no closer than 1/4 mile from a Refuge island or other Federal-owned island, although this can vary depending on the size of the island and the species which might be impacted. This recommendation by the Maine Field Office is non-binding. If a Federal-listed species, such as a nesting bald eagle, is documented near the prospective site, then the Maine Field Office would initiate a detailed review and recommendation process as required under Section 7 of the Endangered Species Act. The Refuge Program staff are not the authority responsible for this process; however, they will consult with the Field Office upon request.

The January 2004 report by the Governor’s Task Force on the Planning and Development of Marine Aquaculture in Maine provides a wealth of information on the history and status of aquaculture in Maine and includes a total of 95 individual recommendations for improving the development of the industry while considering impacts on other uses and the environment (www.maine.gov/dmr/aquaculture/aqtaskforce/finalreport.htm). One recommended best management practice is to insure that facilities do not unreasonably interfere within 1,000 feet of “important ecological, recreational, scenic, cultural, or historic” local, State, or Federal lands. Proposed amendments to current State lease decision criteria (Sec. A-6.12 M.R.S.A. §6072, Sub-§7-A) include:

7-A. Decision...

“(D) The lease will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support existing ecologically significant flora;” and

(F) The lease does not unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, or docking facility owned by the Federal Government, the State Government or a municipal governmental agency or certain conserved lands. For the purposes of this paragraph, “conserved lands” means land in which fee ownership has been acquired by the municipal government, State government or Federal Government in order to protect the important ecological, recreational, scenic, cultural, or historic attributes of that property.”

In addition to the Governor’s Task Force Report and proposed State rule changes for aquaculture leases, other management implications could arise from the Draft Recovery Plan for Maine Atlantic Salmon, which was issued by the National Oceanic and Atmospheric Administration (NOAA) and the Service on June 18, 2004 for 90 days of public comment. This plan identifies nine actions as necessary for the full recovery of the “Gulf of Maine Distinct Population Segment” including...(3) reduce the risk from commercial aquaculture operations.”

The following reasons influenced our decision to not undertake a detailed analysis on impacts to aquaculture operations from implementing this Refuge CCP. First, the purpose of this CCP is to develop strategic management direction for our Refuge Program staff to implement on refuge lands. It does not provide direction for other Service programs, nor are we attempting to modify the current lease review process, or impose jurisdiction where we have no authority, as in State waters.

Second, there is a lot of uncertainty with predicting the locations and extent of future aquaculture facilities. This uncertainty restricts and compromises our ability to conduct a meaningful impacts analyses. In our past experience, we have been more concerned with the proximity of finfish operations to Refuge islands because these facilities and associated

activity have more potential to disturb nesting birds. However, future locations for finfish facilities are the most difficult aquaculture operation to predict (Horne-Olson, pers com). Contributing to this uncertainty is the pending release of the Final Atlantic Salmon Recovery Plan, which will address aquaculture issues, and establish actions necessary to de-list the species from the Federal Endangered Species list.

Third, it is our expectation that the release of the Final Governor's Task Force report and a decision on the proposed rule changes for deciding on aquaculture leases by the State, coupled with the pending Federal recovery plan, will provide the basis for public meetings on improving the governance and implementation of aquaculture in Maine. For example, recommendations on improving the lease process, establishing minimum buffer widths, implementing seasonal restrictions, and use of new technologies should all be discussed through this forum. It is through these public hearing processes that the Service may best be able to affect aquaculture practices to the benefit of natural resources.

Finally, management alternatives in this final EIS include resource monitoring at aquaculture sites in close proximity to Refuge islands with sensitive seabird and bald eagle nesting and feeding areas (Objective 4.3). The monitoring would be done in cooperation with State agencies, our research partners, and industry representatives. The information obtained would provide us with a more informed basis for analyzing future impacts.

Given the reasons noted above, and the purpose of this final EIS, we determined it was not warranted to conduct a detailed impacts analysis on the relationship of proposed Refuge management to the aquaculture industry in Maine.

2. *Will we use eminent domain (condemnation) to take privately owned coastal nesting islands?*

The Service, like all Federal agencies, has been given the power of eminent domain which allows it to condemn and acquire lands for the public good. Some island owners fear that the Service will condemn and take their islands without their consent. They also fear that if this happens they will not be adequately compensated for the real value of their island. Others believe the Service should use all of the tools at its disposal, including eminent domain, to conserve and protect coastal nesting islands.

Service policy is to acquire property only from willing sellers, at market value. None of our alternatives include the use of eminent domain, therefore, we believed it did not warrant further analysis.

3. *Will we take away or regulate private property owners' rights?*

Some people believe the presence and involvement of the Federal government will result in the loss of some of their rights as property owners, ultimately affecting their ability to use their land as they see fit. This would effectively reduce the value of their land by preventing them

from placing it in its “highest and best use.” They believe that, even if the Federal government doesn’t directly regulate or restrict their rights, local or State governments may pass new regulations because of Service interest in the nesting islands. Others feel very strongly that restricting property owners’ rights to sell their land to anyone, including the Federal government, infringes on their individual rights. We have no authority in this planning process to restrict private property rights, or to manage private lands, nor have we ever expressed an interest in doing so unless under a partnership agreement. None of our alternatives consider regulation of private property by the Service and, therefore, it does not warrant additional discussion.

4. How will we affect lobstering and other commercial fisheries near coastal nesting islands?

Lobstering and other forms of shell or fin fishing are important components of both local and State economies. The industry provides important jobs in local communities, and many believe it is a mainstay of the traditional culture of coastal Maine. Anything that threatens the viability of the industry is a concern to most people we spoke with. As with aquaculture operations, some people are concerned that Service ownership of islands will adversely impact present and future lobster operations by imposing restrictions. Other people support the industry, but request that the Service work closely with industry representatives to ensure that the fisheries vital to seabirds, wading birds, and bald eagles are not overharvested.

Similar to what we presented in the aquaculture discussion, the Service has no jurisdiction over commercial fisheries, unless it is determined that Federal trust resources may be impacted. At this time, we determined this issue is outside the scope of this document. It did not make sense for us to evaluate new catch limits, new technologies, or other strategies given our limited ability to directly influence an outcome. This topic will not be addressed further in the EIS, except where we identify the need to initiate efforts to determine if there are potential impacts on Federal trust resources (Objectives 4.2 and 4.3).

5. Will we affect existing local and State land use regulations?

There are a variety of local and State land use regulations regarding development on islands. Some towns do not have effective regulations or enforcement to conserve natural resources on coastal nesting islands. Many people are concerned that the lack of consistency in the enforcement of existing regulations threatens nesting islands. They fear that variances may be granted that will result in adverse impacts on important island habitats and that current regulatory tools cannot adequately protect nesting

islands. Others complain that these regulations unduly hinder their ability to make effective use of islands they own.

The Service does not have the authority to alter State and local land use regulations, although we can provide input through partnerships and technical assistance. Proposing changes to local and State land use regulations are outside the scope of this document and will not be addressed further.

Plan Amendment and Revision

Periodic review of the CCP will be required to ensure that objectives are being met and management actions are being implemented. Ongoing monitoring and evaluation will be an important part of this process. Monitoring results or new information may indicate the need to change our strategies.

The Service’s planning policy (FWS Manual, Part 602, Chapters 1, 3, and 4) states that CCPs should be reviewed at least annually to decide if they require any revisions (Chapter 3, part 3.4 (8)). Revisions will only be necessary if significant new information becomes available, ecological conditions change, major refuge expansions occur, or we identify the need to do so during a program review.

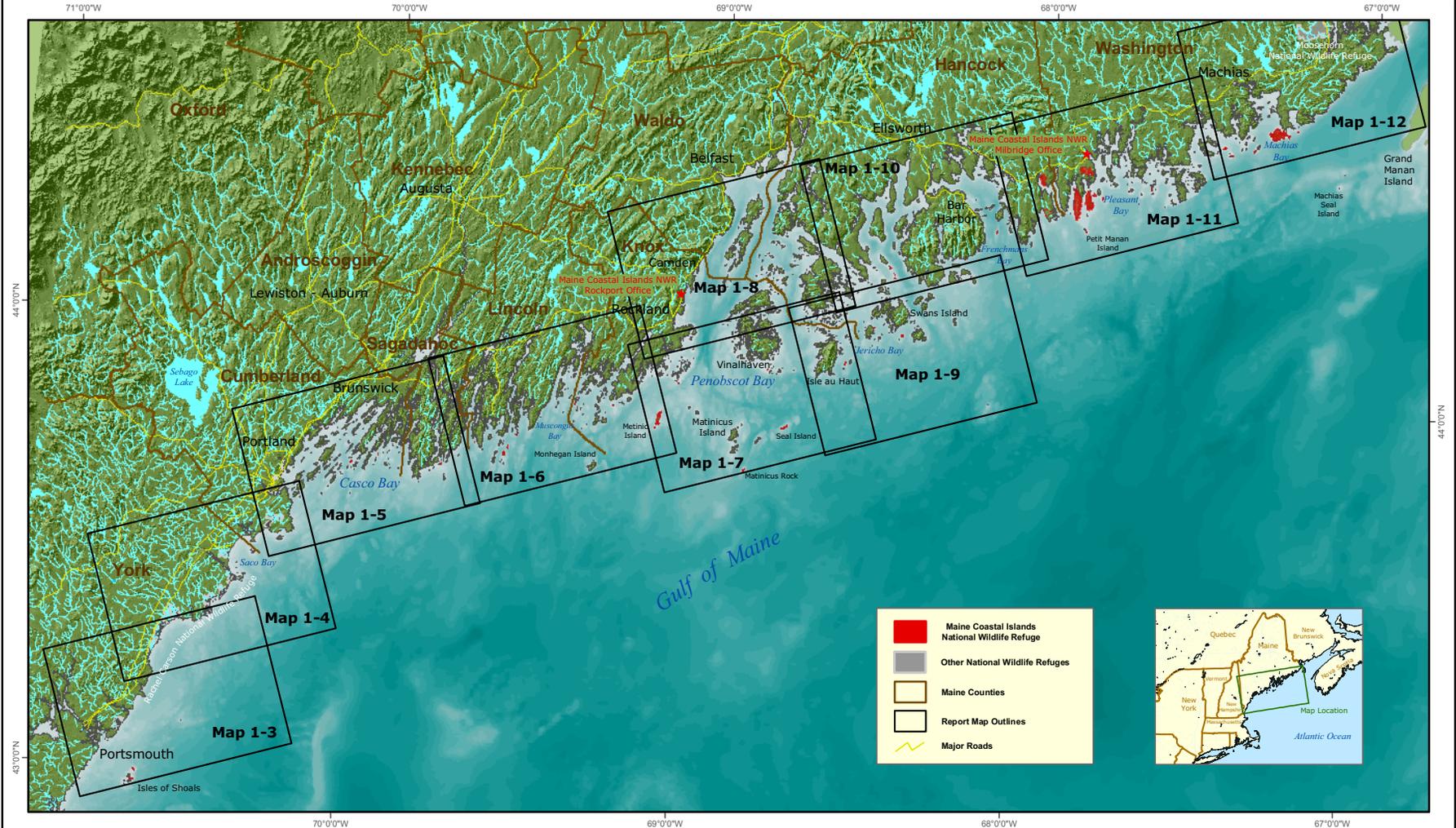
At a minimum, CCPs will be fully revised every 15 years. We will modify the CCP documents and associated management activities as needed, following the procedures outlined in Service policy and NEPA requirements. Minor revisions that meet the criteria for categorical exclusions (550 FW 3.3 C) will only require an Environmental Action Memorandum.



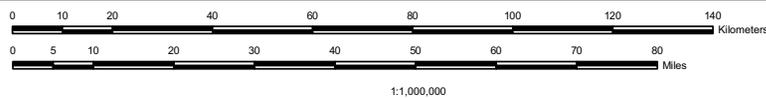
Birch Point Trail on Petit Manan Point Division
USFWS photo



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT Maine Coastal Islands National Wildlife Refuge



- Maine Coastal Islands National Wildlife Refuge
- Other National Wildlife Refuges
- Maine Counties
- Report Map Outlines
- Major Roads



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds

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MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-3 Kittery



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

* Nationally significant is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCP/EIS.

Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
National Land Cover Database from the US EPA
Digital Elevation Model from USGS NED data
Roads from USGS 1:100,000 road data
Town lines adapted from Maine Office of GIS data
All National Wildlife Refuge boundaries from USFWS
Bathymetry from MassGIS
Map produced by USFWS R5Carto 2/23/2005





MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE

COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-4 Saco Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

* 'Nationally significant' is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCP/EIS.

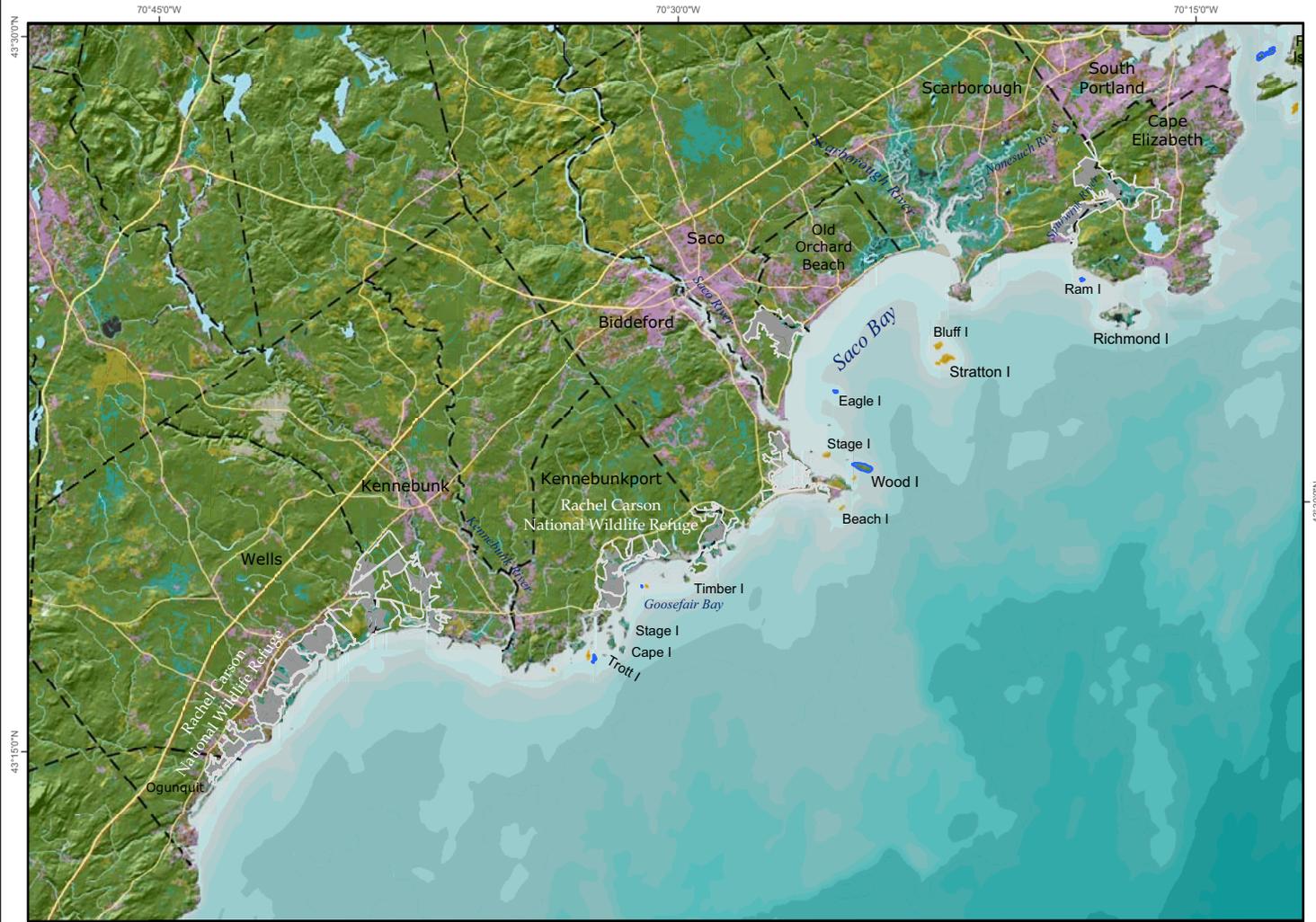
Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

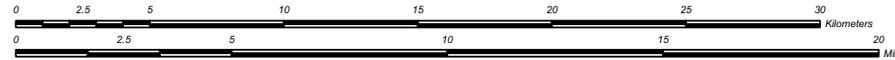
National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Carto 1/6/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North

MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE
COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT
Map 1-5 Casco Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

* Nationally significant is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCP/EIS.

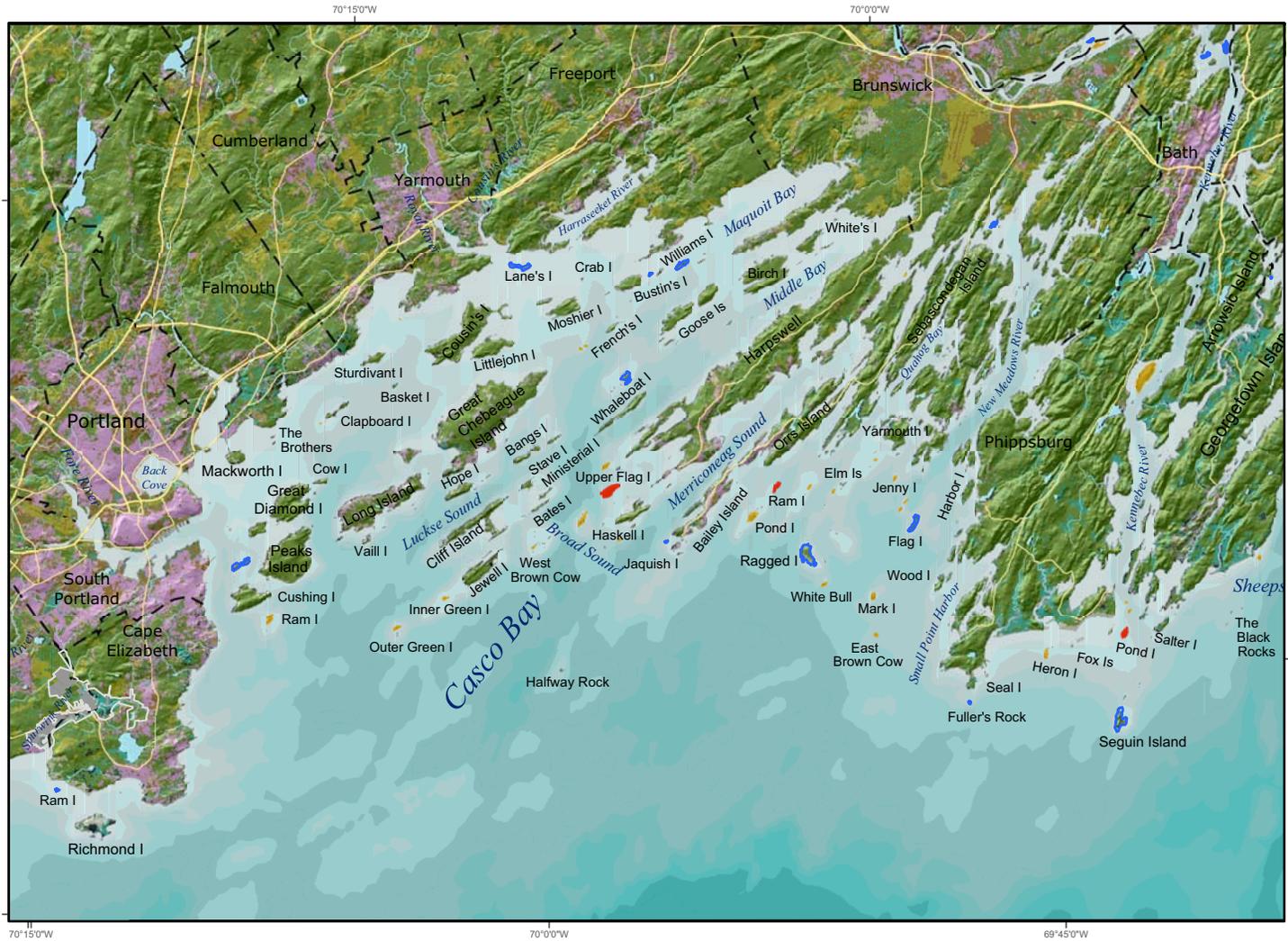
Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Carto 1/10/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-6 Muscongus Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

* 'Nationally significant' is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCP/EIS.

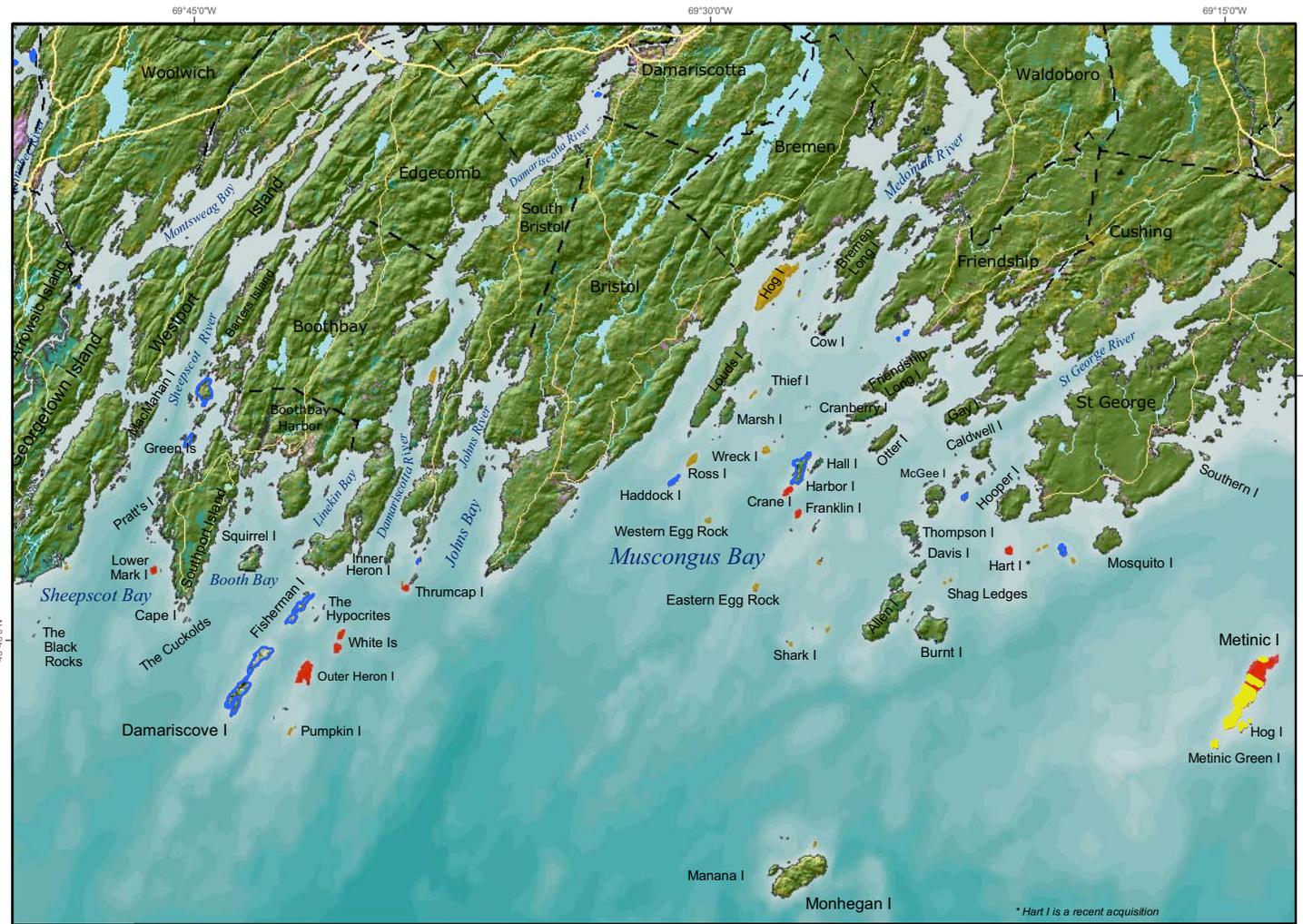
Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

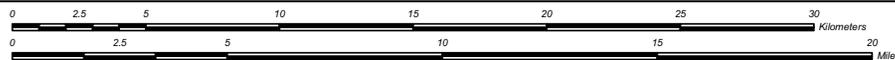
National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS RSCarto 2/23/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE

COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-8 Inner Penobscot Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

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Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Carto 1/11/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE

COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-9 Jericho Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

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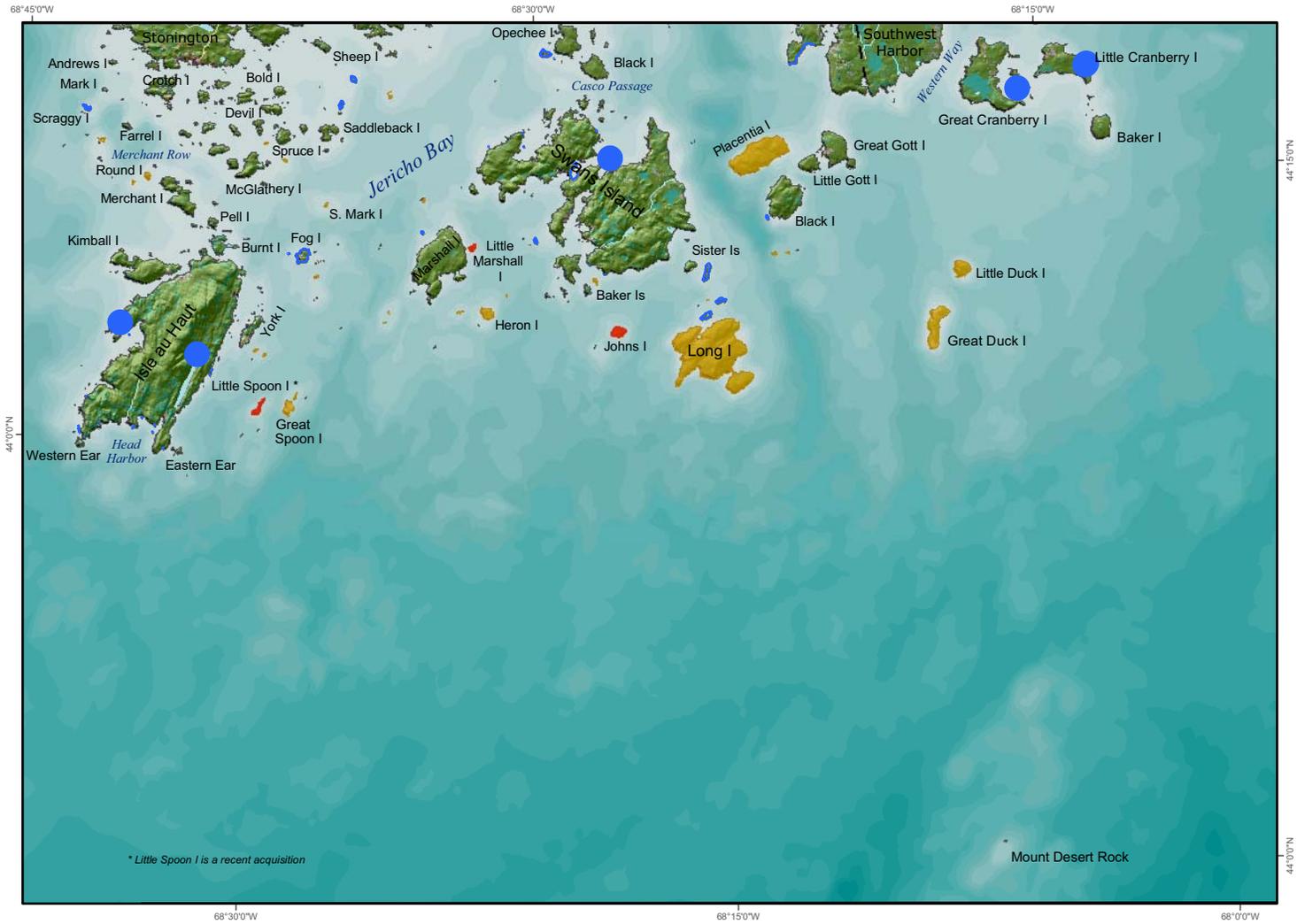
Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

National Land Cover Database

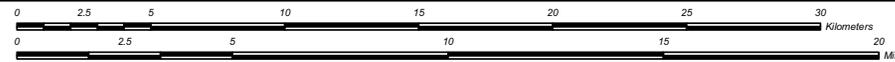
- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Carto 2/23/2005



* Little Spoon I is a recent acquisition

Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE

COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-10 Frenchman Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

*Nationally significant is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCPEIS.

Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

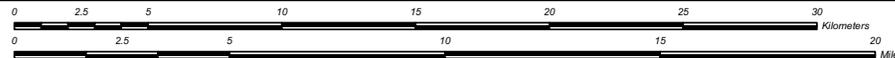
National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS RSCarto 2/23/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE

COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT



Map 1-11 Petit Manan

Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
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- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

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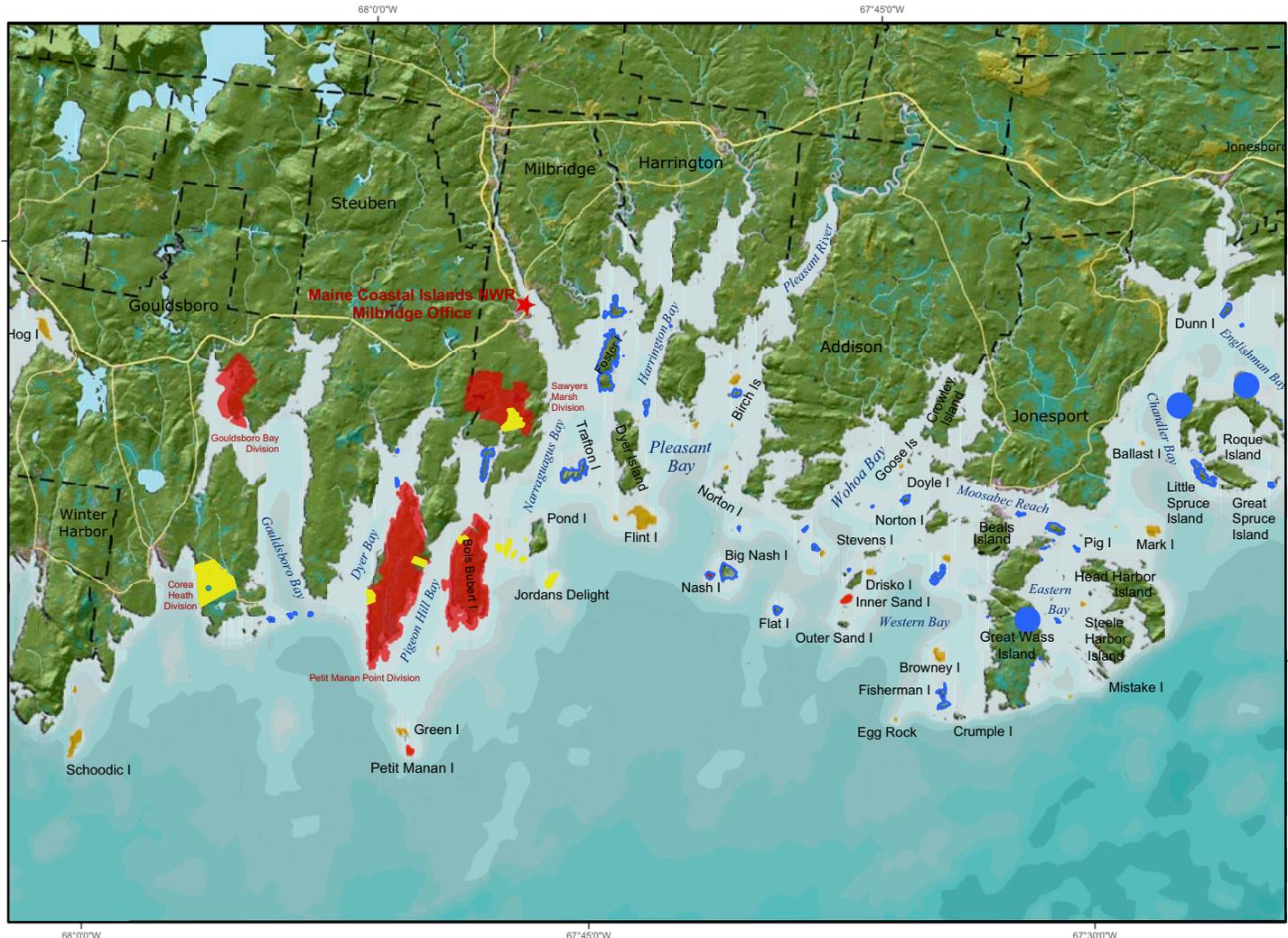
Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

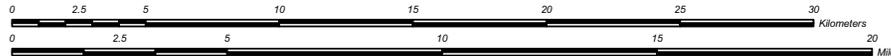
National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Canto 1/11/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North



MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPREHENSIVE CONSERVATION PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Map 1-12 Cobscook Bay



Land Protection Legend

- Maine Coastal Islands National Wildlife Refuge
- Maine Coastal Islands National Wildlife Refuge Approved for Acquisition
- Nationally Significant Islands* Permanently Protected by Others
- Nationally Significant Islands* Not Permanently Protected
- Nationally Significant Bald Eagle Nesting Sites* Not Permanently Protected
- Other National Wildlife Refuges

* "Nationally significant" is defined by criteria developed in partnership with Gulf of Maine Program, Maine Dept. of Inland Fisheries & Wildlife and conservation partners. Specific criteria used to determine national significance identified in Chapter 1 of the CCP/EIS.

Base Map Legend

- Primary Roads
- Secondary Roads
- Town Lines
- Fresh Water

National Land Cover Database

- Residential
- Commercial, Industrial or Transportation
- Bare Rock or Barren Land
- Forested
- Grassland
- Wetland

Data sources:
 National Land Cover Database from the US EPA
 Digital Elevation Model from USGS NED data
 Roads from USGS 1:100,000 road data
 Town lines adapted from Maine Office of GIS data
 All National Wildlife Refuge boundaries from USFWS
 Bathymetry from MassGIS
 Map produced by USFWS R5Carto 1/12/2005



Map Projection: North_American_1927_UTM_Zone_19N
 Graticule Units: degrees, minutes, seconds



Map frame rotated 19 degrees from North