



U.S. Fish & Wildlife Service

# Maine Coastal Islands National Wildlife Refuge

*Final Environmental Impact Statement for  
the Comprehensive Conservation Plan:  
Appendices*

*April 2005*



**Cover Photos:** Cross Island, *USFWS*  
Harbor seal, *USFWS*  
Atlantic puffin, *USFWS*  
Roseate tern, *Gil Lopez-Espina*



*This goose, designed by J.N.  
“Ding” Darling, has become a  
symbol of the National Wildlife  
Refuge System.*

The *U.S. Fish and Wildlife Service* is the principal Federal agency responsible for conserving, protecting, and enhancing fish, wildlife, plants, and their habitats for the continuing benefit of the American people. The Service manages the 95-million acre National Wildlife Refuge system comprised of more than 545 national wildlife refuges and thousands of waterfowl production areas. It also operates 65 national fish hatcheries and 78 ecological services field stations. The agency enforces Federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid Program which distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state wildlife agencies.

Comprehensive Conservation Plans provide long term guidance for management decisions and set forth goals, objectives, and strategies needed to accomplish refuge purposes and identify the Service’s best estimate of future needs. These plans detail program planning levels that are sometimes substantially above current budget allocations and, as such, are primarily for Service strategic planning and program prioritization purposes. The plans do not constitute a commitment for staffing increases, operational and maintenance increases, or funding for future land acquisition.



U.S. Fish & Wildlife Service

# Maine Coastal Islands National Wildlife Refuge

*(formerly Petit Manan National Wildlife Refuge Complex)*

*Final Environmental Impact Statement for the  
Comprehensive Conservation Plan: Appendices*

*April 2005*

U.S. Fish and Wildlife Service  
Refuge Headquarters  
P.O. Box 279, Water Street  
Milbridge, ME 04658-0279

# Maine Coastal Islands National Wildlife Refuge Final Environmental Impact Statement April 2005

## Abstract

**Type of action:** Administrative  
**Lead agency:** U.S. Department of the Interior,  
Fish and Wildlife Service  
**Responsible official:** Marvin Moriarty, Regional Director, Region 5  
**For further information:** Refuge Manager  
P.O. Box 279, Water Street  
Milbridge, ME 04658-0279

The Final Environmental Impact Statement for Maine Coastal Islands National Wildlife Refuge fully compares four management alternatives. Its eleven appendices provide additional information supporting our analysis. A brief overview of each alternative follows.

## Alternative A Current Management

**Refuge expansion of 1,034 acres and continued current management.** This is the “no action” alternative required by regulations under the National Environmental Policy Act of 1969. Although it would expand the Petit Manan Refuge by 1,034 acres beyond the current approved boundary, selecting this alternative would otherwise maintain the status quo in refuge management actions over the next 15 years. Thus, it provides a baseline for comparing or contrasting the three “action” alternatives.

## Alternative B Preferred Alternative

**Refuge expansion of 2,459 acres and notably expanded management and recreation.** Selecting this alternative would expand the Petit Manan Refuge by 2,306 acres beyond the current approved boundary on 87 nationally significant seabird, wading bird, or bald eagle coastal nesting islands and 153 acres of wetlands on the mainland. It would add six new seabird restoration projects to our present six, and intensify the focus of our biological programs on birds of high conservation priority in the Gulf of Maine. It would increase opportunities for wildlife-dependent recreation, especially in our environmental education and interpretation programs, build new trails on the Gouldsboro Bay, Sawyers Marsh, and Corea Heath divisions, and open the Petit Manan Point Division for deer hunting. And, it would recommend that 13 Refuge islands in 8 wilderness study areas be included in the National Wilderness Preservation System. Refuge staffing and budgets would increase commensurately. We recommend this alternative for approval.

## Alternative C

**Refuge expansion of 6,463 acres and greatly expanded management and recreation.** Selecting this alternative would expand the Petit Manan Refuge by 6,463 acres beyond the current approved boundary, adding 6,310 acres on all or parts of 151 seabird or bald eagle nesting islands and 153 acres of wetlands on the mainland. Its wilderness proposal mirrors the proposal in alternative B. It would create 12 new seabird restoration projects, and allow trapping under refuge regulations on three mainland divisions and Bois Bubert and Cross islands. New trails would be developed on refuge mainland divisions, the same as alternative B. This alternative would also require the greatest budget and staffing increases.

## Alternative D

**No refuge expansion beyond the current approved boundary and reduced management with minimal human intrusion.** This alternative adopts a custodial or low intervention approach to management. Selecting it would neither expand a refuge nor recommend wilderness designation. It would restore only minimal seabird habitat, focus our public use, environmental education and interpretation on offsite programs, and close all refuge islands to public access. Except for our emergency intervention to avert or mitigate catastrophic events, it would leave refuge habitats and species to the effects of environmental processes.

## Table of Contents

		Page
<b>Appendix A</b>	Land Protection Plan .....	A-1
<b>Appendix B</b>	Species and Habitats of Conservation Concern .....	B-1
<b>Appendix C</b>	Compatibility Determinations .....	C-1
<b>Appendix D</b>	Wilderness Inventory and Study .....	D-1
<b>Appendix E</b>	Refuge Operations Needs System (RONS) and Management Maintenance System (MMS) .....	E-1
<b>Appendix F</b>	Staffing Charts .....	F-1
<b>Appendix G</b>	Property Tax Impact Analysis .....	G-1
<b>Appendix H</b>	Seabird Viewing Study Results .....	H-1
<b>Appendix I</b>	Summary of Public Comments and Service Response .....	I-1
<b>Appendix J</b>	Consultation under the Endangered Species Act .....	J-1
<b>Appendix K</b>	Consultation with Maine Historic Preservation Commission .....	K-1



## Appendix A



*Blueberry barrens on the Petit Manan Point Division*  
USFWS photo

# Land Protection Plan

- Introduction
- Project Area Description
- Status of Resources to be Protected
- Proposed Action
- Protection Options Considered
- Acquisition Methods
- Service Land Acquisition Policies
- Coordination
- Socioeconomic and Cultural Impacts
- Current Service Ownership and Proposed Acquisition

**Land Protection Plan  
Petit Manan National Wildlife Refuge  
April 2005**

**I. Introduction**

This Land Protection Plan (LPP) provides detailed information on our proposal to expand Petit Manan National Wildlife Refuge, which lies along the entire Maine coast. Petit Manan Refuge is part of the National Wildlife Refuge System (Refuge System) administered by the U.S. Fish and Wildlife Service (Service). It is the flagship refuge for the five-refuge complex we call Maine Coastal Islands National Wildlife Refuge (Refuge). Our targeted audience with this document is affected landowners, interested individuals, organizations, Federal and State agencies, and local officials. This proposal was distributed for a 60-day public review and comment period from April 30 to July 6, 2004. Comments we received helped our Director make a final decision regarding land acquisition. Once approved, this LPP will allow us to acquire an additional 2,459.7 acres from willing sellers, including 87 nationally significant Maine coastal nesting islands (2,306.4 acres) and 153.3 acres of important mainland wetlands habitat.

Specifically, the purposes of this LPP are to:

- inform affected landowners, and other interested parties, about the resource protection needs, location, size, and priority of the 87 nationally significant islands and mainland tracts we propose to acquire;
- inform landowners, whose properties are proposed for acquisition, about our policies, priorities, options, and methods for permanently protecting these lands;
- inform owners of inholdings within our currently approved boundary that we are interested in acquisition, and to remind them of our policies, priorities, options, and methods for permanently protecting these lands; and,
- emphasize the Service's policy of acquiring land only from willing sellers.

The 87 islands we propose for Service acquisition are considered nationally significant using a set of biologically-based criteria established by the Service, the Maine Department of Inland Fisheries and Wildlife (MDIFW), The Nature Conservancy (TNC), and Maine Coast Heritage Trust (MCHT). These islands currently lack permanent protection. We believe their high natural resource values merit inclusion into the Refuge System. As the Service acquires these islands, we would manage them for their wildlife resources, emphasizing the protection of Federal trust resources, such as Federal-listed endangered and threatened species and migratory birds.

## II. Project Area Description

### Existing Maine Coastal Islands National Wildlife Refuge

The Refuge includes 3,735 acres of mainland and 42 coastal islands (3,826.2 acres) which span the Maine coast. It supports an incredible diversity of biological communities ranging from forested and non-forested offshore islands, to coastal salt marsh, open field, and upland mature spruce-fir forest. These communities contain an impressive assemblage of native fish, wildlife, and plant species, including seabirds, shorebirds, wading birds, waterfowl, Neotropical migratory songbirds, raptors, and rare and declining plants. There are extensive intertidal habitats surrounding the islands that support large populations of migrating, wintering, and breeding shorebirds, wading birds, and water birds. Further, most of the islands provide undeveloped, predator-free terrestrial habitats which are immensely valuable as stopover habitat for migratory birds. These same conditions provide excellent nesting seabird habitat; in fact, we are internationally known for our nesting seabird protection and restoration program.

Five separate refuges comprise Maine Coastal Islands Refuge: Seal Island, Franklin Island, Pond Island, Cross Island, and Petit Manan National Wildlife Refuges. Seal, Franklin and Pond islands are single-island refuges. Cross Island Refuge is a six-island complex. Petit Manan Refuge is composed of 33 separate islands and three mainland divisions: Petit Manan Point (2,195 acres; Town of Steuben), Gouldsboro Bay (607 acres; Town of Gouldsboro), and Sawyers Marsh (933 acres; Town of Milbridge). A fourth mainland division, Corea Heath (400 acres; Town of Gouldsboro) is in the final stages of transfer from the U.S. Navy. Each of the refuges was established for the protection and conservation of migratory birds.

The Refuge headquarters is located in Milbridge, Maine. A second office is located in Rockport, Maine. Refuge islands lie in the following 20 towns and 7 counties: the Towns of Steuben, Milbridge, Jonesport, Addison, Machiasport, Roque Bluffs, and Cutler in Washington County; the Towns of Tremont, Winter Harbor, Swan's Island, and Gouldsboro in Hancock County; the Towns of Boothbay, Southport, and South Bristol in Lincoln County; the Towns of Vinalhaven, Saint George, and Friendship in Knox 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 has acquired land through purchases, gifts from private individuals, land trusts, state and national conservation groups, and transfers of title from the Coast Guard and the U.S. Navy. Since 1993, we have acquired interests in 30 islands. All islands acquired since 1993 have become part of Petit Manan Refuge, although they may lie closer to other national wildlife refuges in Maine, such as Rachel Carson and Moosehorn. Our Regional Director determined that the Service would consolidate administration and expertise on off-shore Maine islands at Maine Coastal Islands National Wildlife Refuge.

Attachment A, Maps 1-11, depicts current Refuge lands and the private inholdings yet to be acquired within the currently approved boundary for Petit Manan Refuge. Table 1 provides a summary of these unacquired lands which remain a high priority for acquisition.

Table 1: A summary of lands within the approved Petit Manan Refuge boundary still in other ownerships.

Mainland Division or Island #	Coastal Island Registry Number (CIREG)+	Town	Number of Private Land Tracts	Upland Acres (USGS acres above mean high tide)
Petit Manan Point Division	N/A (mainland)	Steuben	2	24.6
Sawyers Marsh Division *	N/A (mainland)	Milbridge	1	95.0
Corea Heath	N/A (mainland)	Gouldsboro	1	400.0
Metinic Island	63-584	Matinicus Isle	6	150.0
Metinic Green Island	63-585	Matinicus Isle	1	8.7
Hog Island	63-588	Matinicus Isle	1	9.4
East Douglas Island	79-919	Milbridge	1	6.5
Middle Douglas Island	79-918	Milbridge	1	21.0
West Douglas Island	79-917	Milbridge	1	11.0
Jordan's Delight	79-922	Harrington	2	27.0
Major's Head	79-920	Milbridge	1	2.5
Turkey Island	79-913	Milbridge	1	2.5
Bois Bubert Island	79-824	Milbridge	7	32.0
<b>TOTAL</b>			<b>25</b>	<b>790.2</b>

**Notes:**

# Acquisition has been on-going during development of this plan; Contact Refuge Headquarters for latest status. At final press time, Little Spoon, South Twinnie, Duck, and Hart Islands were acquired since the draft CCP/EIS was released.

+ CIREG is a coastal island registry number; a unique identifier assigned by the State of Maine.

\* This Sawyers Marsh Division acreage figure includes tidal saltmarsh

### Proposed Expansion Lands

Our proposal includes: 1) Service acquisition of 87 Maine coastal nesting islands (2,306.4 acres) considered nationally significant, but currently not in permanent protection; and, 2) acquisition of 153.3 mainland acres in two tracts with significant wetland and migratory bird values. All acquired lands would become part of the Petit Manan Refuge.

This proposal was developed in cooperation with MDIFW, TNC, MCHT, and after evaluating all conservation partners ability to acquire and manage coastal islands. It will make a significant contribution to the conservation of Federal trust resources in coastal Maine. Each of the islands has either nesting seabirds, including the only four known unprotected islands with historic nesting by the Federal-listed (endangered) roseate tern; or, the most productive nests by the Federal-listed (threatened) bald eagle. Many also have nesting colonies of wading birds. All of these are Federal trust species of conservation concern. Many islands also have rare plant communities; some are boreal species that are more common to harsh Arctic conditions. All the islands provide important foraging and resting habitat for migrating landbirds, shorebirds, wading birds, raptors, and/or waterfowl. They are also important for wintering bald eagles, black ducks, and sea ducks.

Table 2 presents an alphabetical listing of the 87 islands in our proposal with their nesting importance noted. These 87 islands lie along the entire Maine coastline, from approximately Kittery to Cutler. Attachment A, Maps 1-11, portray in solid red the islands and mainland parcels proposed for Service acquisition.

**Appendix A – Land Protection Plan**

**Table 2: The 87 nationally significant islands proposed for Service acquisition and the presence of nesting birds**

CIREG <sup>1</sup>	NAME	S <sup>2</sup>	W <sup>3</sup>	E <sup>4</sup>	R <sup>5</sup>	D <sup>6</sup>	CIREG	NAME	S	W	E	R	D
81-191	APPLEDORE I	X	X			X	55-282	LT WHALEBOAT I		X			
59-036	BALD ROCK					X	55-283	LT WHALEBOAT I (SE)					X
63-802	BAR I	X				X	59-933	MAHONEY I	X				X
59-190	BEAN I		X	X			63-330	MOUSE					X
59-925	BEAR I			X			79-627	NASH I	X				X
79-626	BIG NASH I/CONE	X			X	X	63-421	OAK I					X
59-132	BLACK I			X			59-800	OUTER PORCUPINE I			X		
59-110	BUCKSKIN I			X			79-602	OUTER RAM I			X		
79-297	CAPE WASH I			X			79-787	PINKHAM I			X		
59-790	COMPASS I					X	59-347	POND I			X		
59-137	CONARY NUB	X			X		55-626	RAGGED I	X				X
63-505	CRANE I (S)			X			63-323	RAM I	X				X
63-651	CROW I			X			55-521	RAM I	X				X
59-448	CROW I			X			63-731	RAM I			X		
65-280	DAMARISCOVE I	X				X	77-045	RAM I			X		
79-412	DUCK LD I					X	79-623	RAM I			X		
81-010	EAGLE I	X				X	59-037	SALLY I					X
79-843	EASTERN I	X				X	63-730	SAND I			X		
59-956	EASTERN MARK I			X			59-836	SCRAGGY I		X			
79-464	FELLOWS I			X			73-320	SEGUIN I	X				X
79-694	FISHERMAN I	X				X	79-514	SHEEP I			X		
65-274	FISHERMAN I		X			X	59-039	SHEEP I			X		
79-621	FLAT I	X				X	79-835	SHEEP I			X		
63-264	FOG I			X			59-959	SHINGLE I			X		
81-101	FOLLY I	X				X	59-447	SISTER I (E)			X		
73-030	FREYEE I (W)			X			59-673	SPECTACLE I	X				X
73-308	FULLER RK					X	79-132	SPECTACLE I	X				X
59-398	GOOSEBERRY I					X	79-763	STROUT I			X		
63-634	GRAFFAM I		X				63-580	THE BROTHERS (C)				X	X
63-135	GREEN LD					X	63-581	THE BROTHERS (S)					X
65-200	HADDOCK I					X	63-579	THE BROTHERS N					X
63-701	HARBOR I	X					79-632	THE LADLE					X
59-450	HARBOR I			X			59-160	THE TWINNIES(N)			X		
65-019	HOG I			X			65-258	THREAD OF LIFE	X				X
79-393	HOPE I			X			59-980	THREE BUSH I	X				
55-381	HOUSE I					X	79-909	TRAFTON I		X			
63-626	LT HURRICANE I					X	55-427	TURNIP I					X
59-799	INNER PORCUPINE I			X			63-901	TWO BUSH I	X				X
59-351	JOHNS I			X			55-088	UPPER COOMBS I			X		
55-200	LANES I			X			59-675	WESTERN I	X		X		
63-655	LARGE GREEN I	X			X		81-015	WOOD I	X				X
63-418	LT GREEN I	X				X	63-917	WOODEN BALL I	X				X
63-654	LT GREEN I	X				X							
79-462	LT RAM I			X									
59-772	LT SPRUCEHEAD	X											

<sup>1</sup> coastal island registry number; a unique identifier established by the State of Maine

<sup>2</sup> nesting seabirds

<sup>3</sup> nesting wading birds

<sup>4</sup> nesting bald eagles

<sup>5</sup> historic roseate tern nesting

<sup>6</sup> diversity; three or more seabird species nest on the island.

### III. Status of Resources to be Protected

There are over 4,617 islands along the Maine coast. Biologists from Federal, State, and non-governmental conservation organizations annually share data on seabird, wading bird, waterfowl, and bald eagle nesting sites across these islands. From this total, 616 islands have historical or current nesting populations of these birds. Of these 616 islands, 377 were determined to be nationally significant using the following criteria developed by the Service, MDIFW, TNC, and MCHT:

- 1% 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
- 1% 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 have 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 population of any one seabird species does not meet the 1% criterion, but;
  - √ four or more seabird species nest on the island; or
  - √ three species nest on the island, at least one of which has >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.

This last criterion recognizes the value of nesting seabird diversity on individual islands. It is also important to recognize that these islands are valuable to a myriad of other Federal trust bird species for roosting and migration habitat; many of which are Partners in Flight species of high conservation concern (see below). Further, since most of the Maine coastal bald eagle pairs are year round residents, the forested islands provide important bald eagle wintering habitat.

Of the 377 islands considered nationally significant, 151 are currently lacking permanent protection. Opportunities to permanently protect, manage, restore, and enhance nesting populations on these islands are very limited to non-existent under present ownerships. The Service, MDIFW, and numerous conservation organizations are working cooperatively under a common goal to permanently protect all 151 islands. The two most significant factors presently affecting island protection is the lack of funding and available willing sellers.

Maine’s coastal nesting islands continue to face numerous threats and pressures. These include development of camps, homes, and other structures, recreational boating and kayaking, landings by commercial kayak and schooner tours, human presence during seabird nesting seasons, unleashed pets, and cultural resource exploitation.

Seabirds, wading birds, waterfowl, and many bald eagle nesting pairs require undisturbed environments during the nesting season. Closing refuge islands to public use during the nesting season is a management tool that we use to control this threat. Long-term protection of these nesting islands can only be assured through conservation ownership and management.

Service acquisition of these islands will minimize the threats noted above, and accomplish goals and objectives identified in many national and regional conservation plans and initiatives as described below.

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

The primary recovery objective in this plan is to increase the northeast nesting population (U.S. and Canada) of the endangered roseate terns to 5,000 breeding pairs. This total should include at least six large colonies (greater than 200 pairs) with high productivity. The roseate tern population in Maine had a record high of 289 pairs recorded in 2001 with nesting on only 3-4 islands. Our current efforts strive to increase the nesting population and geographic distribution of this species in Maine. Our proposal would acquire four unprotected islands with documented historic nesting by roseate terns. In addition, many of the islands in our proposal would provide roosting and future nesting areas for these birds.

### Northern Bald Eagle Recovery Plan (1983)

The primary recovery objective in this plan is to reestablish self-sustaining populations of bald eagles throughout the northern states region, including Maine. Specifically, we would permanently protect existing bald eagle nesting, foraging, roosting, and wintering areas on 35 islands. Attachment C provides a detailed description of the value of these islands for bald eagles.

### Partners In Flight Plan for Area 28-Eastern Spruce-Hardwood Forest (June 2000)

This plan identifies migratory bird species and their breeding habitat in the eastern spruce-hardwood forest physiographic area that are a high conservation concern and priority for management. Our proposal would support priority species and habitat objectives identified in the plan for both the mainland and coastal islands including:

- *Maritime salt marsh and estuary*: These objectives emphasize maintaining stable populations of Nelson's sharp-tailed sparrow, American black duck, northern harrier, and osprey. The American black duck is a globally vulnerable Watch List species with a large proportion of its population in this region. Coastal marshes, mud flats, and rocky shores are important to wintering black ducks throughout the year. Exposed islands and high energy shorelines are especially important to wintering black ducks in the Gulf of Maine because these areas remain ice free during the coldest portions of the season. Our proposal would contribute to this objective through acquisition of these habitat types.
- *Mature conifer(spruce-fir) forest*: These objectives emphasize maintaining stable populations of black-throated green, northern parula and blackburnian warblers, spruce grouse, olive-sided flycatcher, boreal chickadee, pine grosbeak, and red crossbill. In Maine, the black-throated green, northern parula, and blackburnian warblers are focal species. Our proposal includes 35 forested islands, totaling 796 acres, which would contribute to this objective.
- *Coastal beach/dune/island/shoreline*: These objectives emphasize maintaining stable populations of common eider, roseate tern, common tern, Arctic tern, and osprey. The 52 seabird islands in our

proposal provide nesting habitat for eider and/or terns; and, all 87 islands would provide undeveloped and relatively undisturbed migration, feeding, and roosting areas.

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 Coordination Act of 1980 requiring the Secretary of Interior, through the Service, to “identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation action, are likely to become candidates for listing under the Endangered Species act of 1973.” The report includes numerous lists of birds of conservation concern, by national, regional, and landscape scales. We evaluated the list for the Atlantic Northern Forest Birds of Conservation Concern (BCR 14) region, and a recently released draft blueprint for BCR 14 which identifies key actions to implement in order to maintain healthy populations of birds native to the region. In this region, sixteen bird species are listed, of these, the razorbill and common tern utilize nationally significant coastal nesting islands. Five islands in our proposal have documented nesting by these two seabird species; the majority of the others have potential nesting habitat for at least one of the species.

North American Waterfowl Management Plan (update 2004) and Joint Ventures

The North American Waterfowl Management Plan identifies 13 priority waterfowl species. Seven of these species use Refuge lands and nearby habitat during migration; four species use Refuge lands for nesting; and, three use it for wintering habitat. These include Atlantic brant, mallard, American black duck, northern pintail, wood duck, ring-necked duck, and common eider. Our proposal would permanently protect wetlands and ensure the continued existence of breeding, feeding, resting, and wintering habitat for these species.

Implementation of the North American Waterfowl Plan is accomplished at regional levels within 15 habitat and 3 species Joint Venture partnerships. Our project area lies within the Atlantic Coast Joint Venture which divides the entire Maine coast into five focus areas and establishes a waterfowl goal to “protect and manage priority wetlands habitats for migration, wintering and production of waterfowl, with special consideration to black ducks...” The Black Duck and Sea Duck Joint Ventures are also relevant to our project. These plans emphasize the protection of migration and wintering habitats in Maine which exists on most of the islands in our proposal. Our proposal also includes nesting habitat for common eider.

Gulf of Maine Rivers Ecosystem Team Plan (1994)

This plan establishes priorities for the interagency Gulf of Maine Rivers Ecosystem Team. Our proposal would directly benefit two of the plan’s seven resource priorities. These include Resource Priority #1: recovering populations of endangered and threatened species; and Resource Priority # 4: protect, enhance, and restore populations of migratory bird species of special concern and their habitats. The seabird species we have targeted in our proposal are unique to the Gulf of Maine and permanent protection of these islands is an important priority of the Gulf of Maine Rivers Ecosystem Team.

Northern Atlantic Regional Shorebird Conservation Plan (Draft 2002)

The goal of this plan is to maintain or enhance current or historic population levels and diversity of shorebirds throughout the North Atlantic Region through cooperation and partnership with Federal, State, private, and non-governmental conservation organizations. A separate habitat goal is to protect and manage sufficient area of high priority habitats to support current populations of breeding, migrating, and wintering shorebirds. Our proposal would permanently protect breeding habitat for 6 of the 38 shorebird species on the Species Priority List for the region. These include American oystercatcher, American woodcock, willet, spotted sandpiper, common snipe and killdeer. All 38 species utilize the islands for foraging and roosting during migration. At least 12 islands in our proposal are used extensively by shorebirds. The Sprague Neck mainland tract is considered by MDIFW as an area that receives the highest concentration of migrating shorebirds in the State. Finally, our proposal would provide important wintering habitat for purple sandpiper. To document this importance, we are currently cooperating with MDIFW and Acadia National Park on a wintering habitat project for purple sandpipers.

North American Waterbird Conservation Plan (Version 1, 2002)

This plan identifies 55 priority “species of concern” in North America. Our proposal supports the plan’s species and population goal to have sustainable distributions, diversity, and abundance of waterbirds throughout North America and to restore populations of priority species, including those in decline. In addition, our proposal would support the plan’s habitat goal to secure, maintain, and enhance sufficient high quality habitat throughout the year to achieve and maintain sustainable populations of waterbirds throughout North America.

Islands in our proposal support current or historic nesting by at least one of the following species on the highly imperiled/high concern list: Arctic tern, roseate tern, snowy egret, and little blue heron. These islands may also support nesting by the following two species on the moderate concern list: black-crowned night heron and razorbill.

MDIFW Species Assessments and Management Plans

MDIFW has developed species assessment and management plans for migratory shorebirds, passerines, Atlantic puffin/razorbill, Leach’s storm-petrel, common eider, harlequin duck, waterfowl, island nesting terns, and American bald eagle. Our proposal is consistent with these plans by supporting permanent habitat protection for these species.

**IV. Proposed Action**

Islands

Our proposal is to acquire 87 islands (2,306.4 acres) selected from the list of 151 nationally significant coastal nesting islands in Maine currently lacking permanent protection.

These 87 islands will be acquired from willing sellers with support from our conservation partners. We believe 87 islands represents a realistic objective over the next 15 years given the historic rate of

acquisition. We will continue to work cooperatively with the State and our conservation partners to seek ways of permanently protecting the remaining 64 nationally significant islands.

Attachment A includes Maps 1-11 with our proposal in red. Attachment B provides an alphabetical listing of the 87 islands along with other island information we thought would be of interest including:

- coastal island registry number (CIREG)
- town
- Attachment A map #
- current ownership (private, Coast Guard (CG) or U.S. Navy)
- acreage
- Service's priority for acquisition
- proposed acquisition method

All of the 87 nationally significant coastal nesting islands in our proposal are privately owned except an 8-acre tract on Wood Island owned by the Coast Guard (see Attachment B). We are excluding this 8-acre tract, which includes an historic lighthouse from our proposal at the Coast Guard's request. We placed each island in one of two priorities for acquisition: Priority 1 or Priority 2. There are 52 islands identified as Priority 1. These are either islands with nesting seabirds, wading birds, and waterfowl, or any unacquired island parcels within our currently approved acquisition boundary (Table 1). There are 35 islands identified as Priority 2. All of these are high productivity nesting bald eagle islands recommended by MDIFW.

We will use this priority ranking only in the circumstance where two islands are available for acquisition, and we only have funding to purchase one. These priorities do not reflect a landowner's preference to sell the land. Since Service policy is to acquire land only from willing sellers, the order of actual land acquisition will be based on availability and funding.

### Mainland

Our proposal is to acquire two mainland tracts of land totaling 153.3 acres that are not currently within the approved Petit Manan Refuge boundary.

The 150-acre Sprague Neck parcel located in the Town of Cutler, Washington County is part of the U.S. Navy's former Computer and Telecommunications Station Center (Center). It is scheduled for a no-cost transfer to the Department of the Interior (DOI) as a result of recently enacted legislation that transferred most of the Center to the Town of Cutler. The parcel juts into Machias Bay and consists of a headland connected to the mainland by a low-lying isthmus. This headland, consisting primarily of spruce-fir forest, grades to a boulder/cobble beach along the upper shoreline. The shoreline along the northern side, which is not exposed to the ocean, consists of a cobble bar with sandy beaches. At low tide, the vast mud flats adjacent to these sand and gravel bars are exposed to provide important migration and roosting habitat for 19 species of shorebirds, including the black-bellied plover, semi-palmated plover, and the buff-breasted sandpiper. More migratory shorebirds are found on Sprague Neck than anywhere else in Maine. A portion of this property has been designated an "ecological reserve" by the U.S. Navy. This parcel lies within the Little Machias Bay, identified as a focus area in

the North American Waterfowl Management Plan Joint Venture and ranked second of 32 sites within Maine in the Atlantic Coast Black Duck Wintering Habitat Plan.

The second mainland parcel is a 3.3 acre parcel of land referred to as the Litten tract. It is currently a private tract surrounded by the Gouldsboro Bay Division of the refuge. This parcel contains a mixed forest of hardwoods and softwoods and has a rocky shoreline along West Bay in Gouldsboro. Service acquisition of this parcel will create an administratively intact boundary for this Division. Both Sprague Neck and the Litten parcel are identified as Priority 1. All unacquired mainland parcels within our currently approved refuge boundary are Priority 2, with the exception of Sawyers Marsh and Corea Heath which are Priority 1 (Table 1).

## V. Protection Options Considered

According to Service policy (341 FW1), we can acquire land and water interests such as, but not limited to, fee title, easements, leases, and other interests. We considered each of these while evaluating three options before developing our proposed action, presented in detail in Attachment A and B. Our policy is to acquire only the minimal interest necessary to meet Refuge goals and objectives, and to acquire land only from willing sellers. We believe our proposed action is a cost-effective way of acquiring the interest to provide the minimal level of protection needed to meet objectives, given the information now available to us. However, as individual islands become available in the future, changes in their protection option may be warranted to ensure we are using the best option at that time.

### Option 1. No Expansion of Current Service Boundaries; Emphasis on Protection by Others

Under Option 1, we would acquire 3 additional mainland parcels and 21 additional island parcels within the existing approved refuge acquisition boundaries; we would not expand the Refuge boundary or protect additional islands. Our final EIS evaluates this “no new expansion” option in Alternative D.

Under this option, we would work with other conservation organizations and agencies, such as MDIFW, MCHT, TNC, National Audubon Society, and local land trusts, to support their land protection and management programs of mutual interest and benefit to the Service.

Our concern with this option is that although ownership by those groups affords some level of protection, it is unlikely they would have the financial or administrative resources to buy all 151 significant islands, nor could they actively manage all these islands as needed to protect the Federal trust species of concern. Without our contribution to land protection, many nationally significant islands would likely be developed. These groups, and the public, have stated that Service acquisition and management is vital to ensuring the long-term protection of nationally significant coastal nesting islands.

In summary, we do not propose to utilize Option 1 because:

- It would detract from our goal to protect Federal trust resources on the Refuge and throughout Maine coastal nesting islands;
- It does not support the Refuge’s vision, goals, and objectives; and
- It is not supported by the MDIFW and the majority of the public, partners, or elected officials.

### Option 2. Less-than-full Fee Acquisition by the Service

Under Option 2, we would protect and manage all islands by purchasing only a partial interest, typically in the form of a conservation easement. This option keeps the island in private ownership, while allowing us some control over land use. We would have to determine, on a case-by-case basis, and negotiate with each landowner, the extent of the rights we would be interested in buying. Those may vary, depending on the configuration and location of the island, the current extent of development, the nature of wildlife activities in the immediate vicinity, the needs of the landowner, and other considerations.

We propose to utilize conservation easements on the 35 islands identified in Attachment B. These easements would consist primarily of purchasing development rights and the right to control public access during the nesting season on bald eagle nesting islands. Easements are most appropriate for use where:

- The island is large and only minimal management of the habitat is needed, and where development is the greatest threat, such as those large islands that have bald eagles nesting on a small portion of the island;
- The island owner wants to maintain ownership; or
- Only a portion of the parcel contains lands of interest to the Service.

### Option 3. Full Fee Title Acquisition by the Service

Under Option 3, we would purchase fee title from willing sellers, thereby purchasing all rights of ownership. This option provides us the utmost flexibility in managing priority islands, and ensures permanent protection of nationally significant Federal trust resources. Generally, the islands we would buy require active management. We propose fee acquisition when: 1) adequate land protection is not assured under other ownerships; 2) active land management is required; or 3) the island is too small to purchase a conservation easement. Attachment B identifies 52 nesting islands that we propose to acquire full fee title. Lands acquired in fee would be managed similar to our existing Refuge lands in terms of what public uses are allowed to occur and the seasonal access restrictions implemented to protect resources.

It should also be noted that as future transactions occur, a conservation easement could be converted to full fee title acquisition. For example, we may pursue full fee title when an owner is interested in selling the remainder of interest in the island; when changes to zoning or land use regulation compromise resource values; or, when our management objectives change so that more active management is necessary to meet goals and objectives. We will evaluate this need on a case-by-case basis.

## **VI. Acquisition Methods**

We typically acquire the Service interest using one of the following methods: (1) purchase (e.g. complete title, or a partial interest, like a conservation easement), (2) donations, (3) exchanges, and (4) transfers.

### Purchase

We are proposing to purchase either a fee title or conservation easement on the 87 islands, and the Mainland Litten tract, identified in Attachment B, because at this time, we cannot anticipate opportunities for the other three methods.

Purchase involves buying a full (fee title) or partial interest (e.g., conservation easement) in land from willing sellers, as our funding permits. Fee title ownership assures the permanent protection of resources, and allows the complete control necessary for habitat management activities, providing public use opportunities, and managing public access.

As we mentioned under Option 2 above, a conservation easement refers to the purchase of limited rights from an interested landowner. For example, the landowner would retain ownership of the land, and would sell certain rights, such as development rights, to the Service, after agreement by both parties. Easements are property rights and are usually permanent. If a landowner sells his/her property, the easement continues as part of the title. Properties subject to easements generally remain on the tax rolls, although the assessment may be reduced by the reduction of market value if the town gives the landowner a tax abatement for the easement.

Our conservation easement objectives would assure the permanent protection of resources and allow for the minimum control necessary for management activities. Generally, we would purchase at least the development rights and the ability to control access during the nesting season.

Much of our funding to buy land in either fee or conservation easement comes from the Land and Water Conservation Fund, which is composed of certain user fees, proceeds from the disposal of surplus Federal property, the Federal motor boat fuels tax, and oil and gas lease revenues. About 90 percent of that fund now originates from Outer Continental Shelf oil and gas leases. Another source of funding is the Migratory Bird Conservation Fund, which is derived from Federal Duck Stamp revenue. We plan to primarily use the Land and Water Conservation Fund to purchase land identified in our proposal.

### Donation

We generally encourage donations in fee title or conservation easement for lands, providing that management concerns, such as contaminants, are not a major issue. Presently, we are not aware of any opportunities to accept donations.

### Exchange

We have the authority to exchange land in Service ownership for other land that has equal or greater wildlife habitat value. Inherent in this concept is the requirement to get dollar-for-dollar value, with occasionally, an equalization payment. Exchanges are attractive because they usually do not increase Federal land holdings or require purchase funds; however, they also may be very labor-intensive, and take a long time to complete. Presently, we are not aware of any opportunities to do an exchange.

### Transfer

We have accepted transfer of military and Coast Guard lands declared excess, including most recently four lighthouse islands, transferred to the Service under the Maine Lights Bill legislation in 1996. Corea Heath is in the final stages of a negotiated transfer from the U.S. Navy. It is possible that we

could also acquire Sprague Neck as a transfer from the U.S. Navy. Other Coast Guard land transfers have occurred under the Coast Guard Reauthorization Bill.

## **VII. Service Land Acquisition Policies**

Once a new refuge acquisition boundary is approved by our Director, we contact affected owners to determine if they are interested in selling their property. If an owner expresses an interest, an appraiser will be enlisted to appraise the property to determine market value. Once the appraisal process is completed and funding becomes available, we can present an offer for the landowner's consideration. Lands within the boundary do not become part of the Refuge System unless sold, donated, or transferred to the Service.

While the Service has the power of eminent domain (also termed condemnation), Service policy (342 FW 6) is to acquire land through this means as a last recourse only to:

- determine the legal owner (clear title);
- settle a difference of opinion regarding value (when owner is agreeable to court action); or
- prevent uses which would cause irreparable damage to the resources that the refuge was established to protect.

Appraisals would be conducted by the Office of Appraisal Services, National Business Center, Dept. of Interior, and must be performed pursuant to the Uniform Appraisal Standards for Federal Land Acquisitions or the Uniform Standards of Professional Appraisal Practice. It is required by law to appraise properties at market value, based on comparable sales of similar types of properties.

A landowner may choose to sell fee title interest to the Service, but retain the right to occupy an existing residence, referred to as a "life-use reservation." As its name implies, life-use reservations apply to the seller's lifetime, but they can also apply for a specific number of years. After the appraisal is approved, and prior to making the offer, we would discount from the appraised value of the buildings and land, a value for life use based on the age of the owner, and the term of the reservation. The occupant would be responsible for the upkeep on the reserved premises.

## **VIII. Coordination**

In 1993, we began to evaluate the need for additional protection of Maine coastal nesting islands. In 1995, we initiated an Environmental Impact Statement (EIS) to study the protection of significant seabird, wading bird, and eagle nesting islands on Maine's coast. This effort 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.

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

In the summer of 1999, a new planning team was formed to produce a draft Comprehensive Conservation Plan consistent with the Service's new planning policy. This new effort broadened the scope of the original EIS to include not only island acquisitions, but goals and objectives for managing current Refuge lands. The new planning team reviewed the 1995 list of issues and concerns for the project, expanded the scope of the project to include issues on existing refuge lands, and prepared to gather additional comments from the public.

We held five public meetings and open houses in Augusta, Milbridge, Brunswick, and Rockport in 2000. A newsletter shared the comments from the open houses with the 1,400 individuals and organizations on our mailing list. Following the public meetings, the planning team met to draft and refine 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 the other four alternatives. Therefore, our draft and final EIS includes analysis of four alternatives.

We published our Draft CCP/EIS, including the LPP, 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 was also posted on our National Conservation Training Center Library website ([http://library.fws.gov/CCPs/petitmanan\\_index.htm](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: Rockland Public Library, Rockland, ME

June 2, 2004: Milbridge Town Hall, Milbridge, ME

June 8, 2004: Pine Tree State Arboretum, Augusta, ME

June 9, 2004: Falmouth Public Library, Falmouth, ME

Eighty-five people attended the public hearings and 30 gave oral testimony. Some submitted their comments in writing instead of giving oral testimony, while others did both. More comments arrived later by post or electronic mail. In total, we received 594 public responses. The Final EIS, Appendix I, is a summary of the substantive comments we received and our response to them. None of the comments on land acquisition resulted in a significant change to our original LPP proposal. Between the draft and this final LPP, we fixed some typographical errors, clarified some terminology, excluded the 8-acre Coast Guard tract on Wood Island from our proposal at their request, and introduced the new name for the five-refuge complex, Maine Coastal Islands NWR, which includes Petit Manan NWR.

Throughout our CCP/EIS planning process, we solicited and carefully considered public comments on Service land acquisition. We worked with the MDIFW, statewide conservation organizations, local municipalities, local land trusts and national conservation organizations who are directly involved in land protection strategies in coastal Maine. Their continuing work will preserve additional nationally significant coastal nesting islands not acquired by the Service. Specifically, the State helped us develop the land protection proposal and prioritize islands for Service acquisition.

## **IX. Socioeconomic and Cultural Impacts**

It is said that Maine's seacoast is the backbone of the State's economy. This is not surprising as coastal Maine's southern and mid-coast regions are growing at a faster rate (1.7 percent during 1990-1996) than the state as a whole (0.9 percent during 1990-1996) with the majority of the State's 1.2 million people (State Planning Office, 2000) living in coastal counties. Most certainly it is the natural beauty and rich resources of the shore and ocean that draw people to the coast.

In our final EIS, Chapter 4 - Environmental Consequences, we describe in detail the socio-economic consequences of our proposed expansion, including impacts to property taxes, additional local revenues generated, and the implications to commercial wildlife viewing, hunting, sheep farming, aquaculture, public access, educational, and recreational opportunities.

The Refuge contributes directly to the economies of several towns in coastal Maine. Since 1935, the Service has made Refuge Revenue Sharing (RRS) payments to counties or towns for refuge land under its administration. Lands acquired by the Service are removed from the tax rolls. However, under provisions of the Refuge Revenue Sharing Act, as amended, the county or other local unit of government receives an annual revenue sharing payment which can sometimes equal or exceed the amount that would have been collected from property taxes if in private ownership. In 2001, the Service paid \$51,134 to Maine communities for lands under administration of the Refuge. Assuming full expansion, our proposal would distribute an additional estimated \$50,786 annually to 42 Maine town's in RRS payments, assuming the 2002 distribution rate allocated by Congress. We enlisted Dr. Charles Colgan, an economist from the University of Southern Maine, to help us determine net property tax impacts to towns, given these RRS payments (Re: final EIS, Appendix G, for full report). According to Dr. Colgan, overall, the property tax impacts are small. If all 87 islands are acquired by the Service, the property taxes would rise in affected towns by approximately \$130,000, an average of 0.05%, assuming RRS payments at the 2002 levels. The town with the largest absolute reduction in taxes would be the Town of Kittery at \$30,738; however, the Town of Frenchboro would be the most affected in proportional terms; approximately \$6,234 or 9.0% increase in their mil rate. Dr. Colgan has acknowledged that these property tax impacts may be low due to an underestimation of actual values since his analysis was based primarily on 2002 and 2003 values and the coastal real estate market has been very dynamic in recent years.

Our proposal affects other socio-economic components as well. Wildlife-dependent uses of Maine islands include consumptive and non-consumptive recreational activities. Consumptive activities include sport hunting for waterfowl (including eiders), upland gamebirds, and deer, as well as fishing and shell fishing. Our proposal would allow waterfowl hunting; however, hunting game birds and deer is not viable on the off-shore islands, and fishing and shell fishing would occur in State waters. We would allow non-consumptive recreation activities such as photography and wildlife observation, picnicking, personal-use berry picking, and hiking. Camping would not be allowed on all newly

acquired islands. Allowed activities would occur outside the seabird nesting season from April 1<sup>st</sup> - August 31<sup>st</sup>, or the bald eagle nesting season from February 15<sup>th</sup> - August 31<sup>st</sup>. The only exception to the closure period is on eider- and gull-nesting islands which would be closed from April 1<sup>st</sup> - July 31<sup>st</sup>.

The industries of coastal Maine potentially affected by Refuge management includes aquaculture, lobstering and other commercial fisheries, commercial seabird viewing activities, other natural resource-based industries such as timber and blueberries, environmental education, real estate and land development. During our public scoping, we heard particular concern with any potential impacts to aquaculture operations by our proposal. We describe some of these impacts in Chapter 4 of the final EIS. However, we did not predict any direct impacts on current operations, and we have no jurisdiction with issuing future aquaculture leases; the responsibility lies with the U.S. Army Corps of Engineers (ACOE) and the Maine Department of Marine Resources. During the lease review process, our Ecological Services Maine Field Office consistently recommends that all aquaculture facilities lie at least 1/4 mile away from Federal-owned islands; however, the ACOE leases do not always require this. As such, Service acquisition of islands has some potential to affect future lease locations, but would not affect any current leases. With regards to the other industries noted above, our proposal would not result in any adverse impacts. Rather, it would support the seabird viewing and environmental education industries

The Service routinely reviews and assesses archaeological and historic sites under Section 106 of the National Historic Preservation Act (NHPA) when ground disturbing activities are likely. At the Refuge, these reviews have been confined to architectural rehabilitation of lighthouse structures on four Refuge islands. Our proposal includes acquisition of one island that contains a lighthouse (Seguin island). If this island becomes available to us, we would negotiate an easement enabling the current landowner, or an historic preservation entity, to retain responsibility for any historic structures, assuming this arrangement poses no risk to the Federal trust resources we are trying to protect.

As is generally the case in coastal settings, the area is potentially rich in archaeological resources. While no archeological sites are known on the Refuge that meet NHPA criteria, there has not been an intensive survey done on Refuge lands. It is entirely possible there are unrecorded coastal archaeological sites on current Refuge lands and those proposed for acquisition. Our proposal would increase protection for cultural resources since these lands would not be developed and because we adhere to the protection requirements of the NHPA. We will work closely with the Passamaquoddy Tribes (Pleasant Point and Indian Township Reservations) and other Wabanaki tribes to identify, protect, and interpret, cultural resources. Service ownership would help protect known sites against vandalism, and would permanently protect as yet unidentified, or undeveloped cultural sites from disturbance or destruction. Our interpretive and environmental education programs will also continue to promote public understanding and appreciation of the area's rich cultural resources.

In summary, we do not predict any significant adverse socioeconomic or cultural impacts from our proposed action. Further documentation is provided in the final EIS, Chapter 4 - Environmental Consequences.

**Attachment A. Current Service Ownership and Proposed Acquisition**

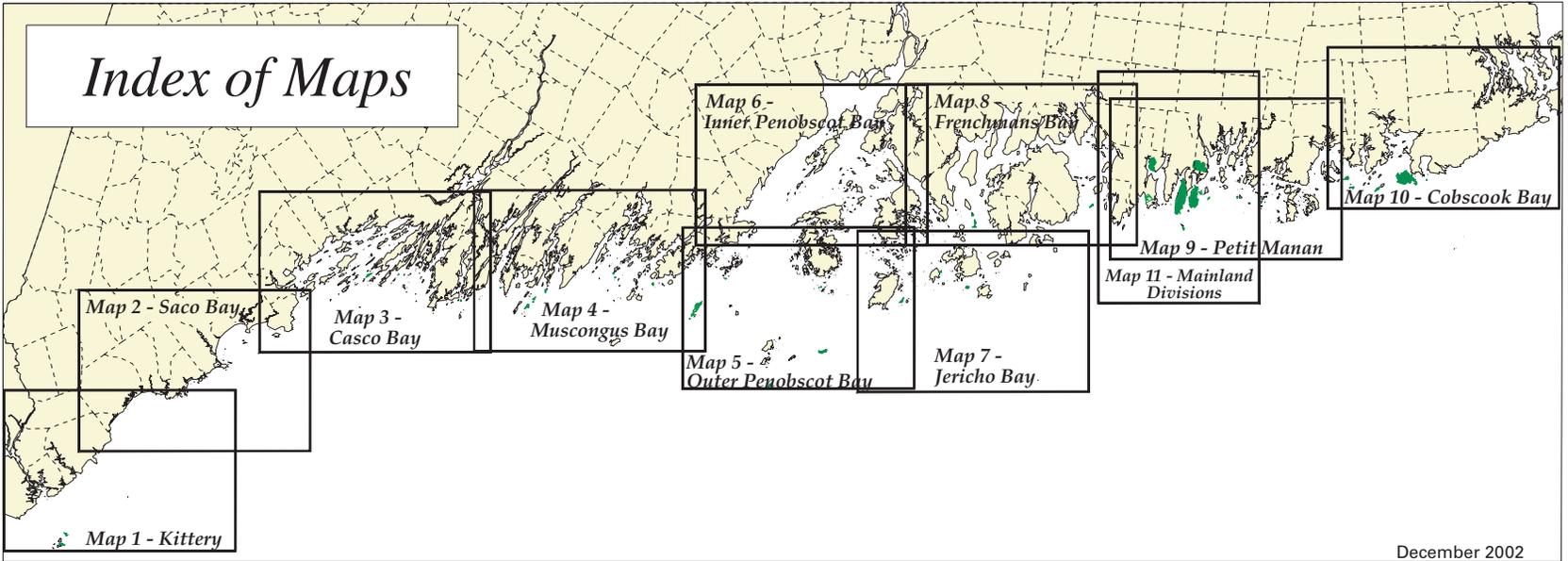
The eleven maps in Attachment A show the mainland and islands that are currently part of the Refuge (solid green); the mainland and islands approved but not yet acquired (outlined in green); and, the mainland and islands that we propose for Service acquisition (solid red) as an expansion to Petit Manan National Wildlife Refuge.

It should be noted that Service acquisition of islands within the existing approved boundary (outlined in green) has been on-going during development of this final EIS. Please contact Refuge Headquarters for the latest update.



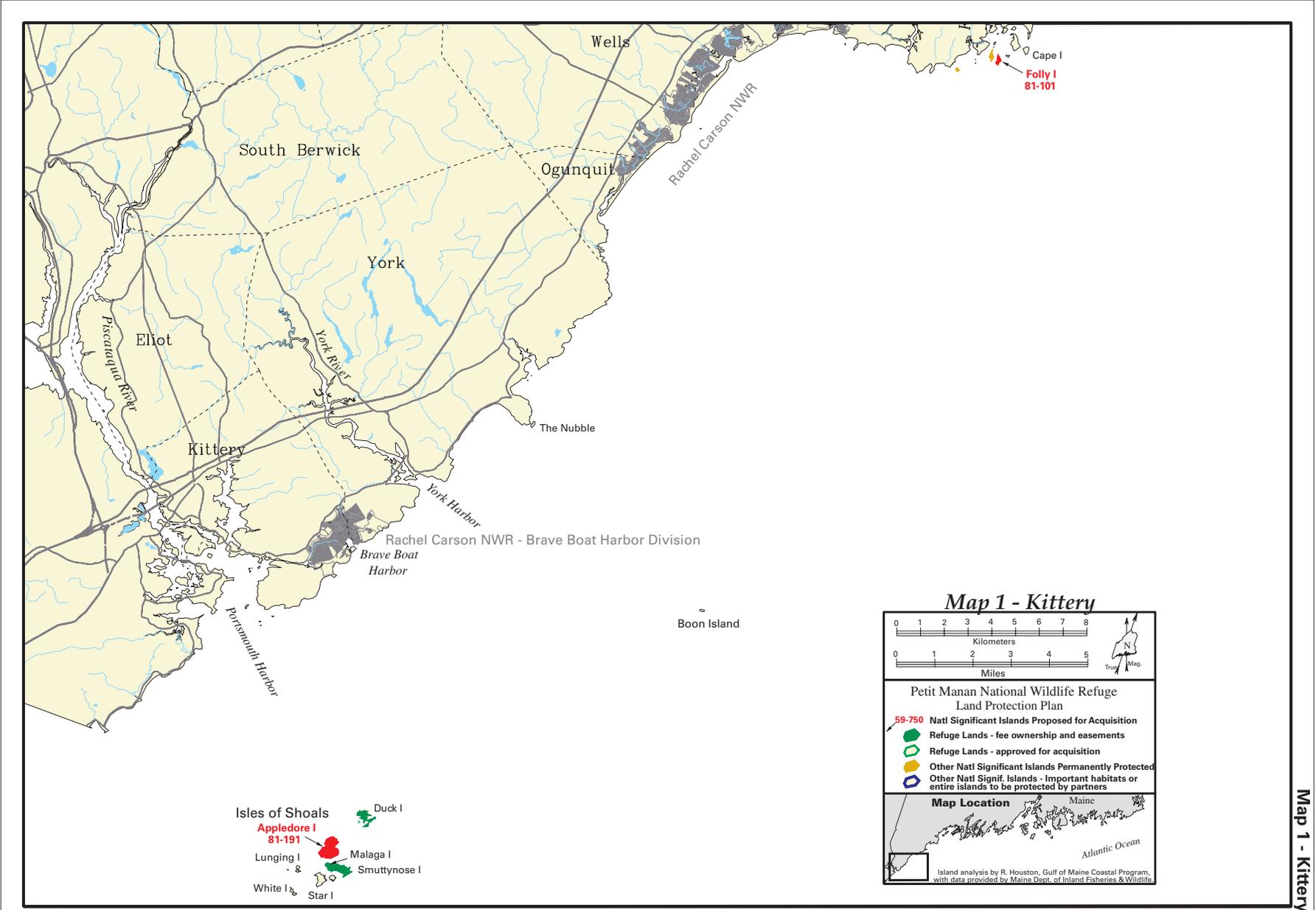
# *Petit Manan National Wildlife Refuge Land Protection Plan*

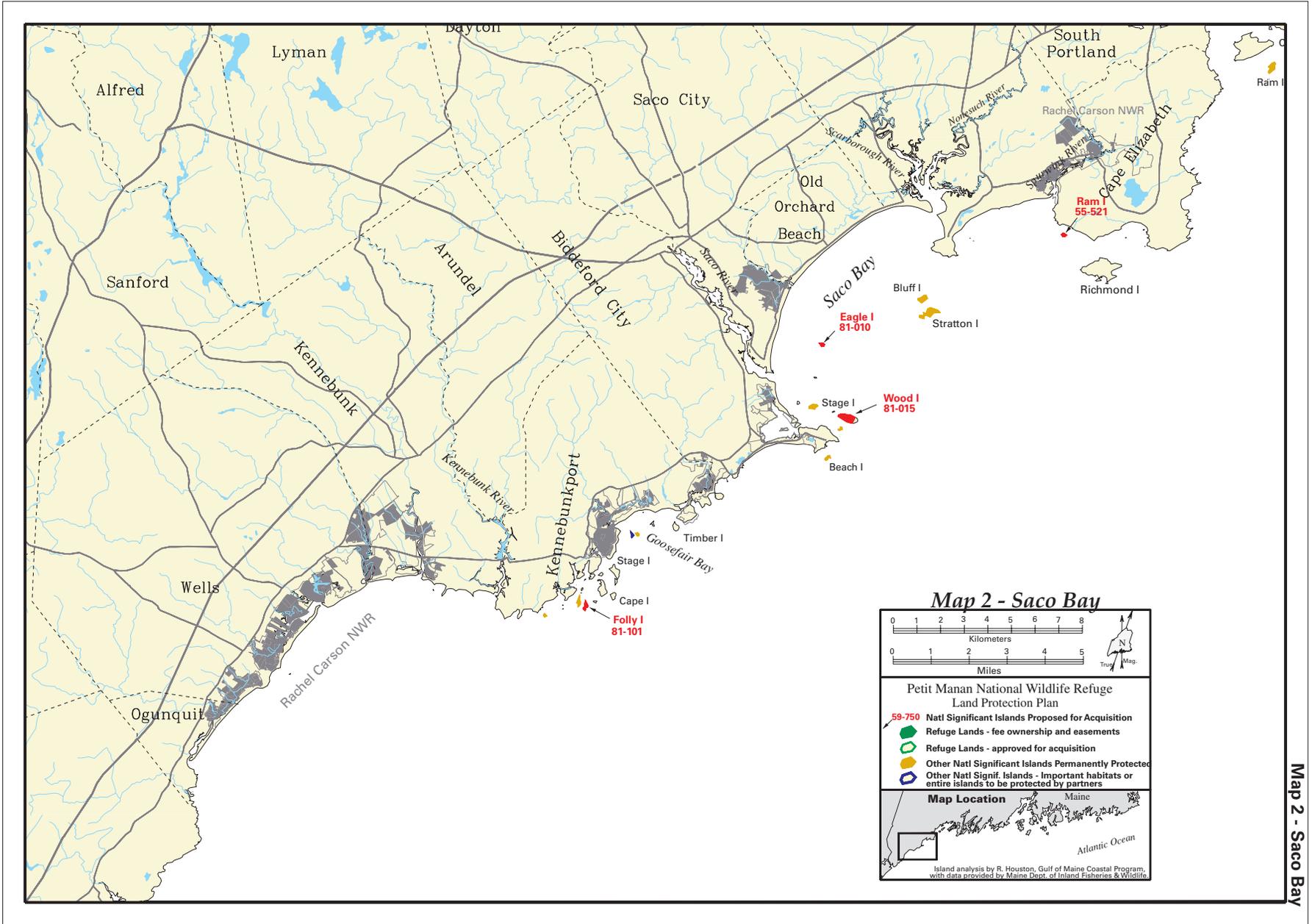
## *Index of Maps*



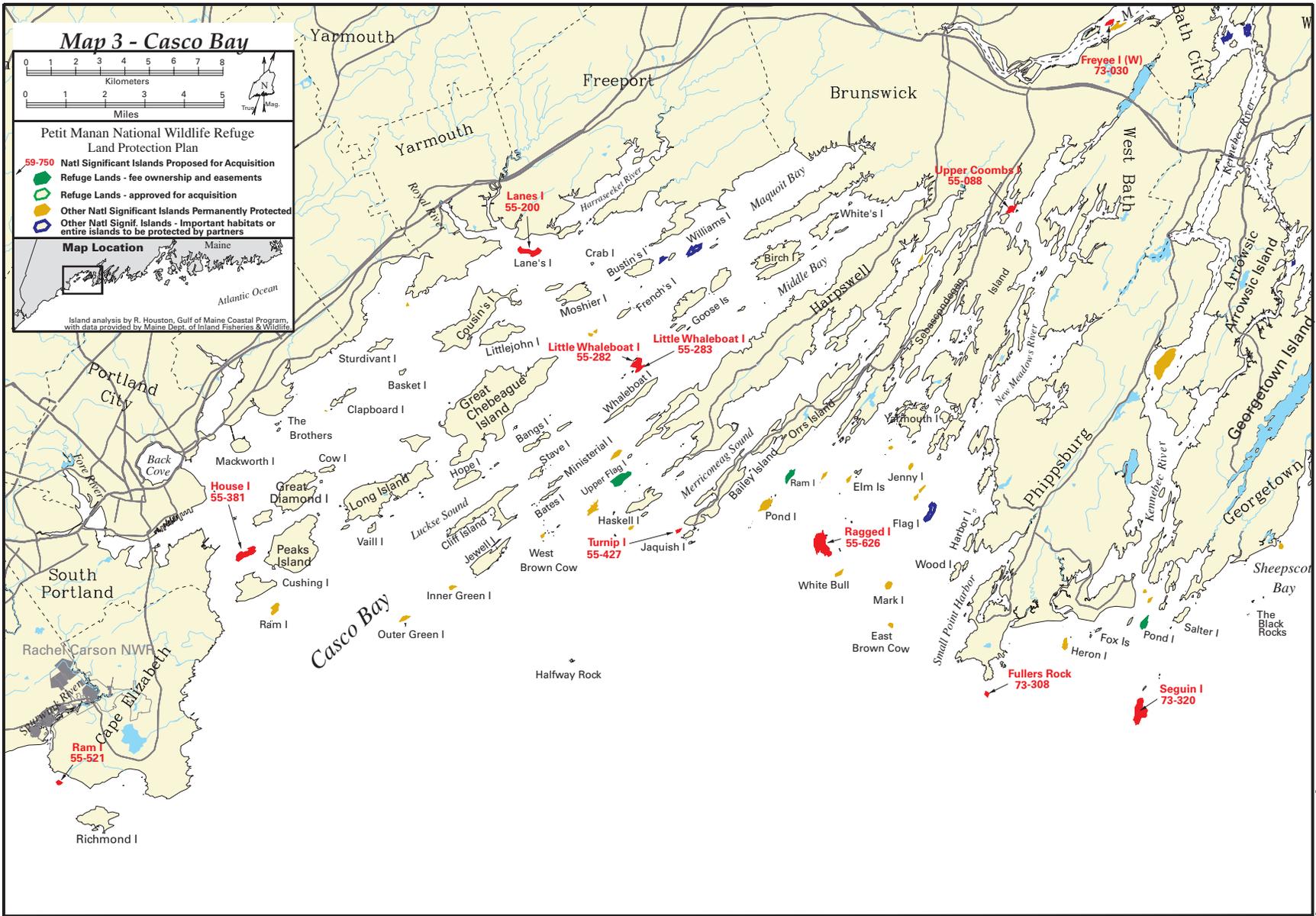
December 2002

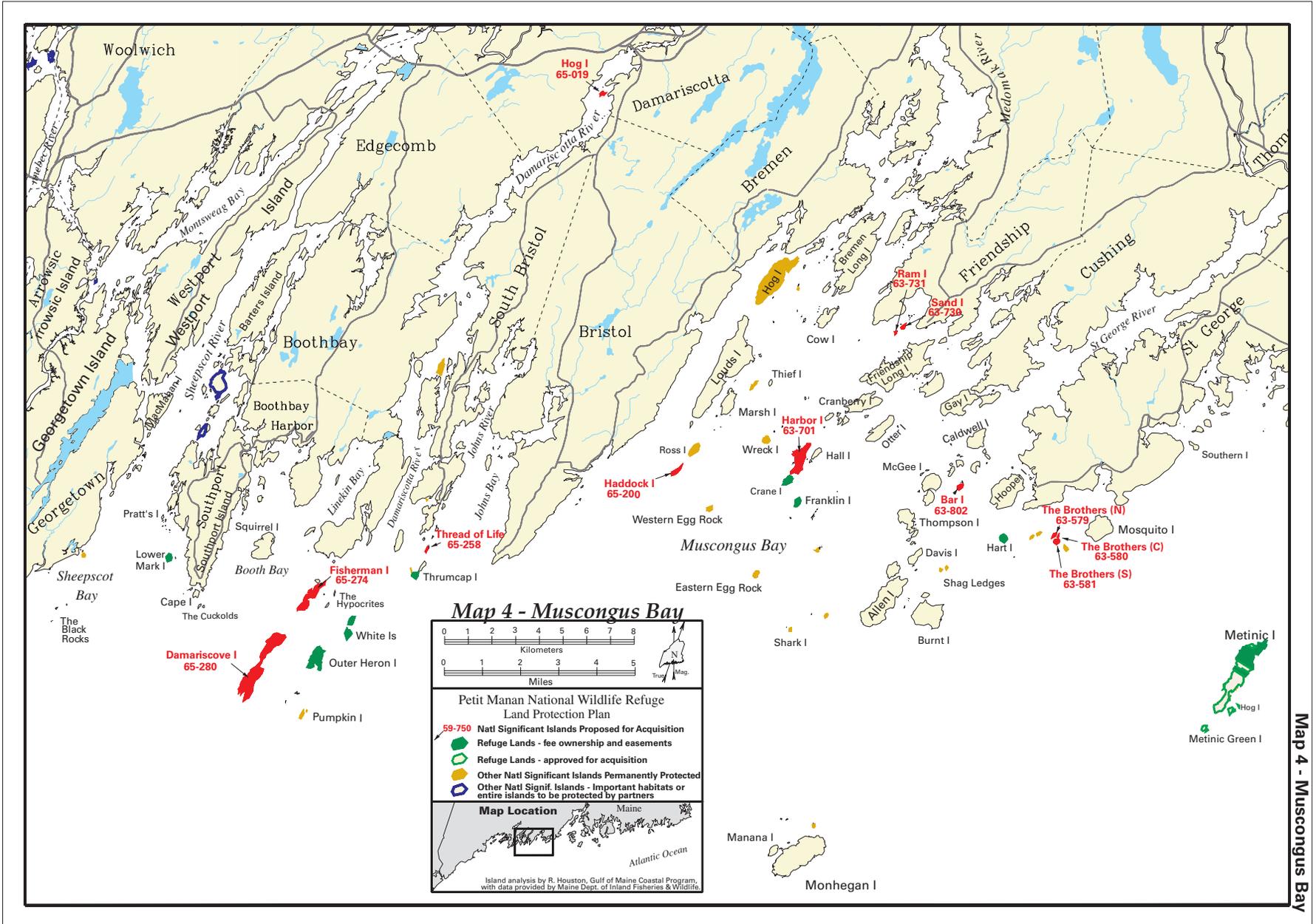
Map 1 - Kittery



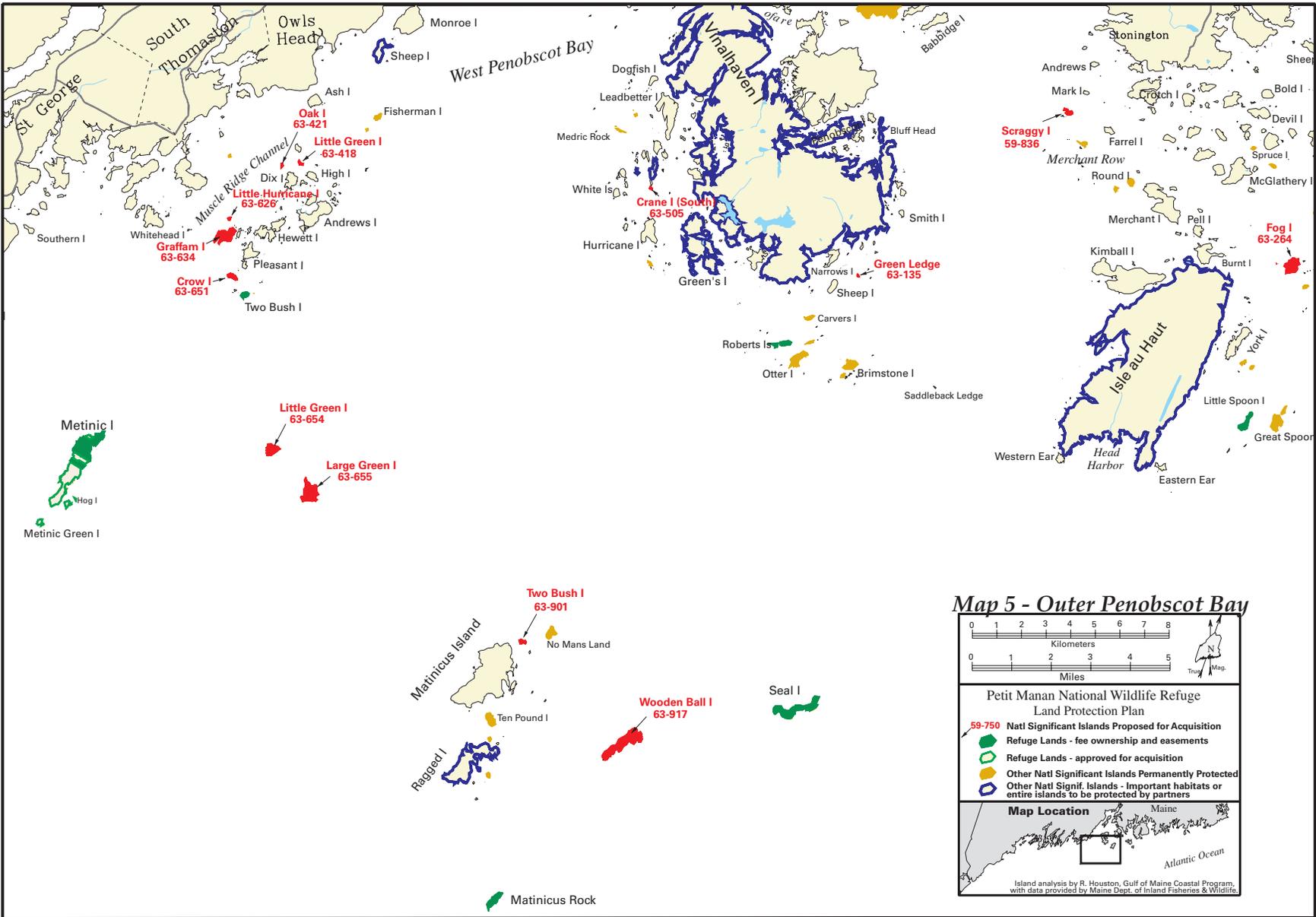


Map 2 - Saco Bay





Map 4 - Muscongus Bay



Map 5 - Outer Penobscot Bay

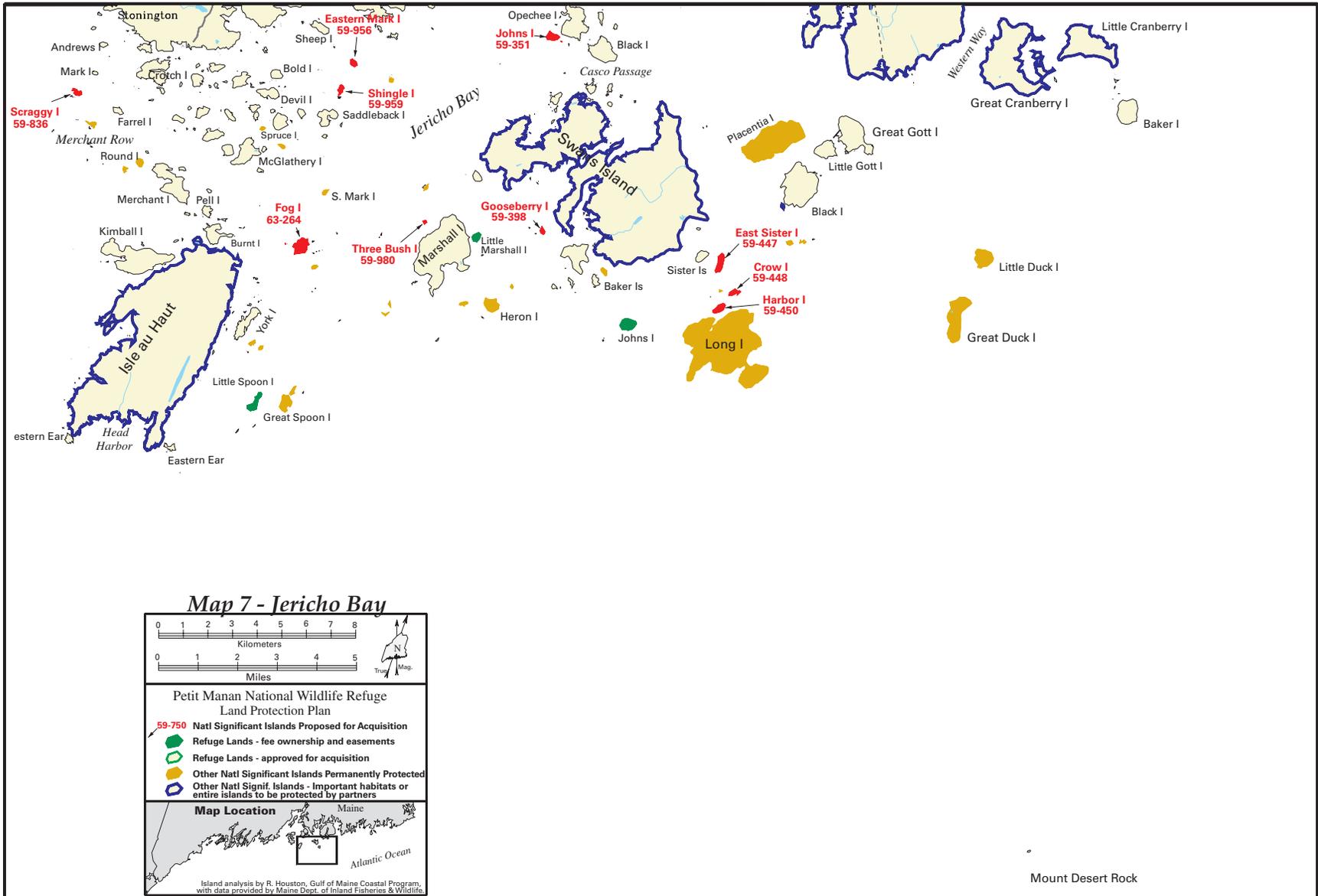
**Petit Manan National Wildlife Refuge  
Land Protection Plan**

- 59-750 Natl Significant Islands Proposed for Acquisition
- Refuge Lands - fee ownership and easements
- Refuge Lands - approved for acquisition
- Other Natl Significant Islands Permanently Protected
- Other Natl Signif. Islands - Important habitats or entire islands to be protected by partners

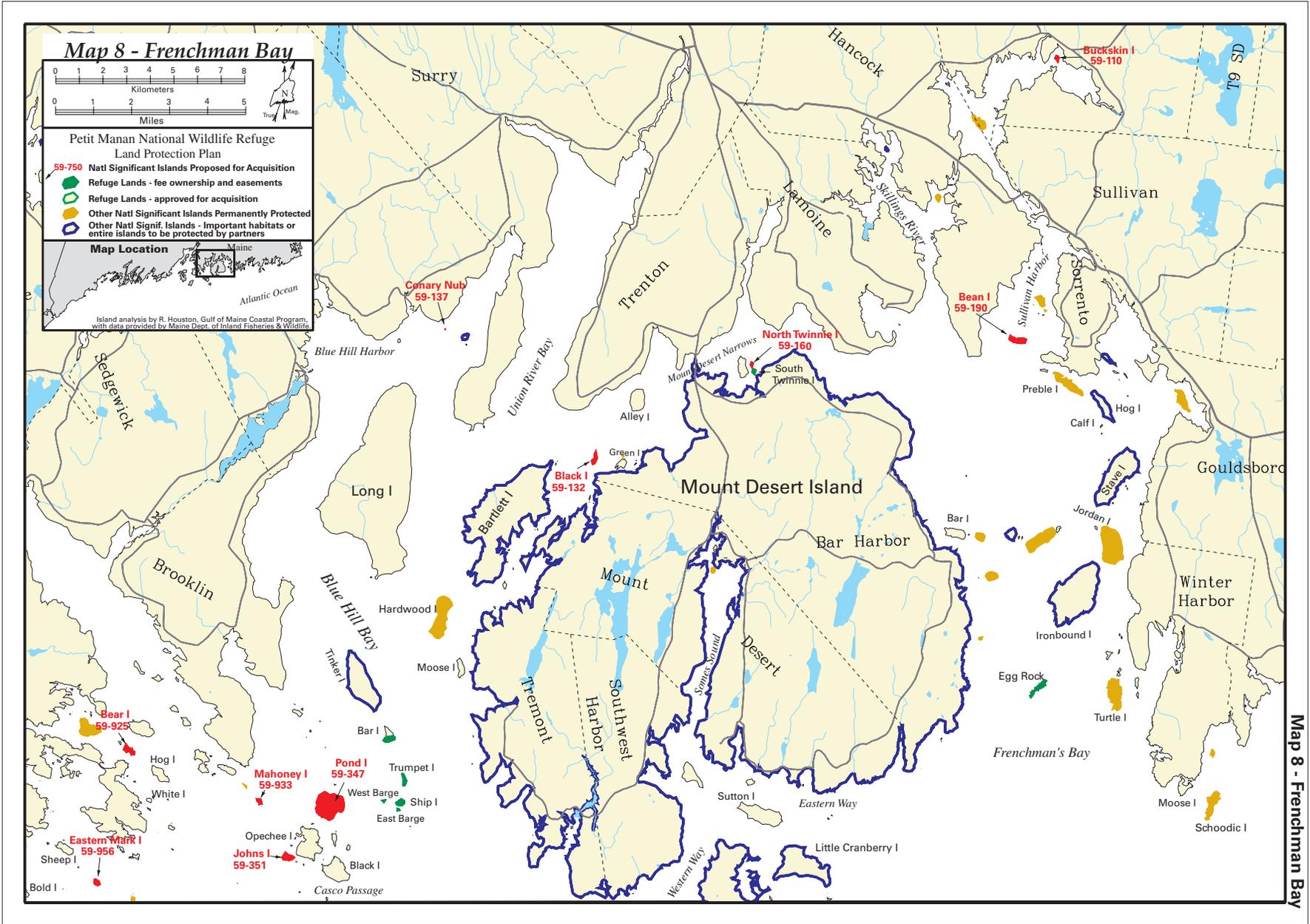
**Map Location**

Island analysis by R. Houston, Gulf of Maine Coastal Program, with data provided by Maine Dept. of Inland Fisheries & Wildlife.



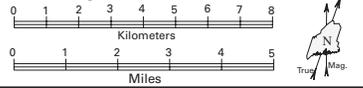


Map 7 - Jericho Bay



Map 8 - Frenchman Bay

### Map 9 - Petit Manan



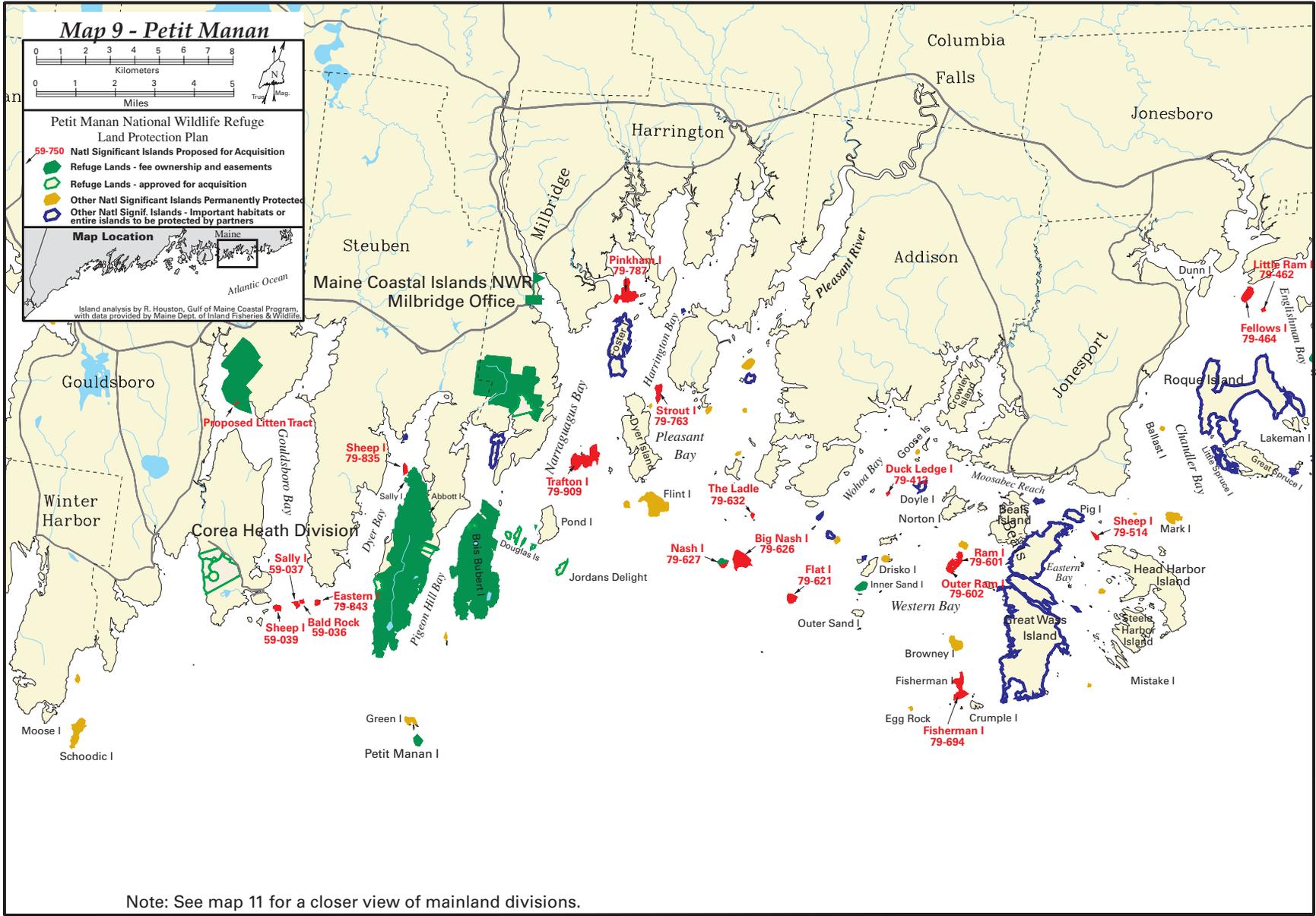
#### Petit Manan National Wildlife Refuge Land Protection Plan

- 59-750 Natl Significant Islands Proposed for Acquisition
- Refuge Lands - fee ownership and easements
- Refuge Lands - approved for acquisition
- Other Natl Significant Islands Permanently Protected
- Other Natl Signif. Islands - Important habitats or entire islands to be protected by partners

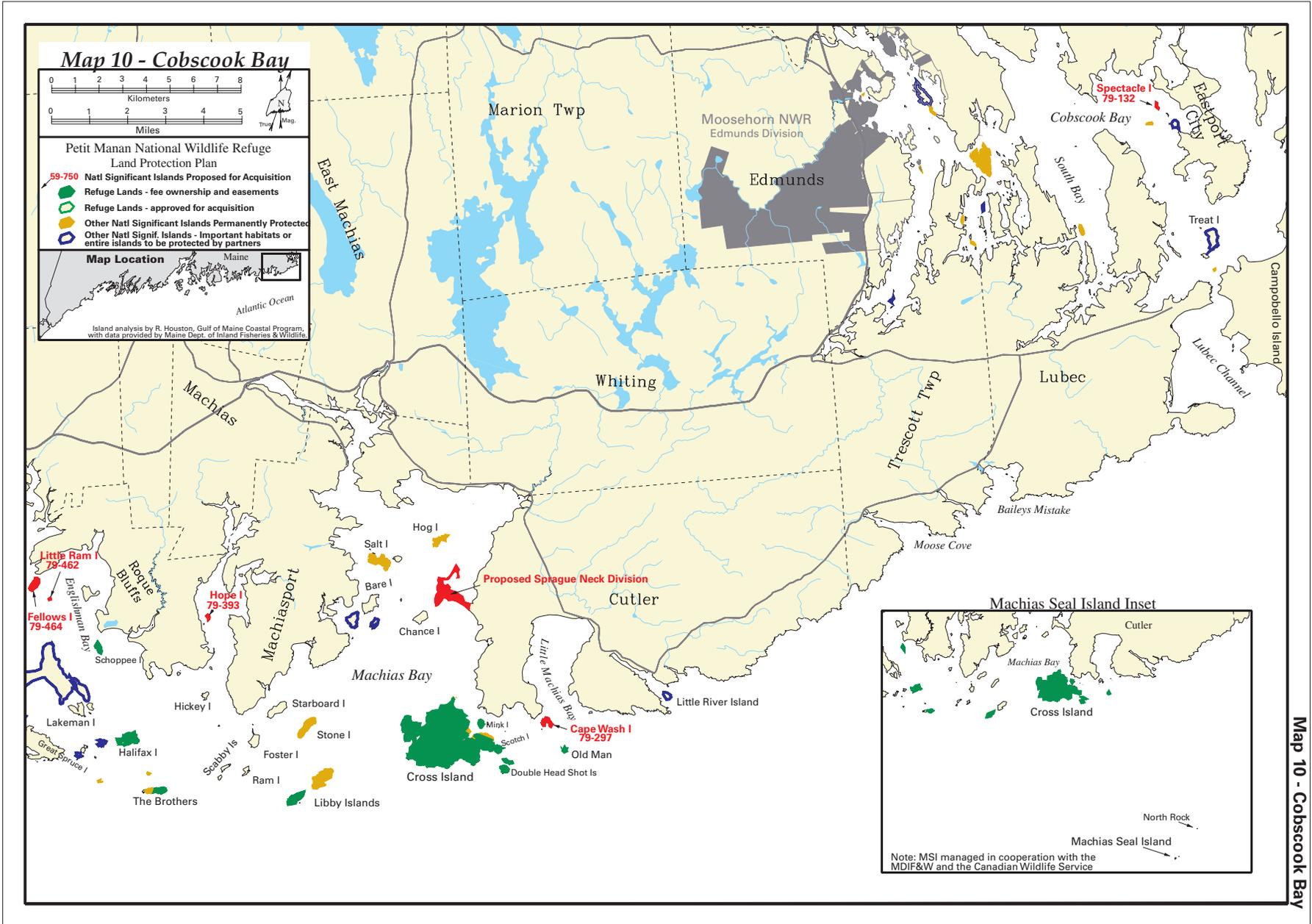
#### Map Location



Island analysis by R. Houston, Gulf of Maine Coastal Program, with data provided by Maine Dept. of Inland Fisheries & Wildlife

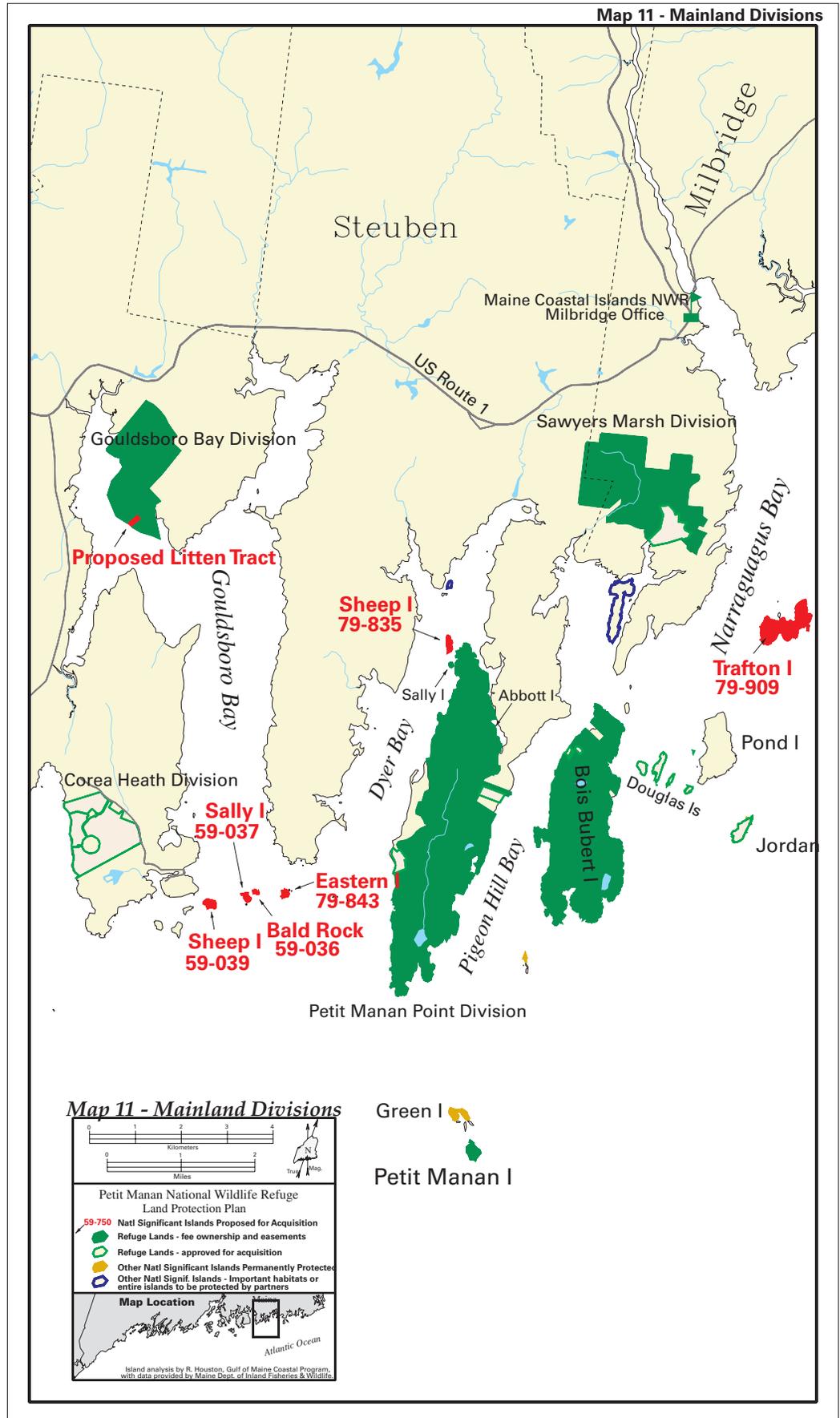


Note: See map 11 for a closer view of mainland divisions.



Map 10 - Cobscook Bay

Map 11 - Mainland Divisions



**Attachment B. Details on Proposed Acquisition**

The first table in Attachment B corresponds to the maps in Attachment A and identifies each island proposed for acquisition, its Coastal Island Registry (CIREG) number, the town it is in, whether its publicly or privately owned, and our priority and recommended option for acquiring it. The second table identifies each mainland parcel proposed for acquisition, the town its in, whether its publicly or privately owned, and our priority and recommended option for acquiring it.

Expanded definition of each column heading follows:

- Island Name** name of specific island
- CIREG** Coastal Island Registry number as designated by the State of Maine
- Town** the town in which the island is located
- Map** map numbers in Attachment A
- Ownership** whether the parcel is privately or publicly owned. “Private” includes individuals, corporations, and conservation organizations. “CG” refers to the Coast Guard.
- Acres** estimated acres for each island from our Geographic Information System (GIS) database. This estimate may not match exactly town tax records; some parcels lack detailed information. It includes only upland acres.
- Priority 1** includes 52 nationally significant nesting seabird islands lacking long-term protection, two new mainland tracts, all the unacquired seabird island parcels, and Sawyers Marsh and Corea Heath mainland tracts within the currently approved Refuge boundary.
- Priority 2** includes 35 eagle islands lacking long-term protection, and all other unacquired mainland parcels within the currently approved Refuge boundary.
- Acquisition Method** whether we would pursue purchase of complete title or full fee simple (fee); or, a partial interest in conservation easement (easement; see discussion in “Acquisition Method”); or, a “transfer” from the Coast Guard or U.S. Navy. We identify what we believe, given the information now available, is the minimal level of Service interest needed for project objectives that is also cost-effective. However, as islands become available in the future, changes may be warranted to ensure we are using the option that best fits the situation at that time and meets ours and landowner’s needs.

**Attachment B: Island Information**

Island Name	CIREG	Town	Map	Ownership	Acres	Priority	Acquisition Method
Appledore I	81-191	Kittery	1	Private	99.11	1	Fee
Bald Rock	59-036	Steuben	9	Private	1.31	1	Fee
Bar I	63-802	Tenants Harbor	4	Private	8.14	1	Fee
Bean I	59-190	Sorrento	8	Private	30.09	1	Fee
Bear I	59-925	Deer Isle	6	Private	20.12	2	Easement

**Attachment B: Island Information (cont'd)**

Island Name	CIREG	Town	Map	Ownership	Acres	Priority	Acquisition Method
Big Nash I	79-626	Addison	9	Private	75.34	1	Fee
Black I	59-132	Bar Harbor	8	Private	13.79	2	Easement
Buckskin I	59-110	Franklin	8	Private	5.60	2	Easement
Cape Wash I	79-297	Cutler	10	Private	21.15	2	Easement
Compass I	59-790	Deer Isle	6	Private	7.00	1	Fee
Canary Nub	59-137	Blue Hill	8	Private	0.17	1	Fee
Crane (S)	63-505	Vinalhaven	5	Private	1.60	2	Fee
Crow I	63-651	Muscle Ridge	5	Private	11.81	1	Fee
Crow I	59-448	Frenchboro	7	Private	10.63	2	Easement
Damariscove I	65-280	Boothbay	4	Private	242.30	1	Easement
Duck Ledge I	79-412	Addison	9	Private	1.06	1	Fee
Eagle I	81-010	Saco	2	Private	3.13	1	Fee
Eastern I	79-843	Steuben	9	Private	4.66	1	Fee
Eastern Mark I	59-956	Stonington	6	Private	9.89	2	Easement
East Sister I	59-447	Swans Island	7	Private	30.27	2	Easement
Fellows I	79-464	Roque Bluffs	9	Private	32.98	2	Easement
Fisherman I	65-274	Boothbay	4	Private	70.72	1	Fee
Fisherman I	79-694	Beals	9	Private	48.15	1	Fee
Flat I	79-621	Addison	9	Private	19.63	1	Fee
Fog I	63-264	Isle Au Haut	7	Private	56.65	2	Easement
Folly I	81-101	Kennebunkport	2	Private	5.36	1	Fee
Freyee I (W)	73-030	Topsham	3	Private	5.29	2	Easement
Fullers Rock	73-308	Phippsburg	3	Private	2.36	1	Fee
Gooseberry I	59-398	Swans Island	7	Private	5.42	1	Fee
Graffam I	63-634	Muscle Ridge	5	Private	65.10	1	Fee
Green Ledge	63-135	Vinalhaven	5	Private	0.73	1	Fee
Haddock I	65-200	Bristol	4	Private	12.05	1	Fee
Harbor I	63-701	Friendship	4	Private	96.68	1	Fee
Harbor I	59-450	Frenchboro	7	Private	19.93	2	Easement
Hog I	65-019	Damariscotta	4	Private	4.69	2	Easement
Hope I	79-393	Roque Bluffs	10	Private	5.52	2	Easement
House I	55-381	Portland	3	Private	31.11	1	Fee
Inner Porcupine I	59-799	Deer Isle	6	Private	10.15	2	Easement
John's I	59-351	Swans Island	7	Private	21.81	2	Easement
Lanes I	55-200	Yarmouth	3	Private	28.19	2	Easement
Large Green I	63-655	Matinicus Isle	5	Private	85.31	1	Fee
Little Green I	63-418	Matinicus Isle	5	Private	2.90	1	Fee
Little Green I	63-654	Matinicus Isle	5	Private	35.97	1	Fee
Little Hurricane I.	63-626	Matinicus Isle	5	Private	1.84	1	Fee
Little Ram I	79-462	Roque Bluffs	9	Private	1.97	2	Easement
Little Sprucehead	59-772	Deer Isle	6	Private	44.08	1	Fee
Little Whaleboat I	55-282	Harpwell	3	Private	17.99	1	Fee
Ltl Whaleboat (SE)	55-283	Harpwell	3	Private	4.31	1	Fee
Mahoney I	59-933	Brooklin	8	Private	6.96	1	Fee
Mouse I	63-330	North Haven	6	Private	2.73	1	Fee

**Appendix A – Land Protection Plan**

**Attachment B: Island Information (cont'd)**

Island Name	CIREG	Town	Map	Ownership	Acres	Priority	Acquisition Method
Nash I	79-627	Addison	9	Private	16.70	1	Fee
North Twinnie I	59-160	Bar Harbor	8	Private	3.58	2	Easement
Oak I	63-421	Matinicus Isle	5	Private	1.76	1	Fee
Outer Porcupine I	59-800	Deer Isle	6	Private	6.31	2	Easement
Outer Ram I	79-602	Beals	9	Private	8.63	2	Easement
Pinkham I	79-787	Milbridge	9	Private	79.56	2	Easement
Pond I	59-347	Frenchboro	8	Private	241.00	2	Easement
Ragged I	55-626	Harpswell	3	Private	74.87	1	Fee
Ram I	63-323	Rockport	6	Private	1.06	1	Fee
Ram I	55-521	Cape Elizabeth	2	Private	2.86	1	Fee
Ram I	77-045	Islesboro	6	Private	6.98	2	Easement
Ram I	79-601	Beals	9	Private	29.34	2	Easement
Ram I	63-731	Friendship	4	Private	1.34	2	Easement
Sally I	59-037	Gouldsboro	9	Private	5.26	1	Fee
Sand I	63-730	Friendship	4	Private	4.22	2	Easement
Scraggy I	59-836	Stonington	5	Private	8.49	1	Fee
Seguin I	73-320	Georgetown	3	Private	63.13	1	Easement
Sheep I	79-514	Jonesport	9	Private	4.17	2	Easement
Sheep I	79-835	Steuben	9	Private	7.88	2	Easement
Sheep I	59-039	Gouldsboro	9	Private	9.39	2	Easement
Shingle I	59-959	Stonington	7	Private	9.19	2	Easement
Spectacle I	59-673	Brooksville	6	Private	8.74	1	Fee
Spectacle I	79-132	Eastport	10	Private	4.76	1	Fee
Strout I	79-763	Harrington	9	Private	20.84	2	Easement
The Brothers (C)	63-580	St. George	4	Private	0.57	1	Fee
The Brothers (S)	63-581	St. George	4	Private	7.39	1	Fee
The Brothers (N)	63-579	St. George	4	Private	3.81	1	Fee
The Ladle	79-632	Addison	9	Private	2.28	1	Fee
Thread of Life	65-258	South Bristol	4	Private	1.44	1	Fee
Three Bush I	59-980	Swans Island	7	Private	1.62	1	Fee
Traffon I	79-909	Harrington	9	Private	113.20	1	Fee
Turnip I	55-427	Harpswell	3	Private	1.89	1	Fee
Two Bush I	63-901	Matinicus Isle	5	Private	5.88	1	Fee
Upper Coombs	55-088	Brunswick	3	Private	8.58	2	Easement
Western I	59-675	Deer Isle	6	Private	22.03	2	Easement
Wood I (except CG tract)	81-015	Biddeford	2	Private	35.51	1	Fee
Wooden Ball I	63-917	Matinicus Isle	5	Private	138.20	1	Fee
<b>Total Island Acres</b>					<b>2,306.40</b>		

**Attachment B: Mainland Information**

Mainland Name	Town	Map	Ownership	Acres	Priority	Acquisition Method
Sprague Neck Property	Cutler	10	U.S. Navy	150.0	1	Transfer
Litten Property	Gouldsboro	9	Private	3.3	1	Fee
<b>Total Mainland Acres</b>				<b>153.3</b>		

**Attachment C. Letter of Support for Acquisition of Bald Eagle Nesting Islands  
from the Regional Chief of Threatened and Endangered Species**



**United States Department of the Interior**

**FISH AND WILDLIFE SERVICE**  
300 Westgate Center Drive  
Hadley, MA 01035-9589



In Reply Refer To:  
FWS/Region 5/ES-TE

**JAN 27 2003**

**To:** Regional Director, Region 5  
**From:** Chief, Division of Threatened and Endangered Species  
**Subject:** Acquisition of Bald Eagle Habitat for the Petit Manan National Wildlife Refuge Complex

I urge your strong support of the Land Protection Plan (LPP) for the Petit Manan National Wildlife Refuge (PMNWR) Complex, part of which recommends acquisition of 37 bald eagle nesting islands along the Maine coast. My reasons for seeking your support appear below.

Bald eagles in Maine continue their dramatic comeback and are leading the recovery of our National symbol in the Northeast. In 2002, 295 pairs of eagles were documented nesting in the State. Nationally, eagle numbers have steadily rebounded for more than 20 years and now surpass Federal recovery objectives in four of five National recovery zones. As a result of improvements among eagle populations, the U. S. Fish and Wildlife Service (Service) proposed de-listing the species from its threatened status. Final action on this proposal is pending.

The primary objective of the Northern States Bald Eagle Recovery Plan, which includes Maine, is self-sustaining populations in suitable habitats. Consequently, protection and enhancement of eagle populations and their habitat have been and continue to be a major focus of plan implementation.

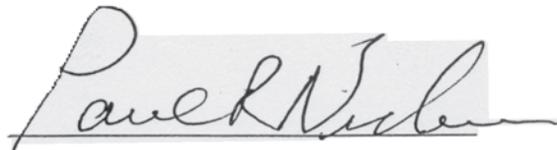
Although Maine will soon achieve its State recovery goals for breeding pairs of bald eagles, delisting at the State level will remove Essential Habitat provisions of the Maine Endangered Species Act. Considerable concern has been expressed that subsequent habitat loss and degradation, especially along the coast and inland lakes, could reverse current population trends. For this reason, Maine Inland Fisheries and Wildlife adopted habitat protection as a State recovery goal. Before eagles can be delisted in Maine, a habitat "safety net" must be established with at least 150 nesting areas in conservation ownership, easement, or cooperative management agreements. Ideally, conserved nesting areas would be distributed throughout the State, include coastal and inland settings, and be well-distributed among different habitats. Currently, about 100 nesting areas are thus protected. An additional 50 nesting areas must be conserved before delisting will occur.

The proposed acquisition of eagle nesting islands in the PMNWR Complex LLP was cooperatively developed by State and Federal biologists in an extremely well coordinated effort. There are about 150 eagle nests on Maine's coastal islands. The 37 islands proposed for acquisition represent the highest conservation priority based on habitat integrity, length of occupation by eagles, long-term conservation integrity of the site for eagles, absence of human disturbance, and strategic geographic importance in conserving eagle populations along the coast. Some territories on the list have been in existence over 30 years. As conserved areas, these islands would be expected to provide eagle nesting habitats for many decades to come.

Island-based eagle territories are some of the easiest to conserve. Protection of nesting islands often conserves 100 percent of the territory (in contrast with inland pairs where complex lake and river shorelines are often in multiple ownerships). Island-nesting eagles use the island year-round (i.e. they are non-migratory). Ample food resources (fish and marine birds) are usually plentiful, and offshore settings provide ice-free feeding habitats all winter. Islands often provide eagles a measure of isolation from human disturbance. Island settings provide fledgling eagles ample obstruction-free space to learn flight and foraging skills. Finally, prey resources adjacent to offshore islands have lower contaminant loads than estuary or inland sites. For these reasons, productivity of island nesting eagles has been greater than for many inland settings.

Implementation of the LPP will make a substantial contribution to the State's "safety net" habitat protection strategy, facilitate recovery of bald eagles in Maine, and provide anchor nesting areas for the foreseeable future. Protection of coastal nesting areas will compliment an initiative by Maine Inland Fisheries and Wildlife to protect inland nesting areas using conservation agreements and easements with new funding from the Landowner Incentive Program.

I strongly support Service acquisition of these coastal nesting islands to insure a permanent recovery of the eagle in the Northeast.

A handwritten signature in cursive script, reading "Paul R. Nickerson", is written over a light gray rectangular background.

cc: Sherry Morgan  
PMNWR Complex  
Nancy McGarigal

## Appendix B



*Roseate tern*  
USFWS photo

# Species and Habitats of Conservation Concern

- Bird Species
- Rare Botanical Species
- Rare Plant Community Types

**Appendix B – Species and Habitats of Conservation Concern**

**Bird Species**

Species	E&T Species ME / USFWS <sup>1</sup>	Migratory Nongame Species of Management Concern <sup>2</sup>	>20% of population in north-east <sup>3</sup>	International Shorebird Survey Report <sup>4</sup>	Water-fowl Population Status Report <sup>5</sup>	Maine Special Concern <sup>6</sup>	Species of Conservation Concern to North-east <sup>7</sup>	Partners In Flight <sup>8</sup>	Important Neo-tropical Migratory Bird species in Maine <sup>9</sup>	Species of Management Concern on Refuge lands <sup>10</sup>
Common Loon		x								
Pied-billed Grebe							x			
Leach's Storm Petrel •						x				x
Great Cormorant •						x				x
American Bittern •		x					x			
Least Bittern		x				x				
Black Crown Night Heron•						x				x
Canada Goose					x					
American Black Duck •					x			x		x
Northern Pintail					x					
Greater Scaup					x					
Lesser Scaup					x					
Harlequin Duck	x						x			
Surf Scoter					x					
Black Scoter					x					
White wing Scoter					x					
Barrow's Goldeneye					x	x				
Bald Eagle •	x									x
Golden Eagle	x						x			
Northern Harrier •		x					x			
Cooper's Hawk						x				

## Bird Species (Cont'd.)

Species	E&T Species ME / USFWS <sup>1</sup>	Migratory Nongame Species of Management Concern <sup>2</sup>	>20% of population in north-east <sup>3</sup>	International Shorebird Survey Report <sup>4</sup>	Waterfowl Population Status Report <sup>5</sup>	Maine Special Concern <sup>6</sup>	Species of Conservation Concern to North-east <sup>7</sup>	Partners In Flight <sup>8</sup>	Important Neotropical Migratory Bird species in Maine <sup>9</sup>	Species of Management Concern on Refuge lands <sup>10</sup>
Northern Goshawk •		x				x				
Red-shouldered Hawk		x								
Peregrine Falcon	x									
Spruce Grouse•								x		
American Coot						x				
Blk Bellied Plover				x						
Piping Plover	x							x		
Killdeer •				x						
Upland Sandpiper	x	x					x			x
Red Knot				x			x			
Sanderling				x						
Semipalmated Sandpiper				x						
Least Sandpiper				x						
Purple Sandpiper				x						
Short-billed Dowitcher				x						
Common Snipe				x						
American Woodcock •				x				x		x
Red-necked Phalarope						x				
Laughing Gull •						x				x
Roseate Tern •	x									x
Common Tern•		x				x	x			x
Arctic Tern •	x									x

Appendix B – Species and Habitats of Conservation Concern

Bird Species (Cont'd.)

Species	E&T Species ME / USFWS <sup>1</sup>	Migratory Nongame Species of Management Concern <sup>2</sup>	>20% of population in north-east <sup>3</sup>	International Shorebird Survey Report <sup>4</sup>	Water-fowl Population Status Report <sup>5</sup>	Maine Special Concern <sup>6</sup>	Species of Conservation Concern to North-east <sup>7</sup>	Partners In Flight <sup>8</sup>	Important Neo-tropical Migratory Bird species in Maine <sup>9</sup>	Species of Management Concern on Refuge lands <sup>10</sup>
Least Tern	x						x			
Black Tern	x	x					x			
Atlantic Puffin •	x									x
Razorbill •	x									x
Short-eared Owl		x				x	x			
Whip-poor-will•			x				x			
Red-headed Woodpecker		x								
Yellow-bellied Sapsucker									x	
Northern Flicker •		x								
Olive-sided Flycatcher •		x				x		x		
Eastern Wood-Pewee •			x							
Eastern Phoebe •			x							
Yellow-bellied Sapsucker									x	
Loggerhead Shrike						x	x			
Yellow-throated Vireo			x							
Veery		x	x					x	x	
Wood Thrush		x	x					x		
Gray Catbird •			x							
American Pipit	x									
Blue-winged Warbler		x	x							
Northern Parula •			x						x	
Chestnut-sided Warbler •		x						x	x	

## Bird Species (Cont'd.)

Species	E&T Species ME / USFWS <sup>1</sup>	Migratory Nongame Species of Management Concern <sup>2</sup>	>20% of population in north-east <sup>3</sup>	International Shorebird Survey Report <sup>4</sup>	Waterfowl Population Status Report <sup>5</sup>	Maine Special Concern <sup>6</sup>	Species of Conservation Concern to North-east <sup>7</sup>	Partners In Flight <sup>8</sup>	Important Neotropical Migratory Bird species in Maine <sup>9</sup>	Species of Management Concern on Refuge lands <sup>10</sup>
Cape May Warbler •								x		
Blk-throated Blue Warbler			x					x	x	
Blackburnian Warbler •			x					x	x	
Bay-breasted Warbler •								x		
Blk and Wht Warbler •									x	
American Redstart •									x	
Worm eating Warbler		x	x							
Ovenbird •									x	
Canada Warbler •							x	x	x	
Scarlet Tanager			x							
Field Sparrow		x								
Vesper Sparrow						x				
Grasshopper Sparrow	x	x								
Sharp-tailed Sparrow •							x	x		
Rose-breasted Grosbeak									x	
Bobolink •		x								x
Eastern Meadowlark		x				x				x
Rusty Blackbird						x				
Orchard Oriole						x				
Red Crossbill								x		
Herring Gull •										x

**Bird Species (Cont'd.)**

Species	E&T Species ME / USFWS <sup>1</sup>	Migratory Nongame Species of Management Concern <sup>2</sup>	>20% of population in north-east <sup>3</sup>	International Shorebird Survey Report <sup>4</sup>	Waterfowl Population Status Report <sup>5</sup>	Maine Special Concern <sup>6</sup>	Species of Conservation Concern to North-east <sup>7</sup>	Partners In Flight <sup>8</sup>	Important Neotropical Migratory Bird species in Maine <sup>9</sup>	Species of Management Concern on Refuge lands <sup>10</sup>
Blk Backed Gull •										x
Great Horned Owl •										x
Double Crested Cormorant •										x
Common Eider •										x
Black Guillemot •										x
Gray Seal										x

• Birds known to nest on the Refuge

**References for bird list**

1. USFWS Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12, December 31, 1999.
2. MDIFW Revised List of Special Concern Species in Maine, Sept. 25, 1996.
3. Wildlife Species of Regional Conservation Concern in the Northeastern United States, Northeast Wildlife Vol.54, 1999.
4. Changes to Maine's List of Endangered or Threatened Species, July 17, 1996.
5. Importance of Geographic Areas to Neotropical Migrant Birds in the Northeast, USFWS Report by Kenneth Rosenberg and Jeffrey V. Wells. July 1995.
6. Partners in Flight Priority Bird Populations and Habitats, Physiographic Areas 27 and 28(Northern New England and Eastern Spruce-Hardwood Forest).
7. Migratory Nongame Birds of Management Concern in the United States, OMB, USFWS, September, 1995.
8. 1995 International Shorebird Survey Report; (subset of species which have been declining and occur in Region 5)
9. 1996 Waterfowl Population Status Report, USFWS.
10. These are the species from the first 9 columns for which management objectives have been written; or for which we are monitoring their populations in case future management is warranted

## Rare Botanical Species

Common Name	Scientific Name	State Rarity Rank	Global Rarity Rank	State Legal Status
Northern yarrow	<i>Achillea millefolium var. borealis</i>	S1	G5T?	Special concern
Nova Scotia false-foxtail	<i>Agalinis neoscotica</i>	S1	G2?	Threatened
Screwstem	<i>Bartonia paniculata</i>	S1	G5	Threatened
Moonwort	<i>Botrychium lunaria</i>	S1	G5	Endangered
Pickering's reed bent-grass	<i>Calamagrostis pickeringii</i>	S1	G4	Threatened
Swarthy sedge	<i>Carex adusta</i>	S1	G5	Endangered
Livid sedge	<i>Carex livida</i>	S2	G5T5	Threatened
Loose-flowered sedge <sup>A</sup>	<i>Carex rariflora</i>	SH	G5	Possibly Extirpated
Salt-marsh sedge	<i>Carex recta</i>	S1	G4	Threatened
Sea-beach sedge	<i>Carex silicea</i>	S3	G5	Special concern
Weigand Sedge	<i>Carex weigandii</i>	S2	G3	Special concern
Coast-blite goosefoot	<i>Chenopodium rubrum</i>	S1	G5	Threatened
Common mare's tail <sup>A</sup>	<i>Hippuris vulgaris</i>	S2	G5	Special concern
Marsh felwort	<i>Lomatogonium rotatum</i>	S2	G5	Threatened
White adder's-mouth	<i>Malaxis monophyllos</i>	S1	G4Q	Endangered
Blinks	<i>Montia fontana</i>	S2	G5	Special concern
Bird's-eye primrose	<i>Primula laurentia</i>	S2	G5	Special concern

<sup>A</sup>: Both *Carex rariflora* and *Hippuris vulgaris* have historically been documented on Petit Manan Point, but recent surveys were not able to confirm their presence.

**Rare Plant Community Types**

Community Type	Maine Natural Areas Program Element Occurrence Rank
Maritime Slope Bog	S2/G3G5
Coastal Plateau Bog	S3
Jack Pine Woodland	S3/G3G5
Northern White Cedar Swamp	S4

**References for botanical list:**

Elements of Natural Diversity: Rare, Threatened and Endangered Plants, Maine Natural Areas Program 1999  
 An Ecological Assessment of Eastern Brothers and Halifax Island, Washington County Maine, Famous and Spencer-Famous 1999  
 South Libby Island Botanical Survey, Bochan and DiGirolamo 1999  
 Maine Forest Biodiversity Project Final Report, Maine Natural Areas Program, 1998  
 The Vascular Flora of Petit Manan Refuge John's Island, Maine, Mittelhauser and Morrison, 2000

State Ranking: (determined by Maine Natural Areas Program)

S1: Critically imperiled in Maine because of extreme rarity or vulnerability to extirpation  
 S2: Imperiled in Maine because of rarity (6 - 20 occurrences) or because of other factors making it vulnerable to further decline  
 S3: Rare in Maine (20 - 100 occurrences)  
 S4: Apparently secure in Maine  
 SH: Occurred historically in Maine  
 Special concern: Rare in Maine based on available information, but not sufficiently rare to be considered threatened or endangered

Global Ranking: (determined by The Nature Conservancy)

G1: Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres).  
 G2: Globally imperiled because of rarity (6 - 20 occurrences) or because of other factors making it vulnerable to further decline (uncertain)  
 G3: Globally rare (on the order of 10 - 100 occurrences)  
 G4: Apparently secure globally, but with cause for long-term concern.  
 G5: Demonstrably widespread, abundant, and secure globally

## Appendix C



*Whale watching tour*  
USFWS photo

# Compatibility Determinations

- Wildlife observation, nature photography, environmental education, interpretation
- Camping
- Sheep grazing on seabird nesting islands
- Monitoring resources
- Research - Neotropical migrants
- Seabird restoration
- Commercial tour boat service to Machias Seal Island
- Public hunting
- Pre-acquisition — public hunting
- Recreational blueberry picking



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Wildlife Observation, Nature Photography, Environmental Education, Interpretation*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(es):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

Conduct and allow access for priority public uses (Wildlife Observation, Photography, Environmental Education, Interpretation) as provided for under the NWRS Improvement Act of 1997. These uses will occur on the three mainland divisions (Petit Manan Point, Gouldsboro Bay, and Sawyers Marsh) and all Refuge islands with specific conditions as noted in this determination.

On Petit Manan Point, these priority public uses will normally occur along the Refuge access road and on the Birch Point and Hollingsworth trails. Seven interpretive panels are installed along the latter trail. Parking areas are available at both trail heads. In addition, the entire shoreline of Petit Manan

Point can be accessed for these uses. Access to Gouldsboro Point and Sawyers Marsh Divisions are limited at this time but are expected to improve as trails and parking lots are developed. An abandoned logging road currently provides foot access on the Gouldsboro Bay Division through upland wooded areas to a saltmarsh. Access to the Sawyers marsh Division is via an unimproved logging road. No parking areas are currently available at these two Divisions. Public access to mainland areas is year round, daylight hours only. Public access to Cross, Scotch, Halifax, and Bois Bubert Islands is year round day use only except for Bois Bubert and Halifax, where limited camping currently occurs. Access to all other Refuge islands is seasonal (September 1 through March 31) to accommodate nesting seabirds.

Environmental education activities seek to increase public knowledge and understanding of wildlife and contribute to the conservation of such wildlife. Activities include traditional environmental education activities (teacher-led or staff-led on-site field trips, teacher and student workshops), off-site programs in classrooms, nature study, and interpretation of the wildlife resources and support facilities such as visitor centers, interpretive trails and visitor contact stations. Environmental education activities on the Refuge include teacher workshops, classroom visits, on-site talks, and use of the Refuge as an outdoor classroom/lab for Humboldt Field Research Institute instructors and students. Approximately 15 teacher/student groups use Refuge lands annually. Teachers and student groups use Refuge roadways, two interpretive trails on Petit Manan Point Division, and certain shoreline areas. Students of Humboldt Field Research Institute use these same areas, as well as conduct two to three trips per year to a raised heath bog, woodlands, marsh, and edge areas. The Research Institute operates under a special use permit and has recently been using both Petit Manan Point Division and Bois Bubert Island. Ten to twelve groups visit the Refuge annually with an average of 150 student visits.

On Cross and Halifax islands, Hurricane Island Outward Bound School (HIOBS) operates under an annual refuge special use permit. During July through August, HIOBS may use a maximum of 24 solo, low impact, camping sites, designated annually by the Refuge Manager. A maximum of 864 person-use-days (to include Service project days) as outlined in the 1986 Cross Island Evaluation and Management Plan is authorized on the unimproved trail system.

HIOBS provides the U.S. Fish and Wildlife Service (Service) with an annual volunteer project of not less than two/hours per student; projects are selected by and coordinated through the Refuge Manager.

The Chewonki Foundation (an educational foundation) provides environmental education opportunities on Bois Bubert and Halifax islands under a refuge special use permit. This organization averages one group visit per year with 12-22 overnight visits per year.

Wildlife observation, photography and interpretation activities seek to increase awareness, enjoyment and understanding of the Refuge's wildlife and plant resources. Interpretive signing is located at several locations on Refuge trails. Visitors view displays and observe and photograph wildlife at their own pace. Access to the islands is by private or commercial tour boat.

### **Availability of Resources:**

Existing staff and budget have provided sufficient resources to manage current uses. We anticipate that Refuge public uses will increase as the additional trails open, coastal recreation increases, community outreach increases, and media attention and web-site information on the Refuge expands.

Costs associated with current program implementation include:

Preparation of Special Use Permits .....	\$500.00
Boat operating costs .....	\$200.00
Trail Maintenance .....	\$1,080.00
Materials .....	\$1,000.00
Staff costs associated with Refuge programs .....	\$1,200.00
Total Cost of Program .....	\$3,980.00

\*FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

**Anticipated Impacts of the Use:**

The Refuge priority uses being evaluated (Wildlife Observation, Photography, Environmental Education, Interpretation) may impose minor negative impacts on specific station physical resources such as trails and roads, and on natural resources such as vegetation and wildlife. Impacts may include erosion, deterioration, trampling, and temporary disturbance. Almost all public uses described herein occur in specific footprints on the Refuge, particularly, Refuge trails on Petit Manan and Gouldsboro Point Divisions. Limited use occurs on the Cross Island trail, and shorelines on Petit Manan Point and around Refuge islands.

The fact that use is generally confined to these areas, overall impacts are not broad nor do they impact the greater part of the Refuge. Currently, most usage occurs during late spring and throughout the summer and fall months. Very little use occurs during the winter. Furthermore, estimated current use (less than 20,000 visitors/year) on Refuge trails does not show intolerable impacts. Erosion does occur in some areas, especially during excessive rainfall events. Boardwalks have been installed in erosion prone areas to lessen these impacts and additional areas are being identified for future boardwalk treatment.

On Cross Island, HIOBS use has caused trail erosion and plant damage in localized areas. These impacts are short-term and can be remediated through re-routing small portions of the trail. Long term impacts are not anticipated as limits are set on allowed use days.

Both short and long term impacts on other Refuge islands is anticipated to be minimal due to the fact that Refuge seabird and eagle nesting islands are closed to access during the summer nesting season which coincides with the highest public use season. Also, coastal islands, by their very nature, are difficult to access. That said, interest in recreational visits to coastal islands is trending upward . Recreational use on islands has increased in recent years (Maine Island Trail Association 2002). The Maine Island Trail System provides opportunities for recreational uses on coastal islands and continues to work cooperatively with private island owners and State and Federal agencies to provide low impact recreational sites for recreational use. MITA has developed Island Use Guidelines, has raised public awareness of the need for ethical use of islands and promotes the *Leave No Trace* philosophy. This type of forward thinking and commitment, should in the long term, help minimize adverse impacts, both short and long term, to islands in the Maine Island Trail System. This ethical philosophy and awareness will, hopefully, extend to Refuge island users.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Further public comment opportunities were afforded when the Draft CCP/EIS was released for 60-day review. No significant changes were made between the draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible
- Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

The priority public uses (Wildlife Observation, Photography, Environmental Education, Interpretation) are encouraged on Maine Coastal Islands NWR and have been incorporated into the Refuge Management Program. These uses are allowed to continue based on stipulations, mechanisms and regulations that will help to ensure compatibility with Refuge purposes and include:

1. Day use only to decrease the disturbance to wildlife
2. Accommodating/focusing use to specific areas of refuge, such as trails to limit overall disturbance to Refuge habitats and wildlife.
3. Seasonal island closures to protect nesting seabirds and eagles.
4. Special Use Permits with appropriate conditions.
5. Refuge signing and information in brochures.
6. Posting Refuge Regulations.
7. Monitoring by Refuge staff, volunteers, and partners.
8. Promoting the *Leave No Trace* philosophy

**Justification:**

Specific areas (trails) of the Refuge have been designated for these uses on Petit Manan Point and Cross Island . These areas are monitored periodically for impacts that would degrade the natural environment and excessive visitation that would lessen the quality experiences that we strive to make available in support of the mandates of the National Wildlife Refuge System Improvement Act of 1997. Clearly, wildlife oriented uses on Refuges contribute significantly to public education and support of national wildlife refuges.

The Refuge uses partnerships and environmental education to motivate citizens of all ages to action and understanding in protecting a healthy ecosystem. Partnerships and environmental education are tools used to build a land ethic, develop political support, lessen vandalism, littering and poaching. Visitors come to the Refuge to see, enjoy, and learn about wildlife and their habitats. Wildlife observation, photography, and educational opportunities along Refuge shorelines are wildlife oriented activities (USFWS 1985) which are compatible with Refuge purposes. The minor impacts to vegetation and wildlife which may occur are a worthwhile trade off for informing visitors about island wildlife and

providing an opportunity for active land stewardship. These activities are used throughout the country to inform and educate visitors to public lands of all types (Grater 1976).

With the stipulations noted in Special Use Permit conditions, access trails, and posted regulations, activities will be compatible with Refuge purposes, while providing opportunities for visitors to use and learn about Refuge and marine resources. The priority public uses in this determination, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of this Refuge.

Signature: Refuge Manager: Charles W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lege March 24, 2005  
(Signature and Date)

Mandatory 15-Year Re-Evaluation Date: 3-1-2020

### Literature

Grater, Russell K. 1976. The Interpreters Handbook. Globe, AZ: Southwest Parks and Monuments Association.

Maine Island Trail Association 2002. Maine Island Trail Association - 2002 Stewardship Handbook and Guidebook, 15<sup>th</sup> ed. 376 pp.

U.S. Fish and Wildlife Service. 1985. Refuge Manual. Washington, D.C.: U.S. Government Printing Office.

U.S. Fish and Wildlife Service. 1997. National Wildlife Refuge System Improvement Act of 1997, Public Law 105-57-Oct. 9, 1997.



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Camping*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(s):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

The use analyzed is overnight camping on two Refuge Islands (Bois Bubert and Halifax). This use officially started in 1990 under a Cooperative Agreement with the Maine Island Trail Association (MITA). Specific sites on each island are designated for this use. On Bois Bubert Island, the designated campsite is located about half way down the side of the island on the SE side of Seal Cove. The area is on a raised gravel beach bordered by typical spruce forest habitat. Bubert is a 1200 acre island. The designated camp site on Halifax Island is on a gravel over wash bar on the NW side of the island. The area comprises about one acre of this 75 acre island. Fragile areas of the island containing unique botanical features are closed to entry. Neither island attracts nesting seabirds. A bald eagle nest on Bois Bubert is not in the vicinity of the campsite and no disturbance by this use would occur.

Typically, most use occurs in July and August. The use is controlled and monitored via a Special Use Permit MITA and individual SUP’s for non-MITA members. Users are required to make reservations in advance. Uses are monitored through the Refuge Office.

Camping on off shore islands is a popular and traditional recreation activity in coastal Maine. With an increasing interest in kyaking and an abundance of islands stringing Maine's coastline, kyaking is a natural for access to coastal islands that facilitates both day use and over night camping. The Maine Island Trail Association (MITA) manages the Maine Island Trail, a 325 mile waterway extending from Casco Bay east to Machias Bay. In 2001 there were 104 islands on the Trail open to day use and overnight camping. Both Bois Bubert and Halifax Islands provide critical links in the trail for kyakers navigating along islands in this downeast section of the trail.

**MITA (Maine Island Trail Association)** is allowed to use one unimproved site on Bois Bubert Island for overnight camping and an area on the western portion of Halifax Island. Low impact camping is encouraged, no fires or pets are permitted and groups must call the Refuge prior to staying on the islands. The maximum number of people allowed per day is not to exceed 10. MITA on an average accounts for about 10 group visits per year which equals about 30 overnight visits per year.

**CHEWONKI (an educational foundation)** is allowed to use one unimproved site on Bois Bubert Island for overnight camping and one site on the western portion of Halifax Island in conjunction with their environmental education programs. Low impact camping is utilized. Overnight stays do not exceed two nights unless foul weather/sea conditions prevent safe sailing. The maximum number of people allowed per day is not to exceed 10. CHEWONKI at the maximum averages one group visit per year with 12-22 overnight visits/year.

**General Public** is allowed to use both Bois Bubert and Halifax islands for camping under a special use permit. Use/visitation is dictated by weather and sea conditions. Most use occurs during July and August. In 2001, 5 groups (about 30 campers) used Halifax and Bois Bubert islands.

**Availability of Resources:**

Current staffing and budget is sufficient to monitor use periodically during the summer camping season. MITA assigns island stewards to assist island owners with annual monitoring and clean up. Without this assistance, it would be difficult to adequately manage this use. There are no direct Refuge costs for special equipment or maintenance. Both camp sites are primitive and have no facilities or structures. Annual periodic cleanup and monitoring is accomplished totally by MITA volunteers.

Costs associated with Administration of the program include:

Preparation of special use permits .....	\$ 500.00
Annual check of Refuge signs .....	\$185.00
Boat Operating Costs \$50/hr @ 3 hrs .....	\$200.00
Managing reservations .....	\$250.00
Total Cost of Program.....	\$1,135.00

FY 2004 Refuge Budget Allocation included:

Salaries.....	\$428,609.00
Fixed Costs .....	\$ 64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

Based on a review of the budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use listed.

**Anticipated Impacts of the Use:**

Impacts associated with this use would generally be confined to a relatively small area of each island in the immediate vicinity of the use; i.e., the campsite. As each camp site is situated on a gravel type beach, there would be little direct impacts to the immediate environment. Camping may impose some impacts along the edges of the shoreline which may include trampling of vegetation and temporary disturbance to wildlife. These impacts would be short term and would not impose long term degradation at the current use. Seasonal storms, waves, and high tides actually impact island shorelines with forces that far exceed limited human foot traffic. Long term impacts in the form of vegetation trampling, local wildlife disturbance, and littering would occur if this use increased greatly or were unrestricted. On some coastal islands that have a much higher use, littering, erosion, and vegetation trampling were found to be excessive. Islands that have established trails can and do develop areas where erosion is excessive and results in loss of ground cover and sloughing away of the actual trail. These impacts have not occurred on these two islands.

The listed use would not detract from other Refuge programs because volunteers provide all monitoring and policing through MITA's Island Steward Program. Also, Refuge goals and objectives focus mainly on coastal seabird nesting islands. Neither island where this use occurs has nesting seabirds. One pair of eagles nest on Bois Bubert at this time (not in the vicinity of Seal Cove) and no osprey nest in close proximity to the camp site. No eagles or osprey nest on Halifax Island. On Halifax Island- the eastern side of the Island is closed to protect fragile botanical features. Endangered or threatened species do not occur in the immediate area of the campsites and no wetlands would be impacted.

Again, there seem to be very minor problems associated with littering, in fact both of these groups are required to clean up the area and notify the Refuge of any problems. MITA does an annual litter pick-up at the campsite and along the shoreline; most trash collected is fishing gear that has washed on shore.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes occurred between the draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible
- Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

MITA

1. MITA members will not enter closed areas (see current MITA Handbook for reference map) for any purpose at any time without written authorization from the Refuge Manager. Closed areas are subject to change as wildlife activity dictates. Permittee will be informed of these changes both verbally and by posted signs in the field.
2. This permit is issued upon the express condition that the United States of America, its agents and employees shall be free from all liabilities and claims for damages and/or suits for or by reason of any injury to any person or property of any kind whatsoever, whether to the property of the United States, the Permittee or third parties, from any cause whatsoever arising from any acts or omissions of the Permittee, its agents or employees pursuant to the terms of this Permit or in any way connected thereto, and the Permittee hereby covenants and agrees to indemnify, defend, save and hold harmless the United States of America, its agents, and employees from all such liabilities, expenses, obligations, damages, and costs on account of or by reason of any injuries, deaths, liabilities, claims, suits or losses however occurring or damages arising out of the same.
3. The Permittee shall purchase and maintain during the term of this permit comprehensive general liability insurance against claims occasioned by actions or omissions of the Permittee, its agents, and employees, in carrying out the activities and operations authorized hereunder. Such insurance shall be commensurate with the degree of risk and the scope and size of such activities authorized herein, but in any event not less than \$500,000 for bodily injury per person, and \$1,000,000 per incident, and property damage of at least \$25,000 per occurrence. A certificate of insurance will be secured from the insurance carrier and provided to the Refuge prior to beginning any activities authorized under this permit. All liability policies are to name the United States of America as an additional insured and shall specify that the insurance company shall have no right of subrogation against the United States and shall have no recourse against the Government for payment of any premium or assessment.
4. Group size maximum is 10 persons per MITA site.
5. Permittee will provide the Refuge Manager with an annual report of the number of overnight groups (including the number of individuals per group) known to have used the islands per month, as well as the number of hours MITA volunteers spent maintaining each site. This report is due no later than October 12, of each year.
6. Each site on the refuge shall be monitored throughout the season by a MITA-designated volunteer. A log of problems encountered and/or time spent checking and maintaining the site will be submitted along with statistics from item #5.
7. All human waste and trash generated during the visit must be carried off-refuge with the group or individual at departure.
8. Permittee will use only designated camp areas. No vegetation at the sites will be disturbed or cut without authorization from the Refuge Manager.
9. Fires (cooking or camp) and pets are not permitted on Refuge islands.

## The CHEWONKI Foundation

1. Tour leader and/or group will not enter closed areas for any purpose at any time without written authorization from the Refuge Manager. Closed areas are subject to change as wildlife activity dictates. Permittee will be informed of these changes both verbally and by posted signs in the field.
2. This permit is issued upon the express condition that the United States of America, its agents and employees shall be free from all liabilities and claims for damages and/or suits for or by reason of any injury to any person or property of any kind whatsoever, whether to the property of the United States, the Permittee or third parties, from any cause whatsoever arising from any acts or omissions of the Permittee, its agents or employees pursuant to the terms of this Permit or in any way connected thereto, and the Permittee hereby covenants and agrees to indemnify, defend, save and hold harmless the United States of America, its agents, and employees from all such liabilities, expenses, obligations, damages, and costs on account of or by reason of any injuries, deaths, liabilities, claims, suits or losses however occurring or damages arising out of the same.
3. The Permittee shall purchase and maintain during the term of this permit comprehensive general liability insurance against claims occasioned by actions or omissions of the Permittee, its agents, and employees, in carrying out the activities and operations authorized hereunder. Such insurance shall be commensurate with the degree of risk and the scope and size of such activities authorized herein, but in any event not less than \$500,000 for bodily injury per person, and \$1,000,000 per incident, and property damage of at least \$25,000 per occurrence. A certificate of insurance will be secured from the insurance carrier and provided to the Refuge prior to beginning any activities authorized under this permit. All liability policies are to name the United States of America as an additional insured and shall specify that the insurance company shall have no right of subrogation against the United States and shall have no recourse against the Government for payment of any premium or assessment.
4. Groups will not exceed 10, including tour leaders.
5. In accordance with the 1992 United States General Accounting Office audit, the U.S. Fish and Wildlife Service is required to conduct compliance checks to ensure Permittees are operating within all aspects of their permit and U.S. Coast Guard regulations. These checks may be conducted unannounced.
6. A schedule of island visits planned for the season will be provided to the Refuge Manager prior to beginning and activities authorized under this permit so that overlap with other tour groups may be avoided.
7. Permittee will provide the Refuge Manager with an annual report of the number of overnight tours (including the number of individuals per tour) conducted on the refuge per month. This report is due no later than October 12, 2001.
8. Fires (cooking or camp) and pets are not permitted on Refuge islands.
9. All human waste and trash generated during the visit must be carried off-refuge with the group or individual at departure.
10. Permittee will use only designated camp areas, designated on a map by Refuge Manager. No vegetation at the sites will be disturbed or cut without authorization from the Refuge Manager.

General Public

1. On Bois Bubert Island-only camp in the area located at Seal Cove and on Halifax Island-only camp on the area which is near the north-facing cobble beach. No more than 2 consecutive nights is allowed for camping,
2. On Halifax Island- the eastern side of the Island is closed to protect fragile botanical features.
3. Fires of any kind are not allowed.
4. Group size limited to 10 persons
5. Permittee will notify the Refuge of any problems on or around the island.
6. All human waste and trash generated during the visit must be carried off island.
7. Pets are not allowed on Refuge islands.
8. All visitors must practice the *Leave No Trace* principles.

**Justification:**

Although not necessary to enjoy wildlife-oriented refuge activities, overnight stays could expand on this by providing recreational opportunities to offshore islands where an overnight stay would facilitate the increased safety in having a safe haven in the coastal ocean environment. Cooperating with MITA also allows for the dissemination of literature and information promoting island ethics. In addition, MITA members serve as our monitoring eyes on islands that we only visit periodically.

MITA is a non-profit conservation organization committed to preserving Maine's undeveloped islands in their natural state while providing a recreational asset for responsible visitors. These goals are achieved by encouraging a sense of stewardship and promoting a philosophy of low-impact use. Members use the islands in a manner that has little or no impact on the natural environment with special consideration given to wildlife. Members also assist island owners in monitoring wildlife, recreational use, keeping shores clean, and carrying out projects. Sea kayaking has become an incredibly popular sport and pressures on islands are increasing. MITA is the only organization that is educating these users to responsible stewardship. Their annual publication includes information on marine/island wildlife, safety, property rights, commercial traffic, low impact camping, weather, etc. In addition, each year prior to their annual mailing the USFWS is given an opportunity to send additional information (e.g., Island Ethics brochure).

They perform a needed service - cleaning up litter, primarily from commercial fishing activities, noting wildlife use in daily logs, and activities that may be of potential concern, and serve as stewards of the site, which is very attractive and consequently draws use. MITA use is allowed under an annual refuge special use permit.

The CHEWONKI Foundation is a non-profit educational institution dedicated to outdoor experiential education. Founded in 1915 programs encourage participants to develop their personal potential, gain a sense of community, and heighten their interest in and understanding of the natural world, in particular the marine environment. CHEWONKI has provided long-term monitoring of wildlife populations on many islands within the Gulf of Maine. CHEWONKI use of the islands has been minimal, one or two visits per year. Instructors are well versed in seamanship, respect for the land and wildlife, and natural history, and they leave the site spotless.

The Refuge uses partnerships and environmental education to motivate citizens of all ages to action and understanding in protecting a healthy ecosystem. Partnerships and environmental education are tools used to build a land ethic, develop political support, lessen vandalism, littering and poaching. Visitors come to the Refuge to see, enjoy, and learn about wildlife and their habitats. Wildlife observation, photography, and educational opportunities along Refuge shorelines are wildlife oriented activities (USFWS 1985) which are compatible with Refuge purposes. The minor impacts to vegetation and wildlife which may occur are a worthwhile trade off for informing visitors about island wildlife and providing an opportunity for active land stewardship. These activities are used throughout the country to inform and educate visitors to public lands of all types (Grater 1976).

With the stipulations noted in the Special Use Permit conditions, activities will be compatible with Refuge purposes, while providing opportunities for visitors to use and learn about Refuge and marine resources.

**General Public** use on these islands for camping is justified because to exclude one segment of users and allow the same use to others would not be in keeping with an equal opportunity philosophy. Not to allow the general public the same opportunity as MITA or Chewonki might be construed as discriminatory.

Based on the limited detrimental impacts of this use, the above stipulations, and a 12 year history of use, overnight camping at current levels will not materially interfere with or distract from the mission of the National Wildlife Refuge System or the purposes for which the refuge was established.

Signature: Refuge Manager: Charles W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lejeune March 28, 2005  
(Signature and Date)

Mandatory 10-Year Re-Evaluation Date: 3-1-2015

### Literature Cited

Grater, Russell K. 1976. The Interpreters Handbook. Globe, AZ: Southwest Parks and Monuments Association.

U.S. Fish and Wildlife Service. 1985. Refuge Manual. Washington, D.C. : U.S. Government Printing Office.



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Sheep Grazing on Seabird Nesting Islands*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(s):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

What is the Use? Is the use a priority use?

The use is sheep grazing on Nash Island and Metinic Island. Sheep grazing is not a priority public use of the National Wildlife Refuge System.

Where would the use be conducted?

Sheep are currently allowed to graze freely on both Nash and Metinic islands.

The Service does not own Metinic Island entirely in fee title and sheep move onto Refuge land from the south end of the island which is under private ownership. Sheep move to Nash Island at low tide from Big Nash, a privately owned island. Permanent fencing to limit or exclude sheep on either island would be difficult, costly, and inefficient as the animals could easily travel around the fences during low tides.

When would the use be conducted?

Sheep remain on both islands year around and are gathered each year in early summer for shearing. Approximately 120 sheep graze Metinic Island Refuge property and 30-35 graze on Nash Island. Due to the sheep movement between private and public land, this number does not represent a daily use.

How would the use be conducted?

Sheep are currently allowed to graze freely on both Nash Island and Metinic islands. On Metinic Island, sheep are fenced out of the tern colony with electric fence during April through August.

Why is the use being proposed?

Both Nash and Metinic Islands are predominately vegetated by grass and forbs. The islands host nesting terns, eiders, and gulls. Metinic Island supports one of the Refuge’s six seabird restoration projects. Controlled grazing may be the best tool available at this time to maintain island nesting habitat for terns and the other nesting island species. Other habitat management options including burning, mowing, or herbicide treatment are not practical or not cost effective.

The Service is engaged in a study to determine the impacts of sheep grazing and the effectiveness of grazing as a management tool for maintaining viable island nesting bird habitat. The results of the study will be evaluated within 5 years of this approved compatibility determination. This compatibility determination will be reevaluated at that time and the new determination will reflect the findings of the study.

**Availability of Resources:**

The costs incurred by Refuge programs for managing this use are funded through the on-going seabird restoration project which is funded under RONS projects. Funding supports seasonal research interns and sheep enclosure electrical fencing, solar panels and batteries on Metinic Island. No funding is directed to Nash Island as this island does not support a seabird restoration program at this time. MMS dollars are also available if necessary. Currently, the cost of maintaining sheep free areas to protect nesting seabirds is available in existing program budgets.

Costs associated with administration of this program include:

Boat Operating Costs \$50/hr @ 15hrs .....	\$750.00
Equipment maintenance/replacement (includes, fence posts, electric fence, hardware, solar panel, batteries) .....	\$2,500.00
Staff time to set up and monitor .....	\$1,050.00
Intern Time (monitoring) .....	\$210.00
Total Cost of Program .....	\$4,300.00

This is the cost to implement the program and is not an annual cost. The cost will fluctuate depending upon how often equipment needs replacing.

FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
RONs Project (Metinic Island) .....	\$10,800.00
Total Available Funds .....	\$538,122.00

Based on a review of the budget allocated for grazing management, I certify that funding is adequate to ensure compatibility and to administer and manage this use.

**Anticipated Impacts of the Use:**

Where uncontrolled, grazing can have detrimental impacts to habitat and wildlife. For example, high density cattle stocking and grazing that is not seasonally managed has been shown to have a negative impact on nesting densities of several species of ducks and upland sandpipers in the northern Great Plains (Kruse and Bowen 1996, Bowen and Kruse 1993).

Grazing can negatively impact other species, such as terns and eiders directly through physical disturbance which could subject the birds to predation by gulls or more indirectly through habitat alteration from intensive grazing. In addition, grazing under some conditions could displace nesting birds, eiders in particular, to peripheral and less productive habitat. The positive effects of grazing as a management tool must also be considered. Managing habitat with cattle grazing can be successful where grazing pressure is managed and a rest rotation regime is used (Mundinger 1976). Sheep grazing has also been used to manipulate rangeland vegetation in Utah (Jensen and Urness 1982) and to control cattail in California (Ermacoff 1968).

Nash Island is a former tern nesting island that now supports nesting eiders and gulls in addition to a small number of terns nesting on the periphery of the island. Little information is available on the interactions between sheep and seabirds on this island. It is currently unclear what effects nesting black-backed gulls are having on terns and eiders, or if the combination of grazing and gull predation is synergistic.

Metinic Island currently supports a seabird restoration program where research interns monitor nesting terns and sheep. Sheep on this island are excluded from the tern restoration site during the may-August nesting season using electric fencing. Also, vegetation is being studied to look at the effects grazing has on habitat. Grazing is being monitored to ascertain how it can be applied as a tool to manage vegetation for improving nesting habitat for terns on offshore seabird nesting islands. Where vegetation is left unchecked for long periods of time, encroaching rank grasses, forbs, and shrubs can choke out quality tern nesting habitat. It appears that grazing during the fall and winter does control vegetation and with seasonal exclusions, can become an effective tool in tern habitat management. It can also be argued that for eiders, grazing would reduce the vegetative density and thereby reduce good eider nesting habitat.

Managing grazing through timing and exclusion will have a positive impact on nesting terns over the long term via vegetation control and nesting habitat maintenance. Using grazing as a tool will help meet Refuge objectives to restore tern populations on Refuge lands.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Several comments have been received to date. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. Appendix I in the final EIS summarizes the comments and our responses to them. No significant changes occurred between draft and final plans, except for the decision to re-evaluate the use within 5 years of this approval.

**Determination Check one below):**

- Use is Not Compatible
- Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Where grazing can be controlled, stocking density will be below the maximum necessary to achieve objectives. Where appropriate, sheep will be seasonally excluded from specific habitats or nesting colonies through physical barriers. Because the Service does not have complete ownership of Nash and Metinic islands, it is difficult to control grazing on the Refuge portion of each island. Seasonal fencing (exclosures) may be the most effective technique at this point, as permanent fencing across each island would not be feasible or effective given that sheep are extremely mobile and can negotiate around fences during low tides. On Metinic Island, the tern colony will be enclosed by electric fencing. This technique works well as long as the area can be consistently monitored throughout the nesting season. Two interns are hired annually to monitor nesting seabirds on this island. In addition, the island protocol includes specific tasks to monitor sheep and study vegetation in the enclosure and adjacent grazed areas. The impacts of grazing and the effectiveness of using grazing as a management tool will be evaluated within 5 years of the approved compatibility determination.

**Justification:**

Grazing can be used in the form of a system which can be locally adapted to produce desirable objectives. Rest and or deferred rotational periods can be incorporated into a system to produce a variety of habitat for wildlife. With proper timing, kind of livestock, stocking rate and frequency, grazing can be used to achieve wildlife objectives (Refuge Manual, 6RM 5.5B 1982). Using grazing as a habitat management tool on Refuge islands is currently under study. With the use of exclosures to keep sheep out of the seabird colony, Refuge objectives to restore colonial nesting seabirds to off shore islands are being accomplished. The limited amount of grazing currently on Refuge islands will not deter from nor detract from the mission of the National Wildlife Refuge System. Under current circumstances, accommodating grazing, at least at current levels, will help the Refuge gain biological information for the seabird restoration program.

Signature: Refuge Manager: Clayton W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lejeune March 28, 2005  
(Signature and Date)

Mandatory 5-Year Re-Evaluation Date: 3-1-2010

Literature Cited:

- Bowen B.S. and A.D. Kruse. 1993. Effects of grazing on nesting by upland sandpipers in south-central North Dakota. *J. Wildl. Manage.* 57: 291-301.
- Ermacoff, N. 1968. Marsh and habitat management practices at the Mendota Wildlife Area. California Dept. of Fish and Game. Game Management leaflet 12. 12 pp.
- Mundinger, J.G. 1976. Waterfowl response to rest-rotation grazing. *J. Wildl. Manage.* 40: 60-68.
- Jensen, C.H. and P.J. Urness. 1982. Big game livestock relationships survey: Grazing domestic sheep to manipulate vegetation for big game on foothill rangeland. Utah Div. Of Wildlife Resources, Proj. No. Utah W-105-R. 39 pp.
- Kruse, A.D. and B.S. Bowen. 1996. Effects of grazing and burning on densities and habitats of breeding ducks in North Dakota. *J. Wildl. Manage.* 60(2): 233-246.
- Wasson, R.L. 1984. Pulling together a Maine-New England maritime market development program. Maine Agricultural Experiment Station Misc. Pub. 684: pp. 106-111.



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Monitoring Resources*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(s):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

**Activities:** On Refuge lands, monitoring through collection of zoological specimens, including herpetiles, lepidopterans, Odonates, Arachnids and other Family groups occurs as opportunities with resource professionals arises. On Refuge lands, we monitor for occurrence of Lyme disease carrying ticks, and band or census birds in support of MAPS project, Migratory Bird Management Office needs, Regional migratory bird inventory needs, and special projects where banding and censusing are appropriate techniques for gathering biological information. We collect soil samples as needed to support Refuge research and monitoring projects and NRCS soil survey needs and collect vegetative samples for pre-approved herbarium use.

A Refuge Special Use Permit is completed annually between the Service and Humboldt Field Research Institute.

Humboldt Field Research Institute is a educational institution specializes in training wildlife, biological, botany, etc. professionals in coastal ecology. They have completed surveys of bryophytes, wetland plants, geological patterns, etc. on Petit Manan Point and some islands. Professionals from all over the nation attend classes, in addition to gaining more baseline data on Refuge resources. Communications with other professionals is also a benefit. Data, where appropriate, is entered into a GIS.

**Availability of Resources:**

Resources are available through current RONS funding. Refuge staff, volunteers and cooperators also provide resources to implement projects.

**Anticipated Impacts of the Use:**

Impacts have been positive and useful, increasing information for the Refuge and coastal ecosystem. This activity supports the purposes for which the Refuge was established. Some trampling of vegetation may occur, but monitoring is being conducted by trained professionals, who wish to continue their studies and respect the resource. Some wildlife may temporarily be disturbed.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes were made between draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible
- Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Research activities will be implemented through a special use permit and monitored through annual review of standard operating procedures, impacts on the resource, pre-season consultations, and an annual end of season field report. New proposals must be submitted for review and approval prior to initiation of work. Prior to field trips, any areas of use will be agreed to and identified on a map.

Justification:

Data collection, monitoring of existing wildlife species, monitoring dispersal of insects, continuing plant inventories, etc. add to the Refuge baseline data information which enables land managers and wildlife professionals to better manage Federal lands. These activities support the purposes of the Refuge. Monitoring Resources will not detract from the mission of the National Wildlife Refuge System or the objectives of the Refuge.

Signature: Refuge Manager: Clayton W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lejeune March 28, 2005  
(Signature and Date)

Mandatory 10-Year Re-Evaluation Date: 3-1-2015



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Research – Neotropical Migrants*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(s):**

1. “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. “... 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 ...” 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. “...particular value in carrying out the national migratory bird management program.” 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. “... 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 ...” 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

This effort is part of a *Neotropical Migrant Landbird Monitoring Program for Maine and New Brunswick: Assessing Coastal Importance and Management Strategies*. This project, initiated in 1993, is a long-term international, multi-agency/privately funded monitoring program for Neotropical migrant landbirds nesting and migrating through structurally stable boreal forests, bogs, and fens that are relatively free from future habitat fragmentation, large changes in habitat structure, human disturbances, and insect infestations. The USFWS provides Challenge Grant and Migratory Bird-Nongame Funds for monitoring on selected Refuge islands.

Monitoring of Neotropical migrants occurs on selected Refuge islands in the spring, summer, and fall. On Cross Island, the primitive trail system is used and overnight stays are permitted in the Refuge cabin. Boat support is often provided by USFWS. Vegetative monitoring is done in August through September. Neotropical migrant and vegetation studies conducted via contract researchers and Refuge staff initiated by a RONS FY98 project, as appropriate will be expanded to include future Refuge lands (islands and mainland) and those lands that will be managed cooperatively through conservation easements or management agreements.

**Availability of Resources:**

Current staff and funding through RONS projects or flexible funds are available to support these kinds of projects. Periodic support through specific Regional accounts, e.g., Partners-In-Flight, also may be available.

**Anticipated Impacts of the Use:**

Impacts to vegetation and wildlife are expected to be minimal. Most studies will be conducted on Refuge habitats that include mixed forests, grasslands, shrublands and both forested and non-forested islands. Research activities will be similar on all Refuge lands. Only experienced technicians will be employed, using, where possible, those that have had previous field experience in the area.

**Positive impacts include:**

Developing and implementing an international, long-term monitoring program for Neotropical migrant landbirds in Maine and New Brunswick;

Monitoring species, mostly Neotropical migrants, under-sampled by the BBS within the Region (19 species) and state (13 species) or species with a low level of sampling and showing significant population declines (2 species);

Evaluating long-term monitoring trends for the migration season for Neotropical migrant landbirds using point counts;

Compliment and enhance the results and interpretation of BBS data for the spruce-fir forest biome,

Monitor nesting populations of merlin (only area in New England with established breeding population), Bicknell's thrush, and blackpoll warbler (only lowland populations in the U.S. and Canadian Maritimes); and

Establish baseline floral and faunal information on Refuge lands.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Several comments have been received to date. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes were made between draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible  
 Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Nesting bald eagles, osprey and seabirds will be taken into consideration to minimize disturbance to these birds. Project proposals, cooperative agreements, Special Use Permits, and standard operating procedures will be reviewed prior to each field season; survey routes and plot points will be approved by Refuge staff who will occasionally accompany consultants on field trips; and end of season reports will be compiled. Regulations to ensure the safety for all participants will be reviewed prior to each season.

**Justification:**

Cooperative agreements and contracts are entered into under the authority of the Migratory Bird Conservation Act, as amended (16 USC 715b). Agreements and contracts facilitate cooperation and support management and monitoring on Refuge lands.

This cooperative effort between private land trusts, USFWS, USNPS, US Navy, Maine Department of Inland Fisheries and Wildlife and private landowners, and a Provincial Park has brought together a diverse assemblage of land managers to address the plight of Neotropical migrant landbirds whose habitat requirements have no political/ownership boundaries. Management decisions affecting land use require accurate, reliable long-term data on bird populations and vegetation changes which these studies evaluate. Existing BBS population trend data collected under less rigorous protocol, without concurrent vegetation and land use analysis, need to be critically evaluated. This study will provide the means to accomplish these tasks.

Neotropical Migrant Research will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of this Refuge.

Signature: Refuge Manager: Charles W. Blair 3-23-2005  
 (Signature and Date)

Concurrence: Regional Chief: Anthony D. Legier March 28, 2005  
 (Signature and Date)

Mandatory 10-Year Re-Evaluation Date: 3-1-2015



## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Seabird Restoration Activities by Non-Service Personnel*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(es):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

Restoration, research, monitoring, and management of seabird colonies on certain islands of the Refuge have been on-going since about 1984. Currently (2002), this activity occurs on Petit Manan, Seal, Matinicus Rock, Pond, Ship, and Metinic Islands. As more islands are acquired or are placed under cooperative management status (easements/management agreements, etc.), seabird restoration opportunities may increase. Decisions on future sites will be determined through the Gulf of Maine Seabird Working Group. This compatibility determination specifically covers seabird restoration activities conducted by non-Service personnel. Refuge management activities conducted by the Service do not require a compatibility determination.

Refuge activities that support seabird restoration include feeding studies, banding, predator control, monitoring, nest searching, productivity studies, food studies, vegetation and nest site mapping for GIS analysis, and census. Vegetation management through use of pesticides, burning, mowing or grazing may also occur. Restoration work normally begins in mid-May and continues through the first week in August. Species that will be studied under this determination include common tern, Arctic tern, roseate tern, Atlantic puffin, black guillemot, laughing gull, herring gull, great black-back gull, razorbill, Leach's storm-petrel, and common eider.

Nine objectives and 88 strategies have been developed to carry out seabird restoration in the Comprehensive Conservation Plan.

**Availability of Resources:**

Funding for seabird work on Refuge islands is mainly through RONS projects and NWRS challenge cost-share grants. Staff salaries and Station operations funds are adequate to support this project.

Cost breakout for seabird restoration

Intern salaries (Petit Manan, Ship, Metinic Islands) .....	\$26,000.00
Food for interns .....	\$ 7,800.00
Equipment/materials .....	\$ 5,500.00
Logistical (boat) Support (120 hrs @ \$50/hr.).....	\$ 6,250.00
Logistical (staff) Support .....	\$10,000.00
Planning .....	\$ 3,025.00
Total .....	\$58,575.00

Audubon Support (Seal, Pond, Matinicus Rock Islands)

(Funded through Challenge Grant) .....	\$20,000.00
Project Total .....	\$78,575.00

FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$ 64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

Based on a review of the budget allocated for Refuge biological programs, I certify that funding is adequate to ensure compatibility and to administer and manage seabird restoration.

**Anticipated Impacts of the Use:**

Seabird restoration at Maine Coastal Islands NWR has been on-going since the mid-1980's and is in support of the purposes for which the Refuge was established. In addition, protecting and restoring nesting seabird populations on the Refuge's coastal islands contributes to regional and international seabird conservation goals and supports the *Gulf of Maine Tern Management Plan* (Gulf of Maine Tern Working Group 1989), the *Roseate Tern Recovery Plan* (USFWS 1998) and the focus of the Gulf of Maine Seabird Working Group (GOMSWG). Seabird restoration is also listed as Refuge Goal 5 in the Comprehensive Conservation Plan. It is expected that positive impacts will continue to accrue to

colonies of common and Arctic terns and Federally endangered roseate terns which are showing promise of expanding. Within the time period 1984 and 2001, the Maine population of common terns increased 168% (2,543 to 6,806 pairs); Arctic terns increased 61% (1,720 to 2,771 pairs); and roseate tern populations increased 278% (76 to 289 pairs). Members of GOMSWG have identified the need to maintain numerous seabird colonies along the Maine coast. Increasing the geographic distribution and the number of managed colonies would minimize the potential for a single catastrophic event (i.e., oil spill or disease) from devastating a significant percentage of the population (Welch 2001).

Seabird restoration funding is adequate at present levels provided that funding continues through RONS and challenge cost-share grants. Long term, funding shortfalls could come about if the seabird program expands and RONS funding remains stable, and/or challenge grant funding ceases. In such a case, it is anticipated that this priority program could divert funding from other Refuge programs.

#### **Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes were made between draft and final plans.

#### **Determination (Check one below):**

- Use is Not Compatible
- Use is Compatible With the Following Stipulations

#### **Stipulations Necessary to Ensure Compatibility:**

Restoration and research activities need be monitored through annual review of standard operating procedures, research proposals, annual work plans, pre-season and post-season consultations with cooperators and/ or contract researchers, field inspections, and annual end of season field reports. Reviewing each season's results will allow staff biologists to evaluate the program to ensure that it is meeting the Refuge's goals and objectives. New proposals will be submitted for review and approval prior to initiation of work and cooperative agreements and will be reviewed on an annual basis. All non-Service publications will acknowledge the Service and identify any resources and assistance provided.

#### **Justification:**

Nesting seabirds (terns, puffins, eiders) had been extirpated from most of Maine's islands by the turn of the 20<sup>th</sup> century. Only through the cooperative effort of Federal, State, and private partnerships, have we been able to reverse this trend and start to see recoveries in populations of nesting seabirds along the Maine coast.

Migratory birds are a trust resource that the Fish and Wildlife Service is mandated to protect. To support the Service in managing and protecting this resource, the Refuge has made this a priority biological program and every effort is made to assure that staffing and funding continues to support

this program. Restoration projects and research data collection activities require a long-term commitment and investment of time, funds, and expertise. To continue funding this program will help insure that Refuge goals and objectives are met. In reviewing the Station annual budget and staffing required to support this program, I have determined that carrying out a seabird restoration program on Maine Coastal Islands NWR will not interfere with nor detract from other Refuge programs or the fulfillment of the National Wildlife Refuge System mission or the purposes of the Refuge.

Signature: Refuge Manager: Clayton W. Blaw 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Leger March 28, 2005  
(Signature and Date)

Mandatory 10-Year Re-Evaluation Date: 3-1-2015

### Literature

Gulf of Maine Tern Working Group 1989. Gulf of Maine tern management plan. 44 pp.  
U.S. Fish and Wildlife Service. 1998. Roseate Tern - Northeast population recovery plan. 75 pp.  
Welch, L.(compiler) 2001. Seabird restoration in the Gulf of Maine -2001 season. Refuge files, Petit Manan NWR.

## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Commercial Tour Boat Service to Machias Seal Island*

#### **Establishing and Acquisition Authorities:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose(s):**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

1. *What is the use? (Is the use a priority use?)*

This use includes ferry service to Machias Seal Island for the purpose of observing wildlife, including the largest Alcids colony on the coast of Maine. This recreational use also includes guided access on and over the island to observation blinds and interpretation of the nesting seabird colony. Wildlife observation is a priority use of the National Wildlife Refuge System.

2. *Where would the use be conducted?*

Seabird tours occur on Machias Seal Island, approximately 9 miles off the coast of Cutler, Maine. The island is owned by the State of Maine, Dept. of Inland Fisheries and Wildlife and is managed by Maine Coastal Islands NWR under a Memorandum of Understanding.

3. *When would the use be conducted?*

The period of use normally runs from late May to mid-August of each year depending on weather conditions and numbers of birds on the island.

4. *How would the use be conducted?*

Tour boats servicing the island originate in Jonesport and Cutler, Maine, and Grand Manan, New Brunswick, Canada. The two United States tour boat operators operate under a refuge special use permit. The Canadian operator operates under a Canadian permit. A Schedule allotting landings to each captain is developed cooperatively by the U.S. Fish and Wildlife Service and the Canadian Wildlife Service (CWS). Landings under the special use permit covers the period from June 1 to July 31 which is the time when most birds are present on the island. Landings are limited to 30 people per day (total) which is shared among the three tour boat captains. The average stay on the island is under 3 hours, normally 2 to 2-1/2 hours.

5. *Why is the use being proposed?*

This use is on going and is supported because seabird viewing opportunities where people can actually land on an island and view birds up close from observation blinds are very limited. The current operation on Machias Seal Island provides the only opportunity of this kind in coastal Maine. This is also a good opportunity to provide both outreach and education and to promote support of nesting seabirds and island habitats.

## Background

**Sovereignty Issue:** The Refuge Manager at Maine Coastal Islands NWR has, for the past several years, coordinated tour boat activities with the U.S. State Department's Office of Ocean Affairs, Interior Department Solicitors, CWS, and the Regional Office in Hadley, Massachusetts. Sovereignty is still an issue, even though the U.S. State Department says the island belongs to the United States. Canada also claims the island and has a physical presence there via a staffed Canadian lightstation.

The CWS has designated this island as a migratory bird sanctuary, and has limited the access by tourists during the breeding season since 1986. American and Canadian tour boat captains take tourists to the island to view seabirds. Until the 2001 season (June-July), captains were issued permits by the CWS based on a landing schedule coordinated with the U.S. Fish and Wildlife Service (FWS), Region 5 Regional Office. In 2001, permits were issued by the U.S. (Petit Manan National Wildlife Refuge [NWR]). U.S. captains were requested not to sign Canadian landing permits. The Canadian captain still operates under a Canadian permit. The State Department supports that the island is a U.S. possession and belongs to the State of Maine. The State of Maine delegated ownership to their Department of Inland Fisheries and Wildlife (IFW). A Memorandum of Understanding between the FWS and IFW outlines FWS's responsibility for management on the island. CWS has cooperated with the Maine Coastal Islands NWR in protecting seabirds and providing biological and public use information. This island is listed as 1 of 43 islands protected by Maine Coastal Islands NWR.

**Availability of Resources:**

Existing staff and budget have provided sufficient resources to manage the current use.

Costs associated with current program implementation include:

Preparation of Special Use Permits .....	\$ 500.00
Boat operating costs .....	\$ 500.00
Meetings .....	\$1,000.00*
Materials/Maintenance .....	\$ 500.00
Staff costs associated with Refuge program .....	\$2,900.00
* Includes periodic meetings at U.S. State Department	
Total Cost of Program .....	\$5,400.00

FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

**Anticipated Impacts of the Use:**

Approaching and landing on Machias Seal Island by commercial tour boats and passengers causes short term disturbance to seabirds that are nesting near the approach or loafing nearby. In many cases, birds become accustomed to people and boat movements and disturbance may actually decrease over the season. Canadian light keepers who live on the island year round and seasonal researchers from the University of New Brunswick (UNB) interact with the birds on an almost daily basis during the nesting season. Landings by tour boats which are limited to 30 people per day during the June and July permit period does not seem to be an additive disturbance during this time period. Long term impacts are not known, however, this use has been on-going for many years and still, this colony is thriving and is one of the most productive seabird colonies on the Maine coast.

Currently, commercial tour boats servicing this island are limited to three operators. Current use (est.3,200 landings/year) appears not to be detrimental to nesting seabirds. Because of the issues surrounding sovereignty and the increasing interest in ecotourism opportunities of this kind, and pressures to increase these opportunities, additional tour boat operators may surface in the future. In coastal Maine, wildlife viewing is becoming a popular pursuit for an increasing number of the vacationing public and their desire to view wildlife has resulted in commercial enterprises focusing on bringing people to wildlife. Approximately 25,000 people annually take a commercial seabird tour boat excursion from Bar Harbor past Petit Manan Island. Between 1983-1985 at least 19 companies in coastal Maine chartered cruises to view wildlife resulting in an economic gain of approximately \$1,000,000 per year (Colgan, 1996). It is thus possible, and probable, that increased landings on this island may occur causing more disturbance than the birds could tolerate. In that event, long term detrimental impacts would be evident. Furthermore, current political issues surrounding this island may make it difficult for FWS and CWS to control landing numbers in the future.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and has been identified in the CCP Planning Update. Several comments have been received to date. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes were made between draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible  
 Use is Compatible With the Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Refuge staff meet annually with CWS and tour boat captains to discuss issues and concerns surrounding ecotourism landings on the island. Landings are limited to 30 per day (15/captain) and normally last less than three hours. CWS hires a tern warden to monitor landings and with UNB assesses the level of disturbance from landings and accessing the observation blinds. Tours are monitored by the CWS tern warden and each boat captain and each tour group is escorted to a central staging area before being directed to the blinds. This keeps people from wandering and unnecessarily disturbing nesting birds. Tour boat captains operate under a special use permit that stipulates a landing schedule and a maximum number of landings per day.

**Justification:**

Tour boat landings on Machias Seal Island provide a unique opportunity to bring people to a tremendous wildlife viewing opportunity. This opportunity supports the refuge priority uses of wildlife observation and photography as outlined in the National Wildlife Refuge System Improvement Act of 1997 and will increase outreach of the Refuge and National Wildlife Refuge System. Commercial tour boat service to Machias Seal Island contributes to the achievement of the national wildlife refuge purposes and the National Wildlife Refuge System, and will not interfere with nor detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the Refuge.

Signature: Refuge Manager: Charles W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lejeune March 26, 2005  
(Signature and Date)

Mandatory 10-Year Re-Evaluation Date: 3-1-2015

**Literature Cited**

Colgan, C.S. 2002. Economic analysis Report, Petit Manan National Wildlife Refuge Planning Project, Draft Environmental Impact Statement. U.S. Fish and Wildlife Service, Hadley, Massachusetts.

## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Public Hunting*

#### **Establishing/Acquisition Authority:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purpose:**

1. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. "... 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 ..." 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. "...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. "... 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 ..." 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

1. *What is the use?*  
This determination covers opening several sections of the Refuge to the hunting of migratory game birds and waterfowl, small and big game.
2. *Where would the use be conducted?*  
Areas of the Refuge that are open to hunting and are identified in the Refuge Hunt Plan (USDI-Petit Manan NWR 2001a) and Refuge Specific Regulations (USDI-Petit Manan NWR 2001b) include; Sawyers Marsh Division and Bois Bubert Island in Milbridge, Gouldsboro Bay Division in Gouldsboro, and 22 islands which are open to hunting of migratory birds. In addition, the Refuge proposes to allow deer hunting on a portion of the 2,200 acre Petit Manan Point Division

located in Steuben, Maine. The new hunt would occur north of the access road in the Birch Point trail area.

3. *When would the use be conducted?*

Hunting takes place in Maine normally from September through January.

4. *How would the use be conducted?*

All hunting will be conducted under State and Federal regulations and Refuge Specific Regulations. Refuge Specific Regulations are available to the public in brochure format.

The Refuge ownership on coastal lands in Maine extends to the mean low tidal mark, thus, they normally encompass intertidal lands that lie between the high and low tidal ranges. These intertidal lands are considered Public Trust Lands of the people of Maine, and as such, certain rights (fishing, fowling, and navigation) are held in common by the people of Maine. The Legislature of Maine states that these rights held in public trust are generally derived from English Common Law and from the Massachusetts Colonial Ordinance of 1641-1647 (State of Maine Bureau of Public Lands). These recreational uses held in trust are among the most important to the people of Maine. The Service recognizes these rights and, unless there is evidence that such uses detract from the Service's mission to protect these lands, will allow such uses. Hunting occurs outside the seabird nesting season (April 1 to August 31) and eagle nesting season (February 15 to August 31).

5. *Why is this use being proposed?*

Hunting is one of the priority uses outlined by Congress in the Refuge Improvement Act of 1997. The Service supports and encourages priority uses on National Wildlife Refuge lands where appropriate and compatible. Hunting is used in some instances to manage wildlife populations and can provide pertinent biological information to State wildlife agencies. Hunting is also a traditional form of wildlife oriented recreation that can be accommodated on many NWRS lands. In coastal Maine, many private lands and State areas offer similar hunting opportunities.

**Availability of Resources:**

Additional fiscal resources to conduct this activity would be minimal as hunting would occur under State regulations and not as a Refuge regulated hunting program. Staff time and resources necessary to monitor this use are provided below. Staff from the Rockport and Milbridge offices will provide limited monitoring. The Refuge would also coordinate with State wardens of the Department of Inland Fisheries and Wildlife and Department of Marine Resources Marine Patrol personnel.

Costs associated with administration of this use include:

Preparation of Annual Hunt Plan (16 staff hrs @ \$29.98/hr) .....	\$480.00
Preparation of Refuge Hunting Information/maps (16 staff hrs @ \$22.43/hr)....	\$413.00
Law Enforcement (40 staff hrs @ \$28.61/hr) .....	\$1,144.40
Boat Operation (\$50/hr @ 10 hrs) .....	\$500.00
News Releases (8 staff hrs @ \$24.60/hr).....	\$240.00
Hunter Orientation Session .....	\$320.00
Program Cost .....	\$3,097.00

## \*FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

Based on a review of the budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use listed.

**Anticipated Impacts of Use:**

Hunting is consistent with the purposes of the Refuge when carried out within established regulations and is a priority uses identified in the Refuge Improvement Act. Island visitation is expected to be minimal and anticipated uses and impacts should also be minimal provided that access is limited to outside the seabird nesting season. The Refuge does not anticipate significant hunting pressure to occur on Refuge lands as a result of opening these areas (islands and mainland units) to hunting due to the availability of private lands open to hunting outside the Refuge (USDI-Petit Manan NWR 2001).

Adverse effects on wildlife (waterfowl) populations are not expected to occur because of the hunting regulations and bag limits that have been set in place by the Federal (USFWS-Migratory Bird Office) and State (Dept. Of Inland Fisheries and Wildlife) agencies that manage the harvest of waterfowl populations. Significant conservation measures and extensive pre and post season population monitoring and the institution of Adaptive Harvest Management are safeguards inherent in waterfowl management. Adverse effects on other game species are not expected to occur because hunting will occur under State regulations. The State Dept. Of Inland Fisheries and Wildlife sets harvest limits that takes into account game species population data collected by State biologists and wildlife species assessments.

**Public Review and Comment:**

A draft EA for public hunting on Petit Manan NWR was prepared and distributed to meet NEPA compliance in 2001. A news release was published in the Downeast Coastal Press and Ellsworth American providing information on availability of the EA. Copies were made available at the Refuge office and at other locations in all towns affected by the proposed action. Copies were also sent to State agencies and to Refuge neighbors. The EA document was available for a 30 day comment period.

This determination was prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public scoping meetings and identified in CCP Planning Updates. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. Appendix I of the EIS summarizes the public comments and our responses to them. We modified our hunt proposal for Petit Manan Point in response to the comments we received. Instead of opening the Point to all deer seasons, we have limited it as described above.

**Determination (Check one below):** Use is Not Compatible Use is Compatible With the Following Stipulations**Stipulations Necessary to Ensure Compatibility:**

Access for hunting will occur during the State hunting season (October-January) which is outside the window of the seabird and eagle nesting season. State hunting regulations, including bag limits will be in place. In addition, Refuge specific regulations will be in place to minimize conflicts with other public uses allowed on the Refuge. Federal regulations under 50CFR will also be in place. This activity will occur on Refuge mainland units and off-shore islands that have been historically hunted for many years with no adverse effects to wildlife populations or the landscape. Islands that are normally hunted are rock ledges or the intertidal rocky ledge portion of islands. Access to hunt within the intertidal area has already been established through Colonial Ordinance of 1641-1647 as clarified by Title 12 M.R.S.A. 571 et. seq. Hunting will occur under conditions outlined above unless safety or overriding resource concerns would make hunting incompatible.

**Justification:**

Hunting is a wildlife dependent priority public use with minimal impact on refuge resources. Hunting would be conducted under State and Refuge regulations, thereby reducing the amount of staff time and effort needed to oversee this activity. Staff time and resources that would be needed will be identified during annual work planning to minimize impacts on other refuge programs. In addition, hunting is consistent with the purposes for which the Refuge was established; the Service policy on hunting; the National Wildlife Refuge System Improvement Act of 1997; and the broad management objectives of the National Wildlife Refuge System. Hunting is compatible with and will not detract from the mission of the National Wildlife Refuge System or the objectives of the Refuge. Furthermore, hunting on public lands in Maine is a popular and traditional recreation activity that is strongly supported by the State Department of Inland Fisheries and Wildlife. This agency strongly supports hunting on National Wildlife Refuges in Maine.

Signature: Refuge Manager

Charles W. Blain 3-23-2008  
(Signature/Date)

Concurrence: Regional Chief:

Anthony D. Lejeune March 24, 2005  
(Signature/Date)

Mandatory 15-Year Re-Evaluation Date:

3-1-2020

**Literature Cited**

State of Maine Bureau of Public Lands (no date). State Statutes, Title 12 (revised). Bureau of Public Lands, Augusta.

USDI-Petit Manan NWR 2001). Final Environmental Assessment for Public Hunting on Petit Manan National Wildlife Refuge. Refuge files. 14 pp.

USDI-Petit Manan NWR 2001). Hunt Management Plan - Petit Manan National Wildlife Refuge. Refuge files. 11 pp.

## Pre-acquisition Compatibility Determination – Proposed Additions to Maine Coastal Islands National Wildlife Refuge

### *Public Hunting - Pre-acquisition*

#### **Establishing/Acquisition Authority:**

Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. The establishing and acquisition authorities are:

1. 16 U.S.C. 667b, Public Law 80-537, An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other Purposes; and,
2. 16 U.S.C. 715-715r, The Migratory Bird Conservation Act, as amended and Established under the authority of the Migratory Bird Conservation Act, as amended.

#### **Refuge Purposes:**

1. “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).
2. “... 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 ...” 16 U.S.C. 460k-1 (Refuge Recreation Act).
3. “...particular value in carrying out the national migratory bird management program.” 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
4. “... 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 ...” 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

#### **National Wildlife Refuge System Mission:**

The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

#### **Description of Use:**

Hunting is a popular traditional sport in Maine that occurs on many off-shore islands and ledges. Island hunting focuses on seabirds, such as eiders, scoters, and old squaw. Geese, brant, and other waterfowl such as black ducks are also taken on coastal islands. Hunting on lands acquired by the Refuge would occur during the State waterfowl hunting season and would be conducted under State regulations. In Maine, sea duck hunting takes place from October 1 through January 19. Hunting takes place in the intertidal areas around islands and on ledges associated with many islands and normally

does not occur on the island proper. This type of hunting entails concealment in rocky areas, sometimes using driftwood for blind construction. Decoy sets are placed just off shore. Many hunters use State registered guides for transportation and equipment use. This use is being proposed to accommodate hunting on islands that may be acquired under the Comprehensive Conservation Plan (CCP). During the life of the plan (15 years) 87 islands spanning the coast of Maine may be acquired from willing sellers. The names and locations of prospective acquisitions are identified in the CCP's Land Protection Plan. Many of these islands have been historically hunted and are currently hunted. Also, hunting is one of the priority uses outlined by Congress in the Refuge Improvement Act of 1997.

Most islands that are being considered for acquisition under the proposed action of the CCP are small to medium sized, ranging from only a few to 250 acres in size. Some islands, however, may be larger, exceeding 400 acres in size. Island habitats range from bare rocky outcrops to grassy with mixed shrubs. Most islands exhibit shallow soils overlying granitic bedrock. Forested islands are usually dominated by red spruce and balsam fir. Others may have mixed hardwood associates such as yellow birch, white birch, red maple, and striped maple. All islands identified for acquisition/protection are in the Refuge database (updated annually) and listed as Nationally Significant Nesting Islands.

Service acquisitions of coastal lands in Maine extend to the mean low tidal mark, thus, they normally encompass intertidal lands that lie between the high and low tidal ranges. These intertidal lands are considered Public Trust Lands of the people of Maine, and as such, certain rights (fishing, fowling, and navigation) are held in common by the people of Maine. The Legislature of Maine states that these rights held in public trust are generally derived from English Common Law and from the Colonial Ordinance of 1641-1647 as clarified by Title 12 M.R.S.A. 571 et. seq. (State of Maine Bureau of Public Lands). These recreational uses held in trust are among the most important to the people of Maine today . The Service recognizes these rights and, unless there is evidence that such uses detract from the Service's mission to protect these lands, will allow such uses. Thus, hunting would generally be allowed under Service acquisition on lands in the Land Protection Plan but would occur outside the seabird nesting season (April 1 to August 31) and eagle nesting season (February 15 to August 31).

**Availability of Resources:**

Staff time and resources necessary to monitor this use are provided below. Staff from the Rockport and Milbridge offices will provide limited monitoring. The Refuge would also coordinate with State wardens of the Department of Inland Fisheries and Wildlife and Department of Marine Resources Marine Patrol personnel.

Costs associated with administration of this use include:

Preparation of Annual Hunt Plan (16 staff hrs @ \$29.98/hr) .....	\$480.00
Preparation of Refuge Hunting Information/maps (16 staff hrs @ \$22.43/hr)...	\$413.00
Law Enforcement (40 staff hrs @ \$28.61/hr) .....	\$1,144.40
Boat Operation (\$50/hr @ 10 hrs) .....	\$500.00
News Releases (8 staff hrs @ \$24.60/hr) .....	\$240.00
Hunter Orientation Session .....	\$320.00
Program Cost .....	\$3,097.00

FY 2004 Refuge Budget Allocation included:

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

Based on a review of the budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use listed.

**Anticipated Impacts of Use:**

Hunting is consistent with the purposes of the Refuge when carried out within established regulations and is a priority uses identified in the Refuge Improvement Act. Island visitation is expected to be minimal and anticipated uses and impacts should also be minimal provided that access is limited to outside the seabird nesting season. The Refuge does not anticipate significant hunting pressure to occur on Refuge lands as a result of opening these areas to hunting due to the availability of private lands open to hunting outside the Refuge (USDI-Petit Manan NWR 2001).

Adverse effects on wildlife (waterfowl) populations are not expected to occur because of the hunting regulations and bag limits that have been set in place by the Federal (USFWS-Migratory Bird Office) and State (Dept. Of Inland Fisheries and Wildlife) agencies that manage the harvest of waterfowl populations. Significant conservation measures and extensive pre and post season population monitoring and the institution of Adaptive Harvest Management are safeguards inherent in waterfowl management.

**Public Review and Comment:**

This determination was prepared concurrently with the Comprehensive Conservation Plan (CCP). Four open houses were held as part of the CCP planning process. Information was presented on past and future refuge acquisitions and priority public uses and the status of management planning, including the approved 2001 Refuge EA and Hunt Plan. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes occurred in this proposal between the draft and final plans.

**Determination (Check one below):**

- Use is Not Compatible
- Use is Compatible with the Following Stipulations

**Stipulations Necessary to Ensure Compatibility**

Access for hunting will occur during the State hunting season (October-January) which is outside the window of the seabird nesting season. State hunting regulations, including bag limits will be in place. This activity will occur on off-shore islands that have been historically hunted for many years with no adverse effects to wildlife populations or the landscape. Islands that are normally hunted are rock ledges or the intertidal rocky ledge portion of islands. Access to hunt within the intertidal area has already been established through Colonial Ordinance. Hunting will occur under conditions outlined above unless safety or overriding resource concerns make hunting incompatible.

**Justification:**

Hunting is a wildlife dependent priority public use with minimal impact on refuge resources. Hunting would be conducted under State regulations, thereby reducing the amount of staff time and effort needed to oversee this activity. Staff time and resources that would be needed will be identified during annual work planning to minimize impacts on other refuge programs. In addition, hunting is consistent with the purposes for which the Refuge was established; the Service policy on hunting; the National Wildlife Refuge System Improvement Act of 1997; and the broad management objectives of the National Wildlife Refuge System. Hunting is compatible with and will not detract from the mission of the National Wildlife Refuge System or the objectives of the Refuge. Furthermore, hunting on public lands in Maine is a popular and traditional recreation activity that is strongly supported by the State Department of Inland Fisheries and Wildlife. This agency strongly supports hunting on National Wildlife Refuges in Maine.

Signature: Refuge Manager: Charles W. Blain 3-23-2005  
(Signature/Date)

Concurrence: Regional Chief: Anthony D. Lejeune March 28, 2005  
(Signature/Date)

Mandatory 15-Year Re-Evaluation Date: 3-1-2020

**Literature**

State of Maine Bureau of Public Lands (no date). State Statutes, Title 12 (revised). Bureau of Public Lands, Augusta.

USDI-Petit Manan NWR 2001). Final Environmental Assessment for Public Hunting on Petit Manan National Wildlife Refuge. Refuge files. 14 pp.

## Compatibility Determination – Maine Coastal Islands National Wildlife Refuge

### *Recreational Blueberry Picking*

**Refuge Name:** Petit Manan NWR

**Establishing and Acquisition Authority(ies):** Authorized through an Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes. 16 U.S.C. 667b-667d and Established under the authority of the Migratory Bird Conservation Act, as amended (16 USC 715-715r).

**Refuge Purpose(es):**

- A) “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act)
- (B) “... 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 ...” 16 U.S.C. 460k-1 (Refuge Recreation Act)
- (C) “...particular value in carrying out the national migratory bird management program.” 16 U.S.C. 667b-667d (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes).
- (D) “... 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 ...” 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986).

**National Wildlife Refuge System Mission:** The mission of the National Wildlife 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 in the United States for the benefit of present and future generations of Americans.

**Description of Use:**

**(a) What is the use? Is the use a priority public use?** The use is recreational blueberry picking, which is not a priority public use of the National Wildlife Refuge System.

**(b) Where would the use be conducted?** Recreational blueberry picking occurs within 31 acres of blueberry fields on the portion of the refuge known as Petit Manan Point. The fields occur along two interpretive foot trails and a Refuge maintained road. The road and trails provide safe and easy access to the fields for those involved in this activity.

**(c) When would the use be conducted?** The use is limited to a one month period and occurs annually throughout the month of August.

**(d) How would the use be conducted?** Individuals seeking blueberries are allowed to enter the fields and hand pick the fruit for personal consumption. This activity attracts less than fifty people throughout the entire month of August. Blueberry harvesting is allowed only during daylight hours and use of rakes is prohibited. The quantity of blueberries that are removed, as a result of this use, is less than 1% of the total blueberries produced within the five fields which together total 31 acres.

**(e) Why is the use being proposed?** Recreational blueberry picking is allowed at Petit Manan Point because it is a traditional use of the area. This use is known to have occurred in the area for hundreds of years.

**Availability of Resources:** The resources necessary to provide and administer this use are available within current and anticipated Refuge budgets. Staff time associated with the administration of this use is primarily related to answering general questions from the public and monitoring impacts of the use on refuge resources. This activity is administered by the Refuge staff, who assess the interactions among user groups and any related public use impacts. Resource impacts will be monitored by the Wildlife Biologist, under the supervision of the Refuge Manager. The use of the refuge staff to monitor the impacts of public uses on refuge resources, and visitors is required for administering all refuge public uses. Therefore, these responsibilities and related equipment are accounted for in budget and staffing plans.

The annualized costs associated with the administration of recreational berry picking on the Refuge is estimated below:

Resource impacts/monitoring .....	\$500
Visitor impacts/provide information to public .....	\$500
Vehicle maintenance and miscellaneous supplies .....	\$100
\$Total .....	\$1,100

FY2004 Refuge Budget Allocation

Salaries .....	\$428,609.00
Fixed Costs .....	\$64,613.00
Annual Maintenance .....	\$34,100.00
Total Available Funds .....	\$527,322.00

**Anticipated Impacts of the Use:** No impacts are expected on any threatened or endangered species, whether Federally listed or State listed species. Providing the opportunity for berry pickers to harvest blueberries on the refuge provides them with an opportunity to observe wildlife and to view Service wildlife habitat management projects. There have been no indications that harvesting blueberries on Petit Manan causes problems for wildlife other than minimal and temporary disturbance caused by the mere presence of humans.

**Public Review and Comment:**

This determination is being prepared concurrently with the Comprehensive Conservation Plan (CCP). The listed use has been discussed at CCP public meetings and has been identified in the CCP Planning Update. Further public comment opportunities were afforded when the Draft CCP/EIS was released for a 60-day review. No significant changes occurred between draft and final plans.

**Determination Check one below):**

Use is Not Compatible

Use is Compatible

**Stipulations Necessary to Ensure Compatibility:**

Hand raking of blueberries would not be permitted to ensure that berries are left for wildlife.

Refuge staff will continue to monitor berry pickers and ensure they have an insignificant impact on wildlife.

**Justification:**

Recreational harvesting of blueberries within Petit Manan NWR will not materially interfere with or detract from the mission of the National Wildlife Refuge System or the purposes for which the Refuge was established.

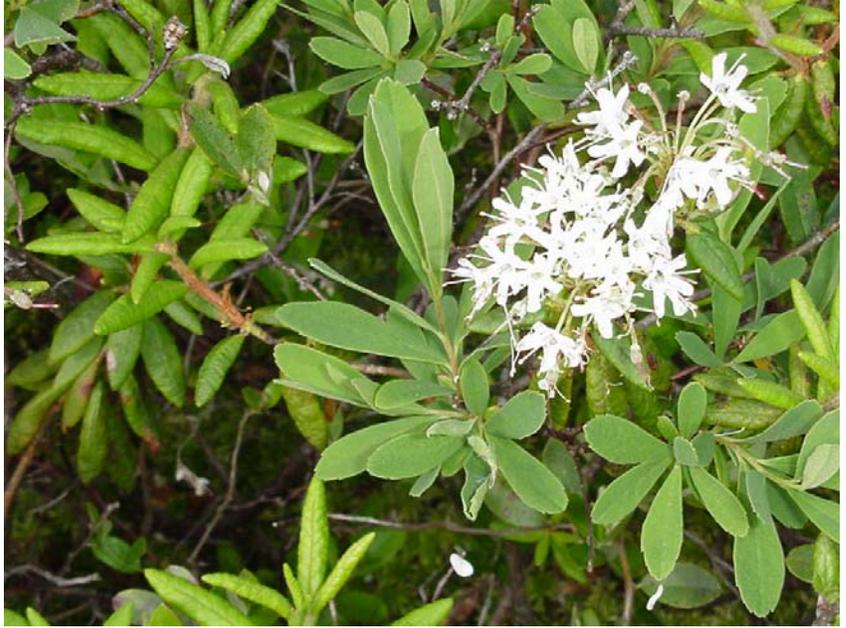
Signature: Refuge Manager: Charles W. Blair 3-23-2005  
(Signature and Date)

Concurrence: Regional Chief: Anthony D. Lezer March 28, 2005  
(Signature and Date)

Mandatory 10-year Re-evaluation Date: 3-1-2015



## Appendix D



*Labrador tea*  
USFWS photo

# Wilderness Inventory and Study

- Introduction
- Wilderness Inventory
- Wilderness Study
- Wilderness Evaluation
- Wilderness Study Area Maps

## Wilderness Inventory and Study — Maine Coastal Islands National Wildlife Refuge

### Introduction

The purpose of a wilderness review is to identify and recommend for Congressional designation National Wildlife Refuge System (System) lands and waters that merit inclusion in the National Wilderness Preservation System (NWPS). Wilderness reviews are a required element of comprehensive conservation plans (CCPs) and conducted in accordance with the refuge planning process outlined in 602 FW 1 and 3, including public involvement and the National Environmental Policy Act (NEPA) compliance.

There are three phases to the wilderness review process: (1) inventory, (2) study; and (3) recommendation. Lands and waters that meet the minimum criteria for wilderness are identified in the inventory phase. These areas are called wilderness study areas (WSAs). In the study phase, a range of management alternatives are evaluated to determine if a WSA is suitable for wilderness designation or management under an alternate set of goals and objectives that do not involve wilderness designation. The findings of the study determine whether we will recommend an area of wilderness designation in the final CCP.

The recommendation phase consists of forwarding or reporting any wilderness recommendations from the Director through the Secretary and the President to Congress in a wilderness study report. Congress has reserved the authority to make final decisions on wilderness designation. The wilderness study report is prepared after the Record of Decision for the Final CCP/EIS has been signed.

Areas recommended for designation are managed to maintain wilderness character in accordance with management goals, objectives, and strategies outlined in the final CCP until Congress makes a decision or the CCP is amended to modify or remove the wilderness proposal.

This appendix summarizes the inventory and study phases of the wilderness review for the Maine Coastal Islands National Wildlife Refuge (Refuge).

### Wilderness Inventory

The wilderness inventory is a broad look at the planning area to identify WSAs. These are roadless areas that meet the minimum criteria for wilderness identified in Section 2 (c) of the Wilderness Act. A WSA must meet the size criteria (or be a roadless island), appear natural, and provide outstanding opportunities for solitude or primitive recreation. Other supplemental values are evaluated, but not required. Our inventory of roadless areas and islands on the Refuge and application of the wilderness criteria are described in the following sections and summarized in Table D-1.

#### Identification of Roadless Areas and Roadless Islands

Identification of roadless areas and roadless islands required gathering land status maps, land use and road inventory data, and aerial photographs of existing Refuge mainland tracts and islands. “Roadless” refers to the absence of improved roads suitable and maintained for public travel by means

of motorized vehicles primarily intended for highway use. Only lands currently owned by the Service in fee title were evaluated. These lands included three mainland divisions and 37 islands. We also evaluated the Corea Heath mainland tract, which is a pending transfer from the U.S. Navy. Once transferred, Corea Heath will become a fourth mainland division of Petit Manan Refuge. Each of the mainland divisions and 37 islands are listed in Table D-1 and described in detail in the Final EIS in Chapter 3-Affected Environment.

### **Evaluation of the Size Criteria**

Roadless areas or roadless islands meet the size criteria if any one of the following standards applied.

- An area with over 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features.
- An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- An area of less than 5,000 contiguous Federal acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the Forest Service, National Park Service, or Bureau of Land Management.

None of the mainland division tracts meet the size criteria. All of the 37 islands on the Refuge meet the second size criteria standard. The islands range in size from 0.5 to 1,654 acres. The majority of the islands (73 percent) are 18 acres or less. See Table D-1.

### **Evaluation of the Naturalness Criteria**

In addition to being roadless, a WSA must meet the naturalness criteria. Section 2©) defines wilderness as an area that "... generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable." The area must appear natural to the average visitor rather than "pristine." The presence of historic landscape conditions is not required. An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. Significant human-caused hazards, such as the presence of unexploded ordnance from military activity, and the physical impacts of refuge management facilities and activities are also considered in evaluation of the naturalness criteria. An area may not be considered unnatural in appearance solely on the basis of the "sights and sounds" of human impacts and activities outside the boundary of the unit. The cumulative effects of these factors in conjunction with island size, extent of Federal holdings, and physiographic and vegetative characteristics were considered in the evaluation of naturalness for each roadless island.

In the wilderness inventory, specific human impacts were identified that significantly affected the overall apparent naturalness of the islands on the Refuge when considered in combination with size and physical characteristics. The following factors were primary considerations in evaluating naturalness:

- presence of a lighthouse and associated structures, including helicopter pads in some cases;

- substantial private ownership with developments such as private residences or incompatible activities;
- presence of an established research facility; and/or
- significant presence of unexploded ordnance that makes the area unsafe for public use.

Eleven roadless islands do not meet the naturalness criteria based on the presence of one or more of these factors. Seven islands were judged to be unnatural based on the presence of operating light-houses: Petit Manan, Egg Rock, Two Bush, Franklin, Pond, Libby, and Matinicus Islands. Nash Island has an inactive lighthouse and a significant proportion of the island is in private ownership. Seal Island has a Service research camp and unexploded ordnance. Bar and Metinic islands are characterized by significant private land holdings with houses. The naturalness evaluation for each roadless island is summarized in Table D-1.

### **Evaluation of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation**

In addition to meeting the size and naturalness criteria, a WSA must provide outstanding opportunities for solitude or primitive recreation. The area does not have to possess outstanding opportunities for both solitude and primitive and unconfined recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk; self reliance; and adventure.

These two opportunity “elements” are not well defined by the Wilderness Act but, in most cases, can be expected to occur together. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

In the wilderness inventory for the roadless islands in the Petit Manan Refuge Complex, the following factors and their cumulative effects were the primary considerations in evaluating the availability of outstanding opportunities for solitude or primitive recreation:

- island size;
- availability of vegetative screening;
- proximity to or attached to the mainland at low tide in an area with intensive public use;
- presence of an operating lighthouse and associated structures, and ongoing Coast Guard maintenance activities;
- substantial private ownership with developments such as private residences and associated incompatible activities; and/or
- significant presence of unexploded ordnance that makes the area unsafe for public use.

Twenty-two of the islands do not meet either the solitude or primitive recreation criteria. Opportunities for solitude and primitive recreation were judged to be less than outstanding on seven islands (Libby, Petit Manan, Egg Rock, Matinicus Rock, Two Bush, Franklin and Pond Islands) based on the combination of small size and the impacts of operating lighthouses and associated Coast Guard maintenance activities. Seven islands (East Barge, Ship, Trumpet, West Barge, Little Roberts, Roberts, and Little Thrumcap Islands) do not meet these criteria because their small size (ranging in size from 0.5 to 11 acres) and lack of vegetative screening limits opportunities for seclusion and dispersed recreation.

Five islands are close to the mainland or connected to the mainland at low tide in areas subject to intense public use. The intense use and accessibility of these islands in combination with their relatively small sizes limits opportunities for solitude and primitive recreation. Three islands (Nash, Bar, and Metinic Islands) do not meet these criteria due to the extent of private ownership (30 to 50 percent private) and the impacts of associated residential and other uses on the private lands.

The evaluation of opportunities for solitude and primitive recreation for each of the roadless islands is summarized in Table D-1.

### **Evaluation of Supplemental Values**

Supplemental values are defined by the Wilderness Act as "...ecological, geological, or other features of scientific, educational, scenic, or historic value." These values are not required for wilderness but their presence is documented for each island in Table D-1 and Chapter 3- Affected Environment in the final EIS.

### **Inventory Findings and Wilderness Study Areas**

Thirteen islands meet the minimum criteria for a WSA. Six of the islands are in a geographic cluster and are considered one WSA unit. The following WSAs on the Refuge are roadless islands, primarily natural, and offer outstanding opportunities for solitude or primitive recreation. The WSAs are presented on Maps D-1 to D-8.

- Outer Heron Island WSA
- Outer White Island WSA
- Little Marshall WSA
- John's Island WSA
- Bois Bubert Island WSA
- Inner Sand Island WSA
- Halifax Island WSA
- Cross Island WSA Complex (includes Cross, Inner Double Head Shot, Outer Double Head Shot, Mink, Scotch, and Old Man Islands)

## Wilderness Study

The eight WSAs found to possess the required wilderness characteristics defined by the Wilderness Act were each further evaluated through the refuge planning process to determine their suitability for designation, management, and preservation as wilderness. Considerations in this evaluation included:

- quality of wilderness values
- evaluation of resource values, public uses, and associated management concerns; and
- capability for management as wilderness or “manageability.”

This information provides a basis to compare the impacts of a range of management alternatives and determine the most appropriate management direction for each WSA.

### Evaluation of Wilderness Values

The following information considers the quality of the WSAs’ mandatory and supplemental wilderness characteristics.

**Naturalness.** All of the WSAs generally appear to have been affected primarily by nature, with the imprint of human uses and activities substantially unnoticeable. The topography and vegetation on all of the islands create a primeval environment.

Cross Island in the Cross Island Complex WSA and Bois Bubert Island WSA are the only WSAs exhibiting signs of human impact. Both islands have private inholdings which are excluded from the WSAs, and do not detract from the WSA’s naturalness. The aquaculture facility off Cross Island affects the viewshed of only a small portion of the island. Service cabins located on Cross and Bois Bubert islands are used to house Refuge or cooperators’ research staff. The Cross Island cabin is a wooden structure, 440 square feet in one open room, with propane gas for lighting and a wood stove for heat and cooking. Bois Bubert has 2 cabins, with one planned to be removed within 2 years. The remaining cabin is a wooden structure, 300 square feet, with an open room and sleeping loft. There is a wood stove for heat and cooking. These facilities have little impact on the quality of natural values because the islands are large and heavily forested.

**Outstanding Opportunities for Solitude and Primitive Recreation.** With the exception of Bois Bubert Island WSA, all of the WSAs offer outstanding opportunities for both solitude and primitive recreation. Opportunities for primitive recreation are outstanding on the 1,011 acres of Bois Bubert Island owned by the Service. However, seasonal activities associated with the private residences, including ATV use, on the 310 acres of private lands on the west side of the island, can impact opportunities for solitude on the island.

The Cross Island Complex WSA offers the best opportunities for recreation and solitude. The core of this WSA is Cross Island itself, which offers 1,654 acres of undisturbed forest accessible from the mainland by kayak. In fact, this WSA is enhanced by the fact that a person can kayak between each of the 7 forested islands, all of which offer solitude and primitive recreation.

**Quality of Supplemental Values.** All of the WSAs offer outstanding ecological values with features of scientific, educational, and scenic interest. The undeveloped coastal islands on the Refuge offer a unique, and increasingly rare, opportunity to observe natural processes occurring unimpeded on an island in the Gulf of Maine. They also provide important habitats for Federal- and State-listed, and

rare and declining plant and animal species. In addition, the islands in the Cross Island Complex WSA are of historical and cultural significance to the Passamquoddy Tribes. These resources are described for each island in the final EIS, Chapter 3 - Affected Environment.

**Evaluation of Manageability and Other Resource Values and Uses.** Each of the eight WSAs on the Refuge can be managed to preserve its wilderness character in perpetuity, recognizing that a “minimum requirement analysis” and “minimum tool” approach will be required. There are no valid existing private rights, or mineral rights, included in any of these WSAs. We specifically excluded all private lands and existing ROWs on Cross and Bois Bubert Islands, and the common boat landing and Lily Pond on Bois Bubert Island to avoid pre-existing private rights conflicts. In addition, the WSA boundaries are defined by the mean high water mark to acknowledge State jurisdiction in the intertidal area.

Existing and proposed public uses and refuge management activities within the WSAs are consistent with management direction in the Wilderness Act and current Service wilderness management policy in the Refuge Manual (6 RM 8). None of the current or expected Refuge management activities and public uses would diminish the wilderness character. These include waterfowl hunting, scientific research, resource monitoring, commercial services such as guided wildlife observation tours, environmental education and low impact recreational activities. There are no plans to construct permanent facilities or structures to accommodate these uses.

In summary, wilderness designation and management of all eight WSAs would be fully compatible with current and proposed Refuge management, and none of the resource values identified above would be forgone or adversely affected as a result of designation.

### **Development of CCP Alternatives**

After evaluating the quality of wilderness values, manageability, and other resource values and uses, and reviewing public comments, the following alternatives were developed and analyzed in the draft and final EISs.

**Alternative A (Current Management).** Under this alternative, none of the eight WSAs (0 acres) would be recommended suitable for wilderness designation. The islands would be managed to accomplish refuge purposes in accordance with legal and policy guidance for the Refuge System.

**Alternative B (Service’s Preferred Alternative).** Under this alternative, all eight WSAs (3,125 acres) would be recommended suitable for wilderness designation. Since Congress has reserved the authority to make final decisions on wilderness designation, the wilderness recommendations are preliminary administrative determinations that will receive further review and possible modification by the Director of the Fish and Wildlife Service, the Secretary of the Interior, or the President of the United States. However, the analysis of the environmental consequences of this alternative in Chapter 4 is based on the assumption that Congress would accept the recommendation and designate all eight WSAs as wilderness.

If the eight WSAs are designated as wilderness, they would be managed according to the provisions of the Wilderness Act and Service wilderness management regulations (50 CFR 35) and wilderness management policy in the Refuge Manual (6 RM 8). The areas would be managed to accomplish refuge purposes and the Refuge System mission, while also preserving wilderness character and natural values for future generations. Use of motorized vehicles, motorized equipment, and mechanical transport on the islands may be allowed for emergency purposes and when necessary to meet minimum requirements for the administration of the area as wilderness and to accomplish refuge

purposes. The islands would continue to be accessible by motorboat. Proposed or new refuge management activities, or refuge uses on the islands would be evaluated through a minimum requirements analysis and NEPA compliance to assess potential impacts and identify mitigating measures to protect wilderness character.

The WSA boundaries would be defined by the mean high water mark, and all private lands and ROWs on Cross and Bois Bubert Islands, and Lily Pond and the common boat landing on Bois Bubert Island would be excluded from the respective WSA boundaries.

Under Alternative B, as the private lands and ROWs are acquired on Cross and Bois Bubert Islands, they would be included in the WSA or designated wilderness area through administrative action. In addition, we would conduct another wilderness review in 15 years to evaluate all lands acquired in the interim, simultaneous with our revision of the CCP. There are 87 islands proposed for Service acquisition in this CCP alternative.

**Alternative C.** Under this alternative, all eight WSAs (3,125 acres) would be recommended suitable for wilderness designation and managed as described in Alternative B above. Under Alternative C, however, future wilderness reviews would be conducted bi-annually to allow us to evaluate newly acquired islands soon after they are acquired. There are 151 islands proposed for Service acquisition in this CCP alternative.

**Alternative D.** Under this alternative, none of the eight WSAs (0 acres) would be recommended suitable for wilderness designation. This alternative emphasizes a “custodial approach” rather than active management to accomplish refuge purposes. Staffing and resources would be limited. The islands would be closed to public access with the exception of staff-led programs or entry by special use permit.

### **Alternatives Considered But Eliminated From Detailed Study**

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). It was determined that there was no benefit in analyzing partial wilderness alternatives for individual WSAs. All of the islands within the eight WSAs could be managed to preserve their wilderness character in perpetuity. There are no feasible or practical boundary adjustments that would improve the manageability of an individual WSA. Similarly, it was determined that developing one or more alternatives that group WSAs, recommending some for designation and others for alternative management, would not provide any additional information or analysis for the decision-maker.

### **Public Review and Comment**

This proposal has received extensive public and partner review in conjunction with development of the Maine Coastal Islands CCP. The potential for wilderness was discussed at five public meetings and Open Houses held in 2000 as part of the CCP initial public scoping. It was also identified in two newsletters shared with over 1,400 individuals and organizations on our mailing list. Our draft CCP/EIS went out for a 60-day public review in 2004. We received numerous comments on the wilderness proposal, mostly positive. These comments are summarized and responded to in the final EIS, Appendix I - Public Comments and Service Responses. The only change in our wilderness proposal between the draft and final EIS was to clarify that existing private lands and ROWs are excluded, as is the common boat landing and Lily Pond on Bois Bubert Island, and all WSA boundaries are defined by the mean high water mark.

**Table D-1 Wilderness Evaluation**

Refuge unit and acreage	Yes/no & comments						
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>Mainland units</b>							
<i>Steuben:</i>							
Petit Manan Point, 2,166 acres	No. Less than 5,000 acres; private inholdings.	No. Bisected by roads, powerlines, telephone lines; existing refuge development such as impoundments.	Yes		Yes	Yes. Rare plant communities, scenic values.	No
<i>Gouldsboro:</i>							
Gouldsboro Bay Division, 573 acres	No. Less than 5,000 acres.	No. Interior roads	No. Adjacent private land development.		No. (see 3a)	Yes. Waterfowl, shorebirds, bald eagles.	No
Corea Heath Division, 405 acres	No. Less than 5,000 acres.	No. Significant private inholding, large industrial-type buildings and roads	No. Adjacent private land development.		No. (see 3A)	Yes. Rare bog community, scenic values.	No
<i>Milbridge:</i>							
Sawyers Marsh Division, 956 acres	No. Less than 5,000 acres.	No. Interior roads.	No. Adjacent town park and private land development.		No. (see 3a)	Yes. Waterfowl, shorebirds, raptors.	No

**Table D-1 Wilderness Evaluation — Cont'd.**

Refuge unit and acreage	Yes/no & comments						Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	
<b>Island units</b>							
<i>Cutler (Cross Island Complex):</i>							
Cross Island NWR, 1,654 acres	Yes. Roadless island.	Yes (not diminished by small FWS cabin or 39 ac inholdings with minor structures or offshore aquaculture facility)	Yes		Yes. Part of 6 island complex.	Yes. Scenic values.	Yes
Inner Double Head Shot Island, 8 acres	Yes. Roadless island.	Yes	Yes. Small size, but forested vegetation.		Yes. Part of 6 island complex.	Yes. Scenic values.	Yes
Mink Island, 11 acres	Yes. Roadless island.	Yes	Yes		Yes. Part of 6 island complex.	Yes. Scenic values, bald eagle nesting.	Yes
Old Man Island, 6 acres	Yes. Roadless island.	Yes	Yes		Yes. Part of 6 island complex.	Yes. Scenic values, seabird nesting, seal haul out area.	Yes
Outer Double Head Shot Island, 14 acres	Yes. Roadless island.	Yes	Yes		Yes. Part of 6 island complex.	Yes. Scenic values, seal haul out area.	Yes
Scotch Island, 10 acres	Yes. Roadless island.	Yes	Yes. Small size, but forested vegetation		Yes. Part of 6 island complex.	Yes. Scenic values.	Yes
<i>Machiasport</i>							
Libby Island, 40 acres	Yes. Roadless island.	No. Operating lighthouse, fog horn, helicopter landing pad; treeless vegetation.	No. Operating lighthouse; occasional disturbance from Coast Guard visits.		No (see 3a)	Yes. Historic lighthouse, scenic values, seabird nesting, seal pupping area.	No, also a priority seabird restoration site

**Table D-1 Wilderness Evaluation — Cont'd.**

Refuge unit and acreage	Yes/no & comments					Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	
<i>Jonesport</i>						
Eastern Brothers Island, 17 acres	Yes. Roadless island.	Yes	Yes	Yes	Yes. Scenic values, seabird nesting.	No, due to priority as a seabird restoration site
Halifax Island, 75 acres	Yes. Roadless island.	Yes	Yes	Yes. On Maine Island Trail	Yes. Scenic values, rare plants.	Yes
<i>Addison</i>						
Inner Sand Island, 18 acres	Yes. Roadless island.	Yes	Yes	Yes	Yes. Seabird nesting, scenic value.	Yes
Nash Island, 5 acres (total island acreage: 17)	Yes. Roadless island.	No. Inactive lighthouse, sheep grazing on privately owned portion of island.	No. Small size, mostly privately owned with sheep grazing, treeless vegetation.	No. (see 3a)	Yes. Historic lighthouse, scenic values.	No
<i>Milbridge</i>						
Bois Bubert Island, 1,190 acres	Yes. Roadless island.	Yes. Not diminished by private camps on west side of island or the 2 FWS cabins	No. Seasonal activity w/private camps, including ATV use.	Yes. On Maine Island Trail	Yes. Scenic values, bald eagle nesting.	Yes
<i>Steuben</i>						
Abbott Island, 4 acres	Yes. Roadless island.	Yes	No. Small size and within a few hundred feet of the mainland, private lands, and Pigeon Hill Road.	No. (see 3a)	Yes. Rare plants	No

**Table D-1 Wilderness Evaluation — Cont'd.**

Refuge unit and acreage	Yes/no & comments					Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or .....	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	
Petit Manan Island, 10 acres	Yes. Roadless island.	No. Operating lighthouse, fog horn, helicopter landing pad, several Coast Guard structures, research facilities.	No. Operating lighthouse and fog horn, active maintenance by Coast Guard, and commercial seabird viewing tours just offshore.	No. (see 3a)	Yes. Historic lighthouse, scenic values, seabird nesting.	No
Sally Island, 1 acre	Yes. Roadless island.	Yes	No. Small size, connected to developed mainland at low tide.	No. (see 3a)	Yes. Scenic values, eagle nest.	No
<i>Winter Harbor</i>						
Egg Rock, 12 acres	Yes. Roadless island.	No. Operating lighthouse, fog horn, separate Coast Guard structures.	No. Operating lighthouse, other Coast Guard structures, active maintenance, commercial tour boat traffic just offshore.	No. (see 3a)	Yes. Historic lighthouse, scenic values, seabird nesting, seal haulout areas.	No
<i>Town of Swan's Island</i>						
John's Island, 43 acres	Yes. Roadless island.	Yes	Yes	Yes	Yes. Scenic values, seabird nesting, rare plants.	Yes

**Table D-1 Wilderness Evaluation — Cont'd.**

Refuge unit and acreage	Yes/no & comments					Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or .....	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	
<i>Tremont</i>						
Bar Island, 17 acres	Yes. Roadless island.	No. Half of island privately owned, house next to Refuge land.	No. Proximity of private land, private residence, and associated recreational activity.	No. (see 3a)	Yes. Scenic values.	No
<i>Tremont</i>						
East Barge Island, 0.5 acre	Yes. Roadless island.	Yes	No. Small size, treeless vegetation, near populated area.	No. (see 3a)	Yes. Scenic values, seabird nesting, seal haulout area.	No
Ship Island, 11 acres	Yes. Roadless island.	Yes	No. Small size, treeless vegetation, near populated area.	No. (see 3a)	Yes. Scenic values, seabird nesting.	No
Trumpet Island, 3 acres	Yes. Roadless island.	Yes	No. Small size, treeless vegetation, near populated area.	No. (see 3a)	Yes. Scenic values, seabird nesting.	No
West Barge Island, 0.5 acre	Yes. Roadless island.	Yes	No. Small size, treeless vegetation, near populated area.	No. (see 3a)	Yes. Scenic values, seabird nesting, seal haulout area.	No
<i>Vinalhaven</i>						
Little Roberts Island, 1 acre	Yes. Roadless island.	Yes	No. Small size, treeless vegetation.	No (see 3a)	Yes. Scenic values, seabird nesting.	No
Roberts Island, 10 acres	Yes. Roadless island.	Yes	No. Small size, treeless vegetation.	No (see 3a)	Yes. Scenic values, seabird nesting.	No

Table D-1 Wilderness Evaluation — Cont'd.

Refuge unit and acreage	Yes/no & comments					Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or ..... (3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	
Seal Island NWR, 65 acres <i>Matinicus Isle</i>	Yes. Roadless island.	No. Research camp, unexploded ordnance	Yes	Yes	Yes. Scenic values, seabird nesting, seal pupping area.	No
Matinicus Rock, 28 acres	Yes. Roadless island.	No. Operating lighthouse and fog horn, maintenance activities, staffed seasonally.	No. Operating lighthouse, active maintenance.	No. (see 3a)	Yes. Historic lighthouse and structures, scenic values, seabird nesting.	No
Metinic Island, 149 acres (total island acreage: 346 ) <i>Saint George</i>	Yes. Roadless island.	No. Mostly privately owned, with houses, fencing, and sheep grazing, research facilities.	No. Houses, partial private ownership, fencing, sheep grazing.	No. (see 3a)	Yes. Scenic values, seabird nesting.	No
Two Bush Island, 8 acres <i>Friendship</i>	Yes. Roadless island.	No. Operating lighthouse and fog horn, maintenance activities.	No. Lighthouse and maintenance, small size, treeless vegetation.	No. (see 3a)	Yes. Historic lighthouse, seabird nesting.	No
Franklin Island NWR, 12 acres	Yes. Roadless island.	No. Operating lighthouse, active maintenance.	No. Operating lighthouse, maintenance activities.	No. (see 3a)	Yes. Scenic values, seabird and osprey nesting.	No

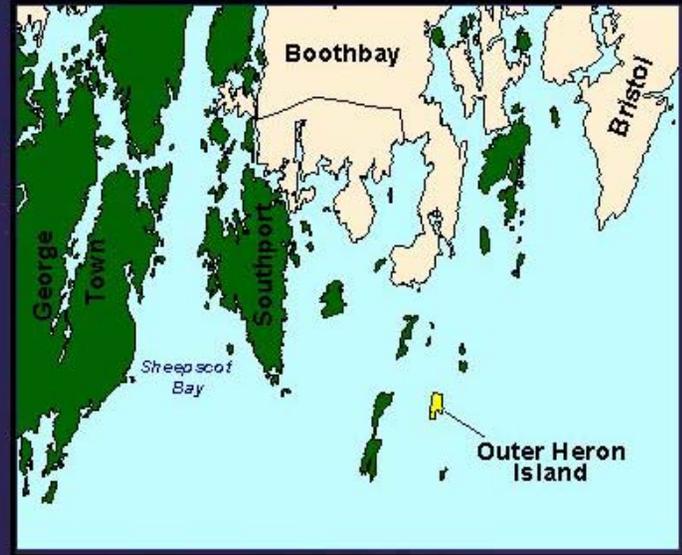
**Table D-1 Wilderness Evaluation — Cont'd.**

Refuge unit and acreage	Yes/no & comments						
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	or	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<i>South Bristol</i>							
Little Thrumcap Island, 9 acres	Yes. Roadless island.	Yes	No. Small size, treeless vegetation, connects by sandbar to Big Thrumcap Is., proximity to development and recreational activities.		No. (see 3a)	Yes. Scenic value, seabird nesting.	No
<i>Boothbay</i>							
Outer White Island, 16 acres	Yes. Roadless island.	Yes	Yes		Yes	Yes. Scenic value, seabird nesting.	Yes
Outer Heron Island, 66 acres	Yes. Roadless island.	Yes	Yes		Yes	Yes. Scenic values, seabird, wading bird, and eagle nesting.	Yes
<i>Phippsburg</i>							
Pond Island, 10 acre	Yes. Roadless island.	No. Operating lighthouse and fog horn, active maintenance.	No. Operating lighthouse, close proximity to mainland and heavy recreational use, small size, treeless vegetation.		No. (see 3a)	Yes. Lighthouse, scenic values, seabird nesting.	No

Table D-1 Wilderness Evaluation — Cont'd.

Refuge unit and acreage	Yes/no & comments						
	(1) has at least 5,000 acres of land or is of sufficient size to make practicable its preservation and use in an unconfined condition, or is a roadless island;	(2) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;	(3a) has outstanding opportunities for solitude;	OR	(3b) has outstanding opportunities for a primitive and unconfined type of recreation;	(4) contains ecological, geological or other features of scientific, educational, scenic, or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<i>Harpwell</i>							
Ram Island, 10 acres	Yes. Roadless island.	Yes	No. Close proximity to mainland and recreational and commercial activity, small size, treeless vegetation.		No. (see 3a)	Yes. Scenic values, seabird nesting.	No
Upper Flag Island, 30 acres	Yes. Roadless island.	Yes	No. Close proximity to mainland and heavy recreational activity.		No. (see 3a)	Yes. Scenic values, seabird nesting.	No
<i>Roque Bluffs</i>							
Schoppee Island, 18 acres	Yes. Roadless island.	Yes	No. Close proximity to mainland and heavy recreational activity.		No. (see 3a)	Yes. Scenic values, eagle nesting.	No
<i>Swans Island</i>							
Little Marshall Island, 14 acres	Yes. Roadless island.	Yes	Yes		Yes	Yes. Scenic values, eagle nesting.	Yes

# Outer Heron Island WSA (65-279\*)



**66 Acres**

**Supplemental values :  
scenic, seabird nesting,  
bald eagle nesting**

**WSA boundary is defined  
by Mean High Water**

**\* Maine Coastal Island  
Registry Number**

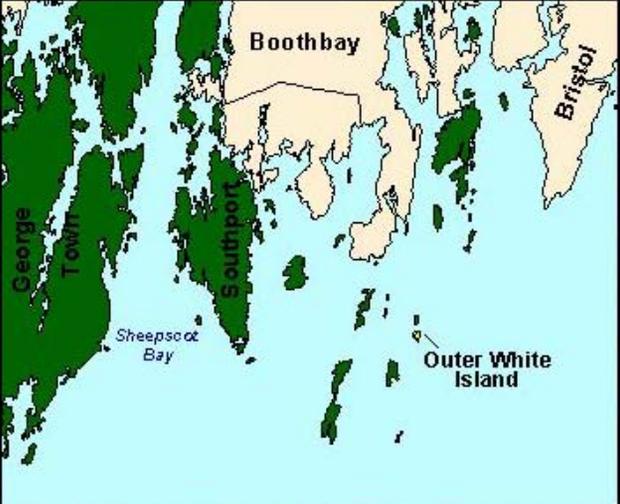
# Outer White Island WSA (65-278\*)



**16 Acres**  
Supplemental values :  
scenic, seabird nesting,  
wading bird nesting

WSA boundary is defined  
by Mean High Water

\* Maine Coastal Island  
Registry Number



# Little Marshall Island WSA (59-470\*)



**14 Acres**

**Supplemental values :  
scenic, bald eagle nesting**

**WSA boundary is defined  
by Mean High Water**

**\* Maine Coastal Island  
Registry Number**

# John's Island WSA (59-483\*)



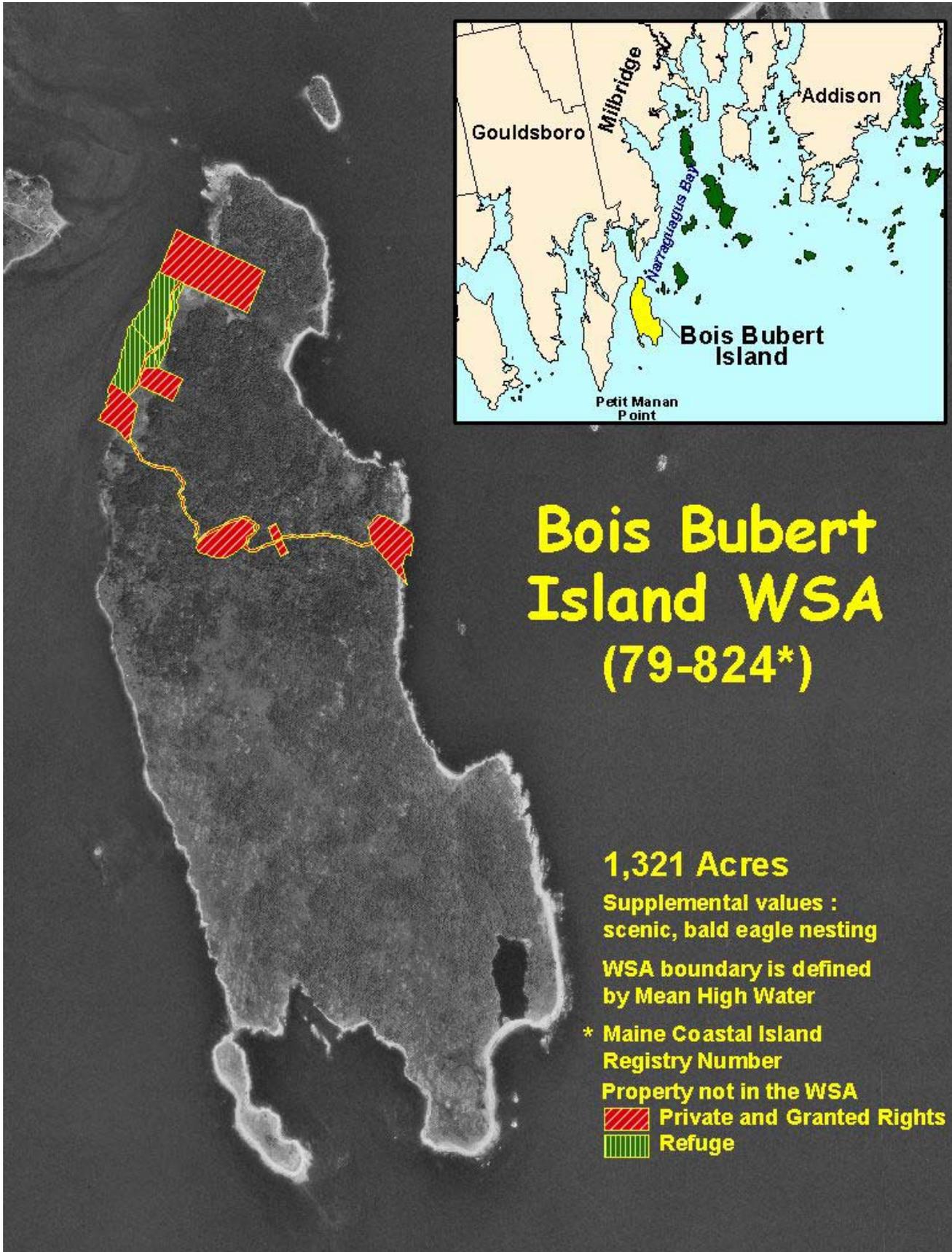
**43 Acres**

**Supplemental values :  
scenic, seabird nesting**

**WSA boundary is defined  
by Mean High Water**

**\* Maine Coastal Island  
Registry Number**





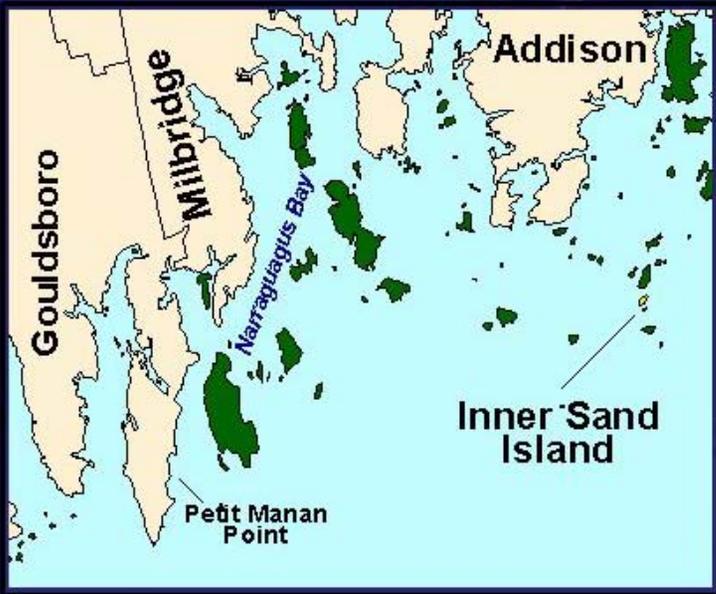
# Inner Sand Island WSA (79-614\*)

**18 Acres**

**Supplemental values :  
scenic, seabird nesting**

**WSA boundary is defined  
by Mean High Water**

**\* Maine Coastal Island  
Registry Number**



# Halifax Island WSA (79-570\*)

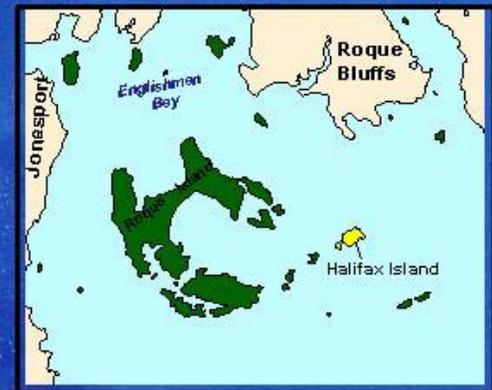


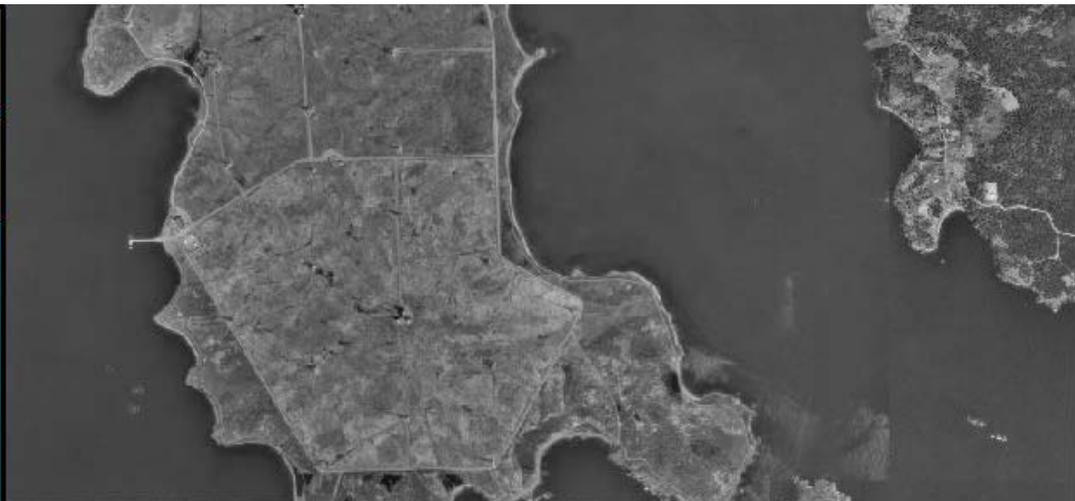
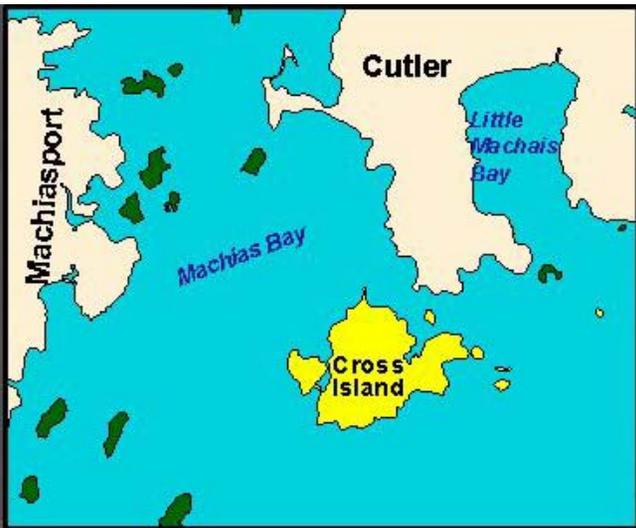
**75 Acres**

**Supplemental values :  
scenic, botanical**

**WSA boundary is defined  
by Mean High Water**

**\* Maine Coastal Island  
Registry Number**





**1,703 Acres**

**Supplemental values :**  
scenic, seabird nesting,  
bald eagle nesting

**WSA boundary is defined**  
by Mean High Water

**\*Maine Coastal Island**  
**Registry Number**

**Property not in the WSA**  
 **Private**

**Mink Island**  
(79-345\*)

**Old Man Island**  
(79-313\*)

**Scotch Island**  
(79-350\*)

**Inner Dbl Head Shot Island**  
(79-351\*)

**Outer Dbl Head Shot Island**  
(79-352\*)

**Cross Island**  
(79-347\*)

# Cross Island Complex WSA

## Appendix E



*Raccoon*  
USFWS photo

# Refuge Operations Needs System (RONS) and Management Maintenance System (MMS)

- Projects currently in the RONS Database
- Projects proposed for the RONS Database
- Projects currently in the MMS Database

**Table E-1. Proposed projects currently in the RONS Tier 1 database and their inclusion in respective CCP Alternatives**

Project #	Project Description	Staffing (FTE's)	Cost Year 1 (x 1000)	Cost, recurring (x1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
98016	Provide handicap viewing opportunities at Meadowbrook Flowage		36		1		X	X	
00012	Enhance outreach and education by developing informational kiosks, informational signing for islands, and support for a seasonal mainland interpretive intern.		100	8	15		X		
00001	Improve public use and education programs -hire an Outdoor Recreation Planner (GS-7) .	1.0	118	53	15		X	X	
00002	Plan and implement public use program in Milbridge - hire an Outdoor Recreation Planner (GS-11).	1.0	139	74	15		X	X	
00004	Expand seabird restoration activities - hire a Wildlife Biologist (GS-11).	1.0	139	74	15		X	X	
00005	Expand baseline inventories of islands, mainland units and rare plant communities - hire a Wildlife Biologist (GS-9)	1.0	128	65	15		X	X	
00006	Study intertidal and marine resources and their availability to coastal wildlife - hire a Marine Ecologist (GS-11)	1.0	139	74	15		X	X	
00007	Enhance law enforcement to ensure resource protection and visitor safety -hire a seasonal law enforcement officer (GS-5).	0.5	64	26	15		X	X	
00008	Improve administrative support to assist with budget, personnel, and public inquiries - hire an administrative assistant (GS-6)	1.0	114	49	15		X	X	
00009	Improve maintenance support to enhance boundary signing and maintaining facilities - hire a maintenance worker (WG-8).	1.0	119	54	15		X	X	
00010	Improve maintenance of visitor facilities - hire a maintenance worker (WG-06).	1.0	114	49	15		X	X	
00011	Restore seabirds to six additional historic nesting islands; maintain existing 6 (12 total).		130	60	15		X	X	
99001	Improve resource protection, enforce seasonal closures, and hunting regulations - hire a full-time Law Enforcement Officer (GS-9).	1.0	193	66	15		X	X	

**Table E-2. *Proposed projects currently in the RONS Tier 2 database and their inclusion in respective CCP Alternatives***

Project #	Project Description	Staffing (FTE=s)	Cost Year 1 (x 1000)	Cost, recurring (x1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
99003	Develop interpretive trail, observation platform and parking area at Gouldsboro Bay Division - hire Maintenance Worker (WG-06).	1.0	123	49	15		X	X	
98004	Expand natural resource inventories on recently acquired properties		66	15	15		X	X	
98009	Improve grassland management to maintain habitat diversity		131	3	15		X	X	
99002	Construct Education Center/ Refuge Headquarters Complex		3,000 (const)	20	15		X	X	

**Table E-3. Proposed projects not currently in the RONS database and their relationship to respective CCP Alternatives and Refuge Complex goals**

Goal 1: perpetuate the biological diversity and integrity of upland cover types on the refuge complex’s mainland coast to sustain high quality habitat for migratory birds

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Wildlife Biologist to oversee all mainland biological programs- (GS-11)	1.0	59	59	15			X	
Initiate rare plant surveys on Sawyer’s Marsh and Gouldsboro Bay Divisions. Document locations and densities for baseline. Develop monitoring protocol.		15	15	3		X	X	
Initiate study to evaluate the effects of deer browsing on rare plant communities and structure of understory.		5	2	7		X	X	
Monitor refuge lands for invasive species. Eradicate invasive plants and restore native vegetation.		50	50	15			X	

Goal 3: perpetuate the biological diversity and integrity of upland cover types on the refuge complex’s coastal islands to sustain high quality habitat for nesting bald eagles and migratory songbirds and raptors, and to protect rare plant sites

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Conduct spring and fall neotropical bird and raptor monitoring on at least three Refuge islands to determine their use of habitats.		20	20	5		X	X	
Complete cover type mapping for island habitats and incorporate into GIS.		10		1		X	X	
Monitor use of offshore islands by neotropical migrants, shorebirds and raptors. (20 islands)		120	120	5			X	
Develop island specific Habitat Management Plans - Hire Wildlife Biologist GS-9.	1.0	128	63	15			X	
Conduct baseline plant and wildlife inventories on at least six Refuge islands per year until all islands have been inventoried - (87 islands)		25	25	15		X		
Conduct baseline plant and wildlife inventories on at least thirteen islands per year until all islands have been inventoried - (151 islands)		52	52	15			X	

Proposed projects not currently in the RONS Database

Goal 4: protect the high quality wetland habitats on the refuge complex's coastal islands to benefit nesting and migrating shorebirds and waterfowl

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Initiate research and monitoring on intertidal and marine habitats surrounding Refuge lands, including the effects of aquaculture & intertidal harvesting (20islands)		145	145	8			X	
Conduct fall shorebird migration surveys on at least three Refuge islands to determine use of habitats & concentrations.		10	10	5		X	X	
Participate in cooperative effort to survey, band, and monitor movements of wintering purple sandpipers on coastal islands.		3	3	5	X	X	X	

Goal 5: protect and restore nesting seabird populations on the refuge complex's coastal islands to contribute to regional and international seabird conservation goals

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Wildlife Biologist to oversee all island programs - (GS-11)	1.0	65	65	15			X	
Contract with a local trapper to actively manage owl and mammal predators at seabird restoration sites experiencing high levels of predation.		2	2	15	X	X	X	
Provide National Audubon funding to support cooperatively managed seabird colonies at Pond, Seal and Matinicus Rock.		25	25	15	X	X	X	
Provide continued funding to support restoration programs at Petit Manan, Ship and Metinic Islands.		36	36	15	X	X	X	
Purchase three burrow scopes to determine productivity of alcid burrows at Seal, Matinicus Rock, and Petit Manan Island.		15		1		X	X	
Initiate three new alcid restoration projects on islands supporting puffin and razorbill habitat.		45	30	15		X	X	
Restore seabirds to twelve historic islands (18 total). Hire Wildlife Biologist GS-12.	1.0	254	159	15			X	
Purchase new 23' boat to support new restoration projects for terns and alcids.		50		1		X	X	

## Appendix E – Refuge Operations Needs System and Management Maintenance System

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

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Outdoor Recreation Planner to oversee all public use programs (GS-11)	1.0	65	65	15		X	X	
Provide staffing for Coastal Education Center - Outdoor Recreation Planner - (GS-7)	1.0	118	53	15		X		
Produce a video and interactive computer program about seabird restoration for use in classrooms and at the Coastal Education Center		60		2		X	X	
Install web-cams at two restored seabird colonies and develop a web-based environmental education program.		140	3	15			X	
Produce interpretive panels for Birch Point Trail and Halifax Island.		25		1		X	X	
Provide interpretive services on refuge's mainland divisions. (2 summer interns)		8	8	15			X	
Expand outreach, education and interpretation of coastal resources - (ORP GS-11, GS-7)	2.0	257	127	15			X	
Construct a parking lot and interpretive trail at the Sawyer's Marsh Division.		25		1		X	X	
Install refuge interpretive panels at three rest areas and three Tourism Centers.		8		1			X	
Develop and produce five refuge brochures interpreting natural and cultural resources for use in Chambers of Commerce and Tourist Welcome Centers.		102		1			X	
Provide interpretive interns to all tour boats visiting refuge islands (7)		25	25	9			X	
Improve outreach aboard commercial tour boats to refuge islands through interpretive panels and seasonal interpreters (3 summer interns).		13	5	15		X		
Increase law enforcement to oversee Refuge Hunt Program, enforce seasonal closures and educate visitors. (LE- GS-9)	1.0	128	63	15		X	X	
Produce refuge brochures on hunting opportunities and "Leave No Trace" principles		6		1		X	X	

Proposed projects not currently in the RONS Database

Increase law enforcement to enforce closure of all refuge property to public use ( 3 LE - GS-5/7)	3.0	351	156	15				X
Construct one barrier-free observation platform and one photo blind on one of the three mainland divisions.		30		1		X	X	
Provide regulatory and interpretive signing on all Refuge islands and future acquisitions (87 new islands).		65		15		X		
Provide regulatory and interpretive signing on all Refuge islands and future acquisitions (151 new islands)		138		15			X	

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

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Improve maintenance support of all Complex programs. (WG-8)	1.0	105	40	15				X
Restore historic lighthouse structures to national and state preservation standards (WG-7)	1.0	116	51	15		X	X	
Provide maintenance and boat support for all Refuge programs on existing lands - Small Craft Operator - (WG-8)	1.0	105	40	15		X	X	X

Goal 8: communicate and collaborate with local communities, federal, state and local representatives, and other organizations throughout coastal Maine to further the mission of the national wildlife refuge system.

Project Description	Staffing (FTEs)	Cost Year 1 (x\$1000)	Cost recurring (x \$1000)	Project Duration (years)	Alt A	Alt B	Alt C	Alt D
Purchase a new phone system capable of providing current Refuge regulations, events and information.		0.5				X	X	
Provide AM radio frequency for visitors to receive current refuge information, openings/closings		30	2	15			X	

Grand Total for RONS Projects from Tables E-1, E-2 and E-3				
	Alternative A, Current Management	Alternative B, Proposed Action	Alternative C	Alternative D
Year 1 - Project Costs	\$66,000	\$5,870,000	\$7,130,500	\$508,000
Recurring Project Costs	\$66,000	\$1,184,000	\$1,971,000	\$248,000

\*Based on FY2002 budget appropriations

**Table E-4 *Projects currently backlogged in the Maintenance Management System (MMS) FY2003 Database for Petit Manan NWR***

<b>Project #</b>	<b>Project Description</b>	<b>Cost Estimate (\$1,000)</b>
<b>98500</b>	<b>Rehabilitate Deteriorated Two Bush Island Lighthouse</b>	<b>\$76</b>
<b>00002</b>	<b>Rehabilitate Historic Oil House Building - Petit Manan Island</b>	<b>315</b>
<b>03002</b>	<b>Repair Historic Matinicus Rock Light Tower #2</b>	<b>125</b>
<b>00004</b>	<b>Rehabilitate Egg Rock Light Station</b>	<b>500</b>
<b>98500</b>	<b>Remove debris and fill foundations on three Lighthouse Islands</b>	<b>101</b>
<b>00006</b>	<b>Replace Egg Rock Boat Ramp</b>	<b>387</b>
<b>00017</b>	<b>Replace 1998 Dodge Grand Caravan - Milbridge</b>	<b>28</b>
<b>02001</b>	<b>Replace 1998 Dodge Grand Caravan - Rockport</b>	<b>28</b>
<b>02007</b>	<b>Replace 1999 Dodge Ram 4X4 V8</b>	<b>25</b>
<b>02005</b>	<b>Replace 1999 Ford Explorer</b>	<b>25</b>
<b>02008</b>	<b>Replace 1998 23' Mako with twin Honda 90 HP motors</b>	<b>45</b>
<b>02003</b>	<b>Replace 1999 Dodge Ram 4X4 V-8 truck</b>	<b>25</b>
<b>02002</b>	<b>Replace 2001 Dodge Ram V10 truck</b>	<b>32</b>
<b>00013</b>	<b>Repair Mague Flowage Dike</b>	<b>41</b>
<b>03001</b>	<b>Replace 1992, 18' Aluminum Skiff, Motor, and Trailer</b>	<b>25</b>
	<b>GRAND TOTAL</b>	<b>1,778</b>

## Appendix F

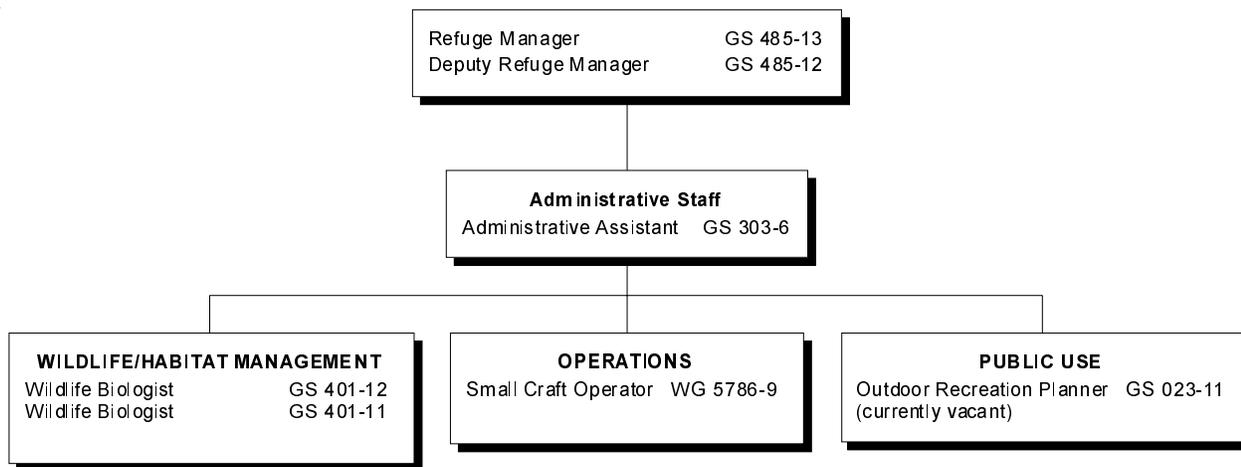


*Refuge staff in 2002*  
USFWS photo

## Staffing Charts

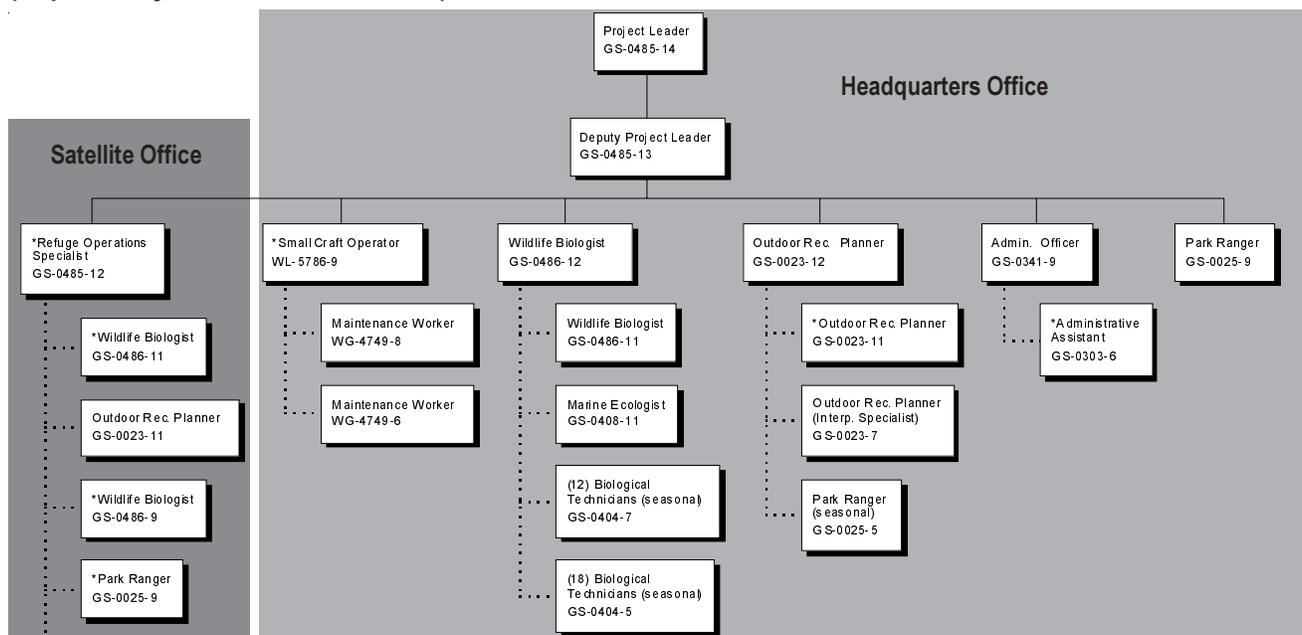
- Alternative A
- Alternative B
- Alternative C
- Alternative D

### Alternative A: Current Management



### Alternative B: The Service’s Preferred Alternative

(Supervisory structure is tentative.)



**Notes:**

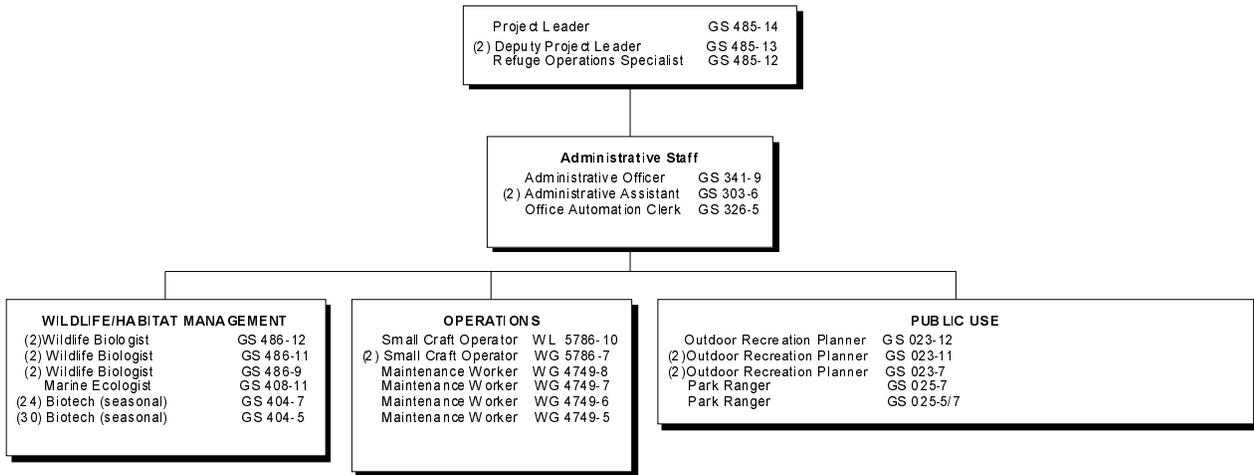
“\*” = New positions; all other positions were approved in Oct. 2001 and include existing staff.

Some positions propose a higher grade than the Oct. 2001 staffing chart.

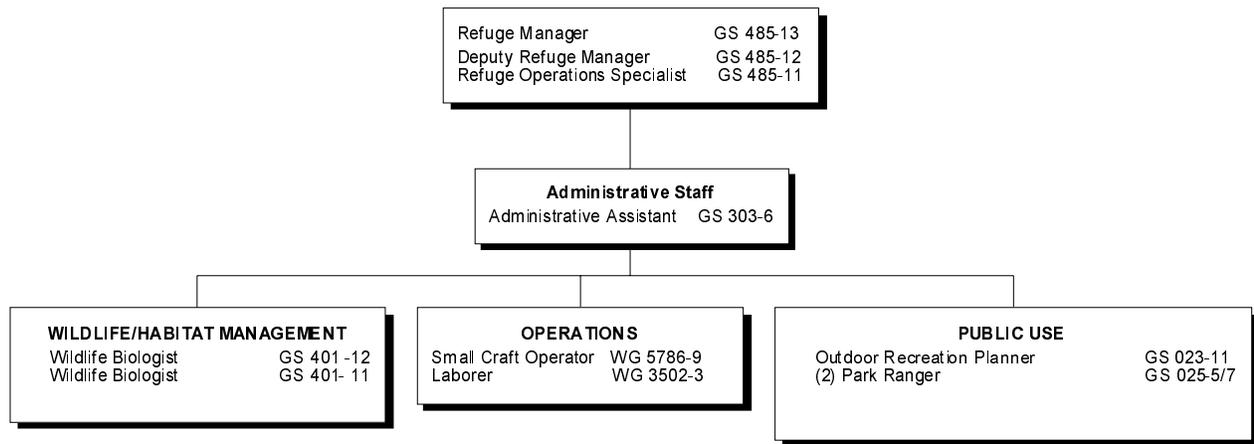
Under Essential Staffing formulas, a GS-14 Refuge Complex includes 20.5 positions at a minimum.

Most employees would be stationed at the proposed office complex/education center in the mid-coast area, except for those in the shaded box, who would be stationed at Milbridge.

**Alternative C:**



**Alternative D:**





## Appendix G



*Petit Manan Point Division*  
USFWS photo

# Property Tax Impact Analysis

- Property Tax Analysis
- Property Tax Impacts
- Assessed Values by Alternative

**Analysis of Property Tax Impacts Resulting from Service Acquisition  
(in support of the Draft and Final Comprehensive Conservation Plan and  
Environmental Impact Statement)**

Petit Manan National Wildlife Refuge Complex  
June 30, 2003

By: Dr. Charles Colgan  
Professor of Public Policy and Management  
University of Southern Maine

The proposed acquisition by the U.S. Fish and Wildlife Service (Service) of Maine coastal islands would have an effect on local property taxes as land is transferred from private taxable ownership to public nontaxable ownership.

To analyze these impacts, the property tax value for all islands proposed for full fee simple acquisition in the Draft Comprehensive Conservation Plan/Environmental Impact Statement (draft CCP/EIS) and final EIS, management alternatives was obtained from respective town municipal records.

The loss of property tax revenues was using information on the assessed value of land and buildings in each potentially-affected community from 2000-2003. The change in a respective town's property tax rate (which reflects the increase in burden on other taxpayers in the town) was then calculated by re-computing the town's mil rate based on the removal of the island from total town valuation and property tax commitment<sup>1</sup>. The property tax impacts predicted are likely an underestimation in the current year since the valuation years were spread over 2002 and 2003 and because coastal values have risen since then. It is also true that rising coastal values may have also had the effect of reducing mil rates so that actual tax impacts could differ. However, we believe the analysis remains a reasonable approximation.

While this analysis includes only those islands to be acquired in their entirety as a fee simple acquisition; in fact, partial purchase and conservation easements are two other types of acquisition proposed in the EISs. Partial purchase would occur when the Service is not proposing to purchase an entire island. This is proposed on larger islands (>200 acres) where the resource of concern is a high priority bald eagle nest site. Due to the complexity of dealing with multiple landowners, typical on larger islands, and the fact that bald eagle nest sites could be adequately protected with less area, the Service has proposed to purchase only a protective buffer (approximately 125 acres, or 3 mile radius) around bald eagle nest sites. The property tax implications of protecting only an area around the nest sites, rather than the entire island, were not included in this analysis because the details of specific locations and properties affected are not available. As such, it is important to note that the impacts to certain towns may be higher when final decisions are made regarding partial purchases.

---

<sup>1</sup> Data from Maine Revenue Services, Municipal Valuation Statistical Data, various years

The second type of acquisition proposed by the Service on some islands is a conservation easement. The details are provided in the final EIS, Land Protection Plan, Appendix A. Conservation easements allow the Service to purchase development rights or other restrictive covenants without actually purchasing title to the island. The island would remain in private ownership subject to appropriate property taxes.

Under Federal law, a town which hosts a national wildlife refuge is entitled to annual Refuge Revenue Sharing (RRS) payments. These payments are the greater of 75 cents per acre or 0.75% of market value (here taken to be assessed value for property tax purposes). The exact amount of the annual payment depends on Congressional appropriations, which in recent years have tended to be less than the amount to fully fund the authorized level of payments. In fiscal year 2002 (FY02), actual payments were 51.89% of authorized levels. We included the benefits to towns from RRS payments in our analysis.

### **Property Tax Impacts- CCP/EIS Alternative A**

Table G-1 shows how we estimated gross and net property tax losses for respective towns resulting from Service acquisition of privately-owned islands proposed in Alternative A. Net property tax losses were determined after including the estimated RRS Payments (at both full and appropriated funding levels). Table G-1 also estimates the percentage increase in mil rates for each town from implementing Alternative A.

Overall, the property tax impacts are quite small. If all islands proposed in Alternative A are acquired by the Service, property taxes would rise in the affected towns by approximately \$31,000 an average of 0.04% assuming RRS payments at the FY02 level. The town with the largest impact would be Matinicus Isle Plantation, which would see a 3.5% increase in its mil rate, with the actual loss in this town only slightly less than \$3,500.

Appendix G – Property Tax Analysis

Table G-1 Property Tax Impacts from Acquisition of Privately Owned, Non-Eagle Site Islands in Alternative A  
(See Attachment 1 for data on islands in each town.)

County	Town	Number of Islands	Tax Assessed Values	Gross Tax Loss	Refuge Revenue Sharing (RRS) Payments	52% of RRS Payments	Tax Loss Net of 52% RRS Payments	% Increase in Property Tax Net of RRS Payments (mill rate)
Cumberland	Cape Elizabeth	1	\$36,400	\$739	\$273	\$142	\$597	0.00%
	Harpswell	2	\$180,800	\$1,946	\$1,356	\$704	\$1,242	0.02%
Cumberland Total		3	\$217,200	\$2,685	\$1,629	\$845	\$1,840	0.01%
Hancock	Brooklin	1	\$188,100	\$2,006	\$1,411	\$732	\$1,274	0.09%
	Brooksville	1	\$149,000	\$1,133	\$1,118	\$580	\$554	0.05%
	Deer Isle	2	\$79,100	\$1,147	\$593	\$308	\$839	0.04%
	Gouldsboro	1	\$73,200	\$1,005	\$549	\$285	\$720	0.04%
	Stonington	1	\$11,400	\$192	\$86	\$44	\$147	0.01%
	Swans Island	1	\$42,500	\$702	\$319	\$165	\$536	0.07%
	Hancock Total		7	\$543,300	\$6,185	\$4,075	\$2,114	\$4,071
Knox	Friendship	1	\$185,500	\$2,025	\$1,391	\$722	\$1,304	0.11%
	Matinicus Isle	4	\$585,860	\$5,740	\$4,394	\$2,280	\$3,460	3.44%
	ME Unor Terr	2	\$416,140	\$2,771	\$3,121	\$1,620	\$1,152	0.19%
	North Haven	1	\$10,500	\$118	\$79	\$41	\$78	0.00%
	Rockport	1	\$27,120	\$396	\$203	\$106	\$290	0.00%
Knox Total		9	\$1,225,120	\$11,051	\$9,188	\$4,768	\$6,283	0.06%
Lincoln	Boothbay	1	\$1,973,500	\$21,422	\$14,801	\$7,680	\$13,741	0.32%
	Bristol	1	\$16,500	\$147	\$124	\$64	\$83	0.00%
Lincoln Total		2	\$1,990,000	\$21,569	\$14,925	\$7,745	\$13,824	0.17%
Washington	Addison	4	\$122,600	\$2,028	\$920	\$477	\$1,551	0.17%
	Eastport	1	\$16,000	\$424	\$120	\$62	\$362	0.02%
	Steuben	1	\$20,000	\$466	\$150	\$78	\$388	0.04%
Washington Total		6	\$158,600	\$2,918	\$1,190	\$617	\$2,301	0.07%
York	Biddeford	1	\$173,800	\$3,516	\$1,304	\$676	\$2,839	0.01%
	Saco	1	\$3,500	\$74	\$26	\$14	\$60	0.00%
York Total		2	\$177,300	\$3,589	\$1,330	\$690	\$2,899	0.01%
<b>Grand Total</b>		<b>29</b>	<b>\$4,311,520</b>	<b>\$47,997</b>	<b>\$32,337</b>	<b>\$16,779</b>	<b>\$31,218</b>	<b>0.04%</b>

### Property Tax Impacts- CCP/EIS Alternative B.

Table G-2 shows how we estimated gross and net property tax losses for respective towns resulting from Service acquisition of privately-owned islands proposed in Alternative B (The Service's Preferred Alternative). Net property tax losses were determined after including the estimated RRS Payments (at both full and appropriated funding levels). Table G-2 also estimates the percentage increase in mil rates for each town from implementing Alternative B.

Overall, the property tax impacts are small. If all islands proposed in Alternative B are acquired by the Service, property taxes would rise in the affected towns by approximately \$130,000, an average of 0.05% assuming RRS payments at the FY02 level. The town with the largest absolute reduction in taxes would be Kittery at \$30,738; however, the Town of Frenchboro would be the most affected in proportional terms. Data on assessed value was available for only two of the three islands proposed for acquisition in Frenchboro. If these islands are acquired, there would be an estimated increase of 9% in Frenchboro's mil rate, with total taxes lost at \$6,294 after RRS payments. The increase in the mil rate for Frenchboro would be larger if all three islands are acquired.

**Table G-2 Property Tax Impacts from Acquisition of Privately Owned, Non-Eagle Site Islands in Alternative B**  
(See Attachment 1 for data on islands in each town)

County	Town	Number of Islands	Tax Assessed Values	Gross Tax Loss	Refuge Revenue Sharing (RRS) Payments	52% of RRS Payments	Tax Loss Net of 52% RRS Payments	% Increase in Property Tax Net of RRS Payments (mill rate)
Cumberland	Cape Elizabeth	1	\$36,400	\$739	\$273	\$142	\$597	0.00%
	Harpswell	4	\$547,100	\$5,889	\$4,103	\$2,129	\$3,760	0.06%
	Portland	1	\$436,800	\$10,484	\$3,276	\$1,700	\$8,785	0.01%
	Yarmouth	1	\$131,300	\$2,863	\$985	\$511	\$2,352	0.02%
Cumberland Total		7	\$1,151,600	\$19,976	\$8,637	\$4,482	\$15,494	0.01%
Hancock	Bar Harbor	2	\$124,600	\$1,790	\$935	\$485	\$1,305	0.02%
	Brooklin	1	\$188,100	\$2,006	\$1,411	\$732	\$1,274	0.09%
	Brooksville	1	\$149,000	\$1,133	\$1,118	\$580	\$554	0.05%
	Deer Isle	6	\$586,970	\$8,524	\$4,415	\$2,291	\$6,233	0.26%
	Franklin	1	\$61,000	\$855	\$458	\$237	\$617	0.07%
	Frenchboro	3	\$546,500	\$8,420	\$4,099	\$2,127	\$6,294	9.04%
	Gouldsboro	2	\$151,200	\$2,076	\$1,134	\$588	\$1,487	0.08%
	Sorrento	1	\$95,100	\$858	\$713	\$370	\$488	0.12%
	Stonington	3	\$147,000	\$990	\$1,103	\$572	\$418	0.02%
	Swans Island	4	\$181,500	\$3,001	\$1,361	\$706	\$2,295	0.28%
Hancock Total		24	\$2,230,970	\$29,652	\$16,745	\$8,689	\$20,963	0.11%
Knox	Friendship	3	\$256,100	\$2,795	\$1,921	\$997	\$1,799	0.15%
	Isle Au Haut	1		\$0	\$43	\$22	-\$22	-0.01%
	Matinicus Isle	5	\$593,360	\$5,811	\$4,450	\$2,309	\$3,501	3.48%
	ME Unor Terr	3	\$429,640	\$2,861	\$3,222	\$1,672	\$1,189	0.20%
	Muscle Ridge	1	\$224,620	\$1,586	\$1,685	\$874	\$712	1.67%
	North Haven	1	\$10,500	\$118	\$79	\$41	\$78	0.00%
	Rockport	1	\$27,120	\$396	\$203	\$106	\$290	0.00%
	St. George	4	\$144,900	\$1,754	\$1,087	\$564	\$1,190	0.03%
	Vinalhaven	2	\$47,100	\$565	\$353	\$183	\$382	0.02%
	Knox Total		21	\$1,733,340	\$15,886	\$13,043	\$6,768	\$9,119

Appendix G – Property Tax Analysis

County	Town	Number of Islands	Tax Assessed Values	Gross Tax Loss	Refuge Revenue Sharing (RRS) Payments	52% of RRS Payments	Tax Loss Net of 52% RRS Payments	% Increase in Property Tax Net of RRS Payments (mill rate)
Lincoln	Boothbay	1	\$1,973,500	\$21,422	\$14,801	\$7,680	\$13,741	0.32%
	Boothbay Harbor	1	\$1,749,100	\$21,854	\$13,118	\$6,807	\$15,047	0.36%
	Bristol	1	\$16,500	\$147	\$124	\$64	\$83	0.00%
	Damariscotta	1	\$73,600	\$1,244	\$552	\$286	\$958	0.03%
Lincoln Total		4	\$3,812,700	\$44,667	\$28,596	\$14,839	\$29,828	0.20%
Sagadahoc	Topsham	1	\$4,000	\$71	\$30	\$16	\$56	0.00%
Sagadahoc Total		3	\$4,000	\$71	\$79	\$41	\$30	0.00%
Waldo	Islesboro	1	\$113,750	\$1,183	\$853	\$443	\$741	0.03%
Waldo Total		1	\$113,750	\$1,183	\$853	\$443	\$741	0.03%
Washington	Addison	5	\$127,400	\$2,107	\$956	\$496	\$1,612	0.18%
	Beals	3	\$356,800	\$5,930	\$2,676	\$1,389	\$4,542	1.22%
	Cutler	1	\$54,474	\$861	\$409	\$212	\$649	0.22%
	Eastport	1	\$16,000	\$424	\$120	\$62	\$362	0.02%
	Harrington	2	\$347,850	\$7,246	\$2,609	\$1,354	\$5,893	0.79%
	Jonesport	1	\$10,300	\$210	\$77	\$40	\$170	0.02%
	Milbridge	1	\$319,820	\$7,306	\$2,399	\$1,245	\$6,061	0.53%
	Rocque Bluffs	3	\$121,356	\$1,262	\$910	\$472	\$790	0.38%
Steuben	3	\$68,000	\$466	\$511	\$265	\$201	0.02%	
Washington Total		20	\$1,422,000	\$25,813	\$10,666	\$5,535	\$20,278	0.28%
York	Biddeford	1	\$173,800	\$3,516	\$1,304	\$676	\$2,839	0.01%
	Kennebunkport	1	\$4,800	\$64	\$36	\$19	\$46	0.00%
	Kittery	1	\$2,265,900	\$39,556	\$16,994	\$8,818	\$30,738	0.26%
	Saco	1	\$3,500	\$74	\$26	\$14	\$60	0.00%
York Total		4	\$2,448,000	\$43,210	\$18,360	\$9,527	\$33,683	0.06%
<b>Grand Total</b>		<b>84</b>	<b>\$12,916,360</b>	<b>\$180,459</b>	<b>\$96,979</b>	<b>\$50,322</b>	<b>\$130,136</b>	<b>0.05%</b>

### Property Tax Impacts- CCP/EIS Alternative C

Table G-3 shows how we estimated gross and net property tax losses for respective towns resulting from Service acquisition of privately-owned islands proposed in Alternative C. Net property tax losses were determined after including the estimated RRS Payments (at both full and appropriated funding levels). Table G-3 also estimates the percentage increase in mil rates for each town from implementing Alternative C.

Overall, the property tax impacts are relatively small for the region. If all islands proposed in Alternative C are acquired by the Service, property taxes would rise in the affected towns by approximately \$225,000, an average of 0.08% assuming RRS payments at the FY02 level. Similar to Alternative B, the town with the largest absolute reduction in taxes would be Kittery at \$30,738, with the Town of Frenchboro the most affected in proportional terms. Data on assessed value was available for only two of the three islands proposed for acquisition in Frenchboro. If these islands are acquired, there would be an estimated increase of 9.36% in Frenchboro's mil rate, with total taxes lost at \$6,517 after RRS payments. The increase in the mil rate for Frenchboro would be larger if all three islands are acquired.

**Table G-3 Property Tax Impacts from Acquisition of Privately Owned, Non-Eagle Site Islands in Alternative C**  
(See Attachment 1 for data on islands in each town.)

County	Town	Number of Islands	Tax Assessed Values	Gross Tax Loss	Refuge Revenue Sharing (RRS) Payments	52% of RRS Payments	Tax Loss Net of 52% RRS Payments	% Increase in Property Tax Net of RRS Payments (mill rate)
Cumberland	Cape Elizabeth	1	\$36,400	\$739	\$273	\$142	\$597	0.00%
	Freeport	2	\$359,900	\$6,876	\$2,699	\$1,401	\$5,475	0.04%
	Harpswell	4	\$547,100	\$5,889	\$4,103	\$2,129	\$3,760	0.06%
	Portland	1	\$436,800	\$10,484	\$3,276	\$1,700	\$8,785	0.01%
	Yarmouth	1	\$131,300	\$2,863	\$985	\$511	\$2,352	0.02%
Cumberland Total		9	\$1,511,500	\$26,851	\$11,336	\$5,882	\$20,969	0.02%
Hancock	Bar Harbor	3	\$181,200	\$2,602	\$1,359	\$705	\$1,897	0.02%
	Brooklin	1	\$188,100	\$2,006	\$1,411	\$732	\$1,274	0.09%
	Brooksville	2	\$161,100	\$1,225	\$1,208	\$627	\$598	0.05%
	Deer Isle	8	\$1,005,700	\$14,608	\$7,555	\$3,920	\$10,688	0.45%
	Franklin	1	\$61,000	\$855	\$458	\$237	\$617	0.07%
	Frenchboro	4	\$568,500	\$8,730	\$4,264	\$2,212	\$6,517	9.36%
	Gouldsboro	4	\$1,512,000	\$16,368	\$11,340	\$5,884	\$10,484	0.58%
	Hancock	1	\$22,900	\$231	\$172	\$89	\$142	0.01%
	Sorrento	3	\$2,755,100	\$27,504	\$20,663	\$10,722	\$16,782	2.19%
	Stonington	3	\$147,000	\$990	\$1,103	\$572	\$418	0.02%
Hancock Total	Swans Island	4	\$181,500	\$3,001	\$1,361	\$706	\$2,295	0.28%
	Winter Harbor	1	\$636,500	\$7,783	\$4,774	\$2,477	\$5,306	0.73%
Hancock Total		35	\$7,420,600	\$85,904	\$55,667	\$28,886	\$57,018	0.26%
Kennebec	Gardiner	1	\$1,800	\$38	\$14	\$7	\$31	0.00%
Kennebec Total		1	\$1,800	\$38	\$14	\$7	\$31	0.00%
Knox	Camden	1	\$989,300	\$15,985	\$7,420	\$3,850	\$10,049	0.11%

Appendix G – Property Tax Analysis

County	Town	Number of Islands	Tax Assessed Values	Gross Tax Loss	Refuge Revenue Sharing (RRS) Payments	52% of RRS Payments	Tax Loss Net of 52% RRS Payments	% Increase in Property Tax Net of RRS Payments (mill rate)
	Friendship	3	\$256,100	\$2,795	\$1,921	\$997	\$1,799	0.15%
	Isle Au Haut	1		\$0	\$43	\$22	-\$22	-0.01%
	Matinicus Isle	5	\$593,360	\$5,811	\$4,450	\$2,309	\$3,501	3.48%
	ME Unor Terr	3	\$429,640	\$2,861	\$3,222	\$1,672	\$1,189	0.20%
	Muscle Ridge	1	\$224,620	\$1,586	\$1,685	\$874	\$712	1.67%
	North Haven	1	\$10,500	\$118	\$79	\$41	\$78	0.00%
	Owls Head	1	\$315,000	\$4,452	\$2,363	\$1,226	\$3,226	0.17%
	Rockport	1	\$27,120	\$396	\$203	\$106	\$290	0.00%
	St. George	4	\$144,900	\$1,754	\$1,087	\$564	\$1,190	0.03%
	Vinalhaven	6	\$696,300	\$8,364	\$5,222	\$2,710	\$5,654	0.26%
Knox Total		27	\$3,686,840	\$44,122	\$27,694	\$14,370	\$27,666	0.10%
Lincoln	Boothbay	1	\$1,973,500	\$21,422	\$14,801	\$7,680	\$13,741	0.32%
	Boothbay Harbor	1	\$1,749,100	\$21,854	\$13,118	\$6,807	\$15,047	0.36%
	Bristol	1	\$16,500	\$147	\$124	\$64	\$83	0.00%
	Damariscotta	1	\$73,600	\$1,244	\$552	\$286	\$958	0.03%
	Southport	1	\$367,800	\$2,462	\$2,759	\$1,431	\$1,030	0.08%
Lincoln Total		5	\$4,180,500	\$47,129	\$31,355	\$16,270	\$30,859	0.19%
Sagadahoc	Bath	2	\$109,800	\$2,306	\$824	\$427	\$1,879	0.02%
	Topsham	1	\$4,000	\$71	\$30	\$16	\$56	0.00%
	Woolwich	2	\$187,700	\$1,697	\$1,408	\$730	\$967	0.04%
Sagadahoc Total		5	\$301,500	\$4,075	\$2,310	\$1,199	\$2,876	0.01%
Waldo	Islesboro	1	\$113,750	\$1,183	\$853	\$443	\$741	0.03%
Waldo Total		1	\$113,750	\$1,183	\$853	\$443	\$741	0.03%
Washington	Addison	10	\$924,800	\$11,537	\$5,221	\$2,709	\$8,828	0.98%
	Beals	6	\$417,955	\$6,940	\$3,135	\$1,627	\$5,314	1.43%
	Cutler	2	\$158,490	\$2,508	\$1,189	\$617	\$1,891	0.65%
	Eastport	3	\$402,400	\$9,227	\$3,018	\$1,566	\$7,661	0.47%
	Harrington	4	\$694,100	\$7,350	\$5,206	\$2,701	\$4,649	0.62%
	Jonesport	5	\$808,510	\$16,588	\$6,064	\$3,147	\$13,441	1.25%
	Machiasport	1	\$198,700	\$3,151	\$1,490	\$773	\$2,377	0.39%
	ME Unor Terr	2	\$60,000	\$544	\$450	\$234	\$310	N/A
	Milbridge	2	\$2,058,675	\$7,306	\$2,399	\$1,245	\$6,061	0.53%
	Pembroke	2	\$54,900	\$890	\$412	\$214	\$677	0.12%
	Rocque Bluffs	3	\$121,356	\$1,262	\$910	\$472	\$790	0.38%
	Steuben	4	\$89,000	\$466	\$668	\$347	\$119	0.01%
	Machias	1	\$53,200	\$1,059	\$399	\$207	\$852	0.05%
Washington Total		45	\$6,042,086	\$68,828	\$30,560	\$15,858	\$52,971	0.52%
York	Biddeford	1	\$173,800	\$3,516	\$1,304	\$676	\$2,839	0.01%
	Kennebunkport	1	\$4,800	\$64	\$36	\$19	\$46	0.00%
	Kittery	1	\$2,265,900	\$39,556	\$16,994	\$8,818	\$30,738	0.26%
	Saco	1	\$3,500	\$74	\$26	\$14	\$60	0.00%
York Total		4	\$2,448,000	\$43,210	\$18,360	\$9,527	\$33,683	0.06%
<b>Grand Total</b>		<b>132</b>	<b>\$25,706,576</b>	<b>\$321,341</b>	<b>\$178,149</b>	<b>\$92,441</b>	<b>\$226,814</b>	<b>0.08%</b>

## ATTACHMENT 1 List of Islands and Assessed Values by Alternative and County and Town

### Introduction

Property tax values were obtained from municipal records either by phone or by in-person inspection of tax records.

“CIREG” in the tables below refers to the Coastal Island Registry Number, a unique identifier for islands given by the State of Maine Planning Office.

Bald eagle nesting islands larger than 200 acres were excluded from the tax analysis as described in the preceding narrative. These excluded islands are presented by alternative in Tables 2B and 2C below. No islands are excluded in Alternative A. An “N/A” in Tables 1A, 1B, and 1C below indicate that no information was available from the town, or the town records listed the island as having no value.

The following table shows the islands for which no property tax loss estimates were made:

### Islands with No Property Tax Impact Calculations and the CCP Alternative Affected

#### Eagle Islands over 200 Acres

Town	Island Name	CI-REG	CCP Alternative		
			A	B	C
Cranberry Isles	Great Cranberry	59-270			√
	Little Cranberry	59-313			√
Isle Au Haut	Isle Au Haut	63-230			√
Islesboro	Islesboro	77-012			√
Mt. Desert	Bartlett I	59-240			√
Swans Island	Swans	59-413			√
Verona	Verona	59-570			√
Vinalhaven	Vinalhaven	63-160			√
	Penobscot I	63-093			√

#### Islands Determined to be in Public/Non Profit Ownership

Town	Island Name	CI-REG	CCP Alternative		
			A	B	C
Blue Hill	Conary Nub	59-137	√	√	√
Georgetown	Seguin I	73-320		√	√

#### Islands with Missing Valuation Data

Town	Island Name	CI-REG	CCP Alternative		
			A	B	C
Deer Isle	Current I	59-849			√
	Inner Porcupine I	59-799		√	√
	Outer Porcupine I	59-800		√	√
Isle Au Haut	Fog I	63-264		√	√
Rocque Bluffs	Hope I	79-393		√	√
South Bristol	Thread of Life	65-258		√	√
Steuben	Bald RK	59-036		√	√

**Table 1A: Alternative A Island Assessed Values**

County	Town	Island Name	Ci-Reg	Land & Building Value
Cumberland	Cape Elizabeth	Ram I	55-521	\$36,400
	Harpwell	LT Whaleboat I	55-282	\$174,800
		Turnip I	55-427	\$6,000
Cumberland Total				\$217,200
Cumberland	Brooklin	Mahoney I	59-933	\$188,100
	Brooksville	Spectacle I	59-673	\$149,000
	Deer Isle	Compass I	59-790	\$17,500
		Western I	59-675	\$61,600
	Gouldsboro	Sally I	59-037	\$73,200
	Stonington	Scraggy I	59-836	\$11,400
	Swans Island	Gooseberry I	59-398	\$42,500
Hancock Total				\$543,300
Knox	Friendship	Harbor I	63-701	\$185,500
	Matinicus Isle	LT Green I	63-418	\$19,560
			63-654	\$58,800
		Two Bush I	63-901	\$17,500
		Wooden Ball I	63-917	\$490,000
	ME Unor Terr	Large Green I	63-655	\$406,640
		Oak	63-421	\$9,500
	North Haven	Mouse I	63-330	\$10,500
Rockport	Ram I	63-323	\$27,120	
Knox Total				\$1,225,120
Lincoln	Boothbay	Damariscove I	65-280	\$1,973,500
	Bristol	Haddock	65-200	\$16,500
Lincoln Total				\$1,990,000
Washington	Addison	Big Nash I/Cone	79-626	\$22,400
		Flat	79-621	\$8,500
		Nash	79-627	\$90,700
		The Ladle	79-632	\$1,000
	Eastport	Spectacle I	79-132	\$16,000
	Steuben	Eastern I	79-843	\$20,000
Washington Total				\$158,600
York	Biddeford	Wood	81-015	\$173,800
	Saco	Eagle I	81-010	\$3,500
York Total				\$177,300

**Table 1B: Alternative B (The Service's Preferred Alternative) Island Assessed Values**

County	Town	Island Name	Ci-Reg	Land & Building Value
Cumberland	Cape Elizabeth	Ram I	55-521	\$36,400
	Harpswell	Lt Whaleboat (SE)	55-283	\$67,300
		Lt Whaleboat I	55-282	\$174,800
		Ragged I	55-626	\$299,000
		Turnip I	55-427	\$6,000
	Portland	House I	55-381	\$436,800
Yarmouth	Lanes I	55-200	\$131,300	
Cumberland Total				\$1,151,600
Hancock	Bar Harbor	Black	59-132	\$104,200
		The Twinnies (S)	59-161	\$8,325
		Twinnies (N)	59-160	\$20,400
	Blue Hill	Conary Nub	59-137	Public
	Brooklin	Mahoney I	59-933	\$188,100
	Brooksville	Spectacle I	59-673	\$149,000
	Deer Isle	Bear I	59-925	\$334,870
		Compass I	59-790	\$17,500
		Inner Porcupine I	59-799	N/A
		LT Sprucehead	59-772	\$173,000
		Outer Porcupine I	59-800	N/A
		Western I	59-675	\$61,600
	Franklin	Buckskin I	59-110	\$61,000
	Frenchboro	Crow I	59-448	\$53,000
		Harbor I	59-450	N/A
		Pond I	59-347	\$493,500
	Gouldsboro	Sally I	59-037	\$73,200
		Sheep I	59-039	\$78,000
	Sorrento	Bean I	59-190	\$95,100
	Stonington	Eastern Mark	59-956	\$47,500
		Scraggy I	59-836	\$11,400
		Shingle	59-959	\$88,100
	Swans Island	East Sister	59-447	\$128,000
		Gooseberry I	59-398	\$42,500
		Johns I	59-351	N/A
		Three Bush I	59-980	\$11,000
	Hancock Total			
Knox	Friendship	Harbor I	63-701	\$185,500
		Ram I	63-731	\$3,600
		Sand Island	63-370	\$67,000
	Isle Au Haut	Fog I	63-264	N/A
	Matinicus Isle	Little Hurricane	63-626	\$7,500
		LT Green I	63-418	\$19,560
			63-654	\$58,800
		Two Bush I	63-901	\$17,500
		Wooden Ball I	63-917	\$490,000
	ME Unor Terr	Crow I	63-651	\$13,500
		Large Green I	63-655	\$406,640
		Oak	63-421	\$9,500
	Muscle Ridge	Graffam I	63-634	\$224,620
	North Haven	Mouse I	63-330	\$10,500
	Rockport	Ram I	63-323	\$27,120

**Table 1B: Alternative B (The Service's Preferred Alternative) Island Assessed Values**

County	Town	Island Name	Ci-Reg	Land & Building Value
	St. George	Bar I	63-802	\$66,900
		Hart I	63-833	\$89,400
		The Brothers (C)	63-580	\$26,000
		The Brothers (N)	63-579	\$26,000
		The Brothers (S)	63-581	\$26,000
	Vinalhaven	Crane I (S)	63-505	\$37,700
		Green Ledge	63-135	\$9,400
<b>Knox Total</b>				<b>\$1,822,740</b>
Lincoln	Boothbay	Damariscove I	65-280	\$1,973,500
	Boothbay Harbor	Fisherman	65-274	\$1,749,100
	Bristol	Haddock	65-200	\$16,500
	Damariscotta	Hog I	65-109	\$73,600
	South Bristol	Thread of Life	65-258	N/A
<b>Lincoln Total</b>				<b>\$3,812,700</b>
Sagadahoc	Georgetown	Seguin I	73-320	Non-profit Ownership
	Phippsburg	Fuller RK	73-308	N/A
	Topsham	Freyee I (W)	73-030	\$4,000
<b>Sagadahoc Total</b>				<b>\$4,000</b>
Waldo	Islesboro	Ram I	77-045	\$113,750
<b>Waldo Total</b>				<b>\$113,750</b>
Washington	Addison	Big Nash I/Cone	79-626	\$22,400
		Duck Ledge I	79-412	\$4,800
		Flat	79-621	\$8,500
		Nash	79-627	\$90,700
		The Ladle	79-632	\$1,000
	Beals	Big Ram I	79-601	\$126,000
		Fisherman	79-694	\$204,000
		Outer Ram I	79-602	\$26,800
	Cutler	Cape Wash I	79-297	\$54,474
	Eastport	Spectacle I	79-132	\$16,000
	Harrington	Jordans Delight	79-922	\$283,100
		Strout I	79-763	\$149,800
		Trafton I	79-909	\$198,050
	Jonesport	Sheep I	79-514	\$10,300
	Milbridge	Pinkham I	79-787	\$319,820
	Rocque Bluffs	Fellows I	79-464	\$105,315
		Hope I	79-393	N/A
		LT Ram I	79-462	\$16,041
	Steuben	Bald RK	59-036	N/A
		Eastern I	79-843	\$20,000
Sheep I		79-835	\$48,000	
<b>Washington Total</b>				<b>\$1,705,100</b>
York	Biddeford	Wood	81-015	\$173,800
	Kennebunkport	Folly I	81-101	\$4,800
	Kittery	Appledore I	81-191	\$2,265,900
		Duck I	81-181	\$25,100
	Saco	Eagle I	81-010	\$3,500
<b>York Total</b>				<b>\$2,473,100</b>

Table 1C: Alternative C Island Assessed Values

County	Town	Island Name	Ci-Reg	Land & Building Value	
Cumberland	Cape Elizabeth	Ram I	55-521	\$36,400	
	Freeport	Sow and Pigs	55-245	\$152,800	
		Williams I	55-295	\$207,100	
	Harpswell	Lt Whaleboat (SE)	55-283	\$67,300	
		LT Whaleboat I	55-282	\$174,800	
		Ragged I	55-626	\$299,000	
		Turnip I	55-427	\$6,000	
	Portland	House I	55-381	\$436,800	
Yarmouth	Lanes I	55-200	\$131,300		
Cumberland Total				\$1,511,500	
Hancock	Bar Harbor	Black	59-132	\$104,200	
		Jed I	59-136	\$56,600	
		Twinnies (N)	59-160	\$20,400	
	Blue Hill	Conary Nub	59-137	Public Ownership	
	Brooklin	Mahoney I	59-933	\$188,100	
	Brooksville	Bear Head I	59-596	\$12,100	
		Spectacle I	59-673	\$149,000	
	Cranberry Isles	Great Cranberry	59-270	Eagle Island > 200	
		Little Cranberry	59-313	Eagle Island > 200	
	Deer Isle	Beach I	59-687	\$376,230	
		Bear I	59-925	\$334,870	
		Compass I	59-790	\$17,500	
		Current I	59-849	\$42,500	
		Inner Porcupine I	59-799	N/A	
		LT Sprucehead	59-772	\$173,000	
		Outer Porcupine I	59-800	N/A	
	Western I	59-675	\$61,600		
	Franklin	Buckskin I	59-110	\$61,000	
	Frenchboro	Crow I	59-448	\$53,000	
		Harbor I	59-450	N/A	
		LT Black I	59-443	\$22,000	
		Pond I	59-347	\$493,500	
	Gouldsboro	Porcupine I	59-198	\$121,300	
		Sally I	59-037	\$73,200	
		Sheep I	59-039	\$78,000	
		Stave	59-180	\$1,239,500	
	Hancock	Kilkenny Cove I	59-089	\$22,900	
	Mt. Desert	Bartlett I	59-240	Eagle Island > 200	
	Sorrento	Bean I	59-190	\$95,100	
		Calf I	59-177	\$541,000	
		Treasure I	59-170	\$2,119,000	
	Stonington	Eastern Mark	59-956	\$47,500	
		Scraggy I	59-836	\$11,400	
		Shingle	59-959	\$88,100	
	Swans Island	East Sister	59-447	\$128,000	
		Gooseberry I	59-398	\$42,500	
		Johns I	59-351	N/A	
		Swans	59-413	Eagle Island > 200	
		Three Bush I	59-980	\$11,000	
	Verona	Verona	59-570	Eagle Island > 200	
	Winter Harbor	Ironbound I	59-182	\$636,500	
	Hancock Total				\$7,420,600

Table 1C: Alternative C Island Assessed Values

County	Town	Island Name	Ci-Reg	Land & Building Value
Kennebec	Gardiner	Nehumkeag I	61-002	\$1,800
Kennebec Total				\$1,800
Knox	Camden	Curtis I	63-313	\$989,300
		Friendship	Harbor I	63-701
	Ram I		63-731	\$3,600
	Sand Island		63-370	\$67,000
	Isle Au Haut	Fog I	63-264	N/A
		Isle Au Haut	63-230	Eagle Island > 200
	Matinicus Isle	Little Hurricane	63-626	\$7,500
		LT Green I	63-418	\$19,560
			63-654	\$58,800
		Two Bush I	63-901	\$17,500
	ME Unor Terr	Wooden Ball I	63-917	\$490,000
		Crow I	63-651	\$13,500
		Large Green I	63-655	\$406,640
	Muscle Ridge	Oak	63-421	\$9,500
		Graffam I	63-634	\$224,620
	North Haven	Mouse I	63-330	\$10,500
	Owls Head	Sheep I	63-393	\$315,000
	Rockport	Ram I	63-323	\$27,120
	St. George	Bar I	63-802	\$66,900
		The Brothers (C)	63-580	\$26,000
		The Brothers (N)	63-579	\$26,000
		The Brothers (S)	63-581	\$26,000
	Vinalhaven	Bluff Head	63-079	\$96,400
		Crane I (N)*	63-501	\$253,200
		Crane I (S)	63-505	\$37,700
		Green Ledge	63-135	\$9,400
		Neck I	63-081	\$180,700
		Penobscot I (Eagle site)	63-093	\$530,500
		Spectacle I	63-503	\$118,900
Vinalhaven		63-160	Eagle Island > 200	
Knox Total				\$4,217,340
Lincoln	Boothbay	Damariscove I	65-280	\$1,973,500
	Boothbay Harbor	Fisherman	65-274	\$1,749,100
	Bristol	Haddock	65-200	\$16,500
	Damariscotta	Hog I	65-109	\$73,600
	South Bristol	Thread of Life	65-258	N/A
	Southport	Green I	65-423	\$367,800
Lincoln Total				\$4,180,500
Sagadahoc	Bath	Crawford I	73-072	\$109,800
		Stoney	73-065	Eagle Island > 200
	Georgetown	Seguin I	73-320	Non-Profit Ownership
	Phippsburg	Fuller RK	73-308	N/A
	Topsham	Frevee I (W)	73-030	\$4,000
	Woolwich	Lt Lines	73-090	\$67,400
Thorne I		73-067	\$120,300	
Sagadahoc Total				\$301,500
Waldo	Islesboro	Islesboro	77-012	\$256,150,000
		Ram I	77-045	\$113,750
Waldo Total				\$256,263,750

Table 1C: Alternative C Island Assessed Values

County	Town	Island Name	Ci-Reg	Land & Building Value	
Washington	Addison	Big Nash I/Cone	79-626	\$22,400	
		Duck Ledge I	79-412	\$4,800	
		Flat	79-621	\$8,500	
		Hardwood I	79-410	\$199,600	
		Lower Birch I	79-742	\$249,900	
		Nash	79-627	\$90,700	
		Plummer I (W)	79-635	\$147,200	
		Ram I	79-623	\$91,000	
		The Ladle	79-632	\$1,000	
		Toms I (N)	79-610	\$109,700	
	Beals	Big Ram I	79-601	\$126,000	
		Fisherman	79-694	\$204,000	
		French House	79-523	\$29,600	
		Mink I	79-679	\$20,000	
		Outer Ram I	79-602	\$26,800	
		Pig	79-520	\$11,555	
	Cutler	Cape Wash I	79-297	\$54,474	
		Lt River	79-304	\$104,016	
	Eastport	Matthews I	79-128	\$56,000	
		Spectacle I	79-132	\$16,000	
		Treat I	79-370	\$330,400	
	Harrington	Foster I	79-789	\$341,250	
		Ripley I	79-778	\$5,000	
		Strout I	79-763	\$149,800	
		Trafton I	79-909	\$198,050	
	Jonesport	Anquilla I	79-574	\$2,205	
		Double Shot	79-580	\$1,930	
		Lt Spruce	79-481	\$5,775	
		Rocque I (Eagle site)	79-475	\$788,300	
		Sheep I	79-514	\$10,300	
	Machiasport	Bar I	79-291	\$198,700	
	ME Unor Terr	Freds I	79-193	\$44,000	
		Gooseberry I	79-219	\$16,000	
	Milbridge	Bar I	79-820	\$1,738,855	
		Pinkham I	79-787	\$319,820	
	Pembroke	Sams	59-587	\$10,000	
		Wilbur Neck (N)	79-081	\$44,900	
	Rocque Bluffs	Fellows I	79-464	\$105,315	
		Hope I	79-393	N/A	
		LT Ram I	79-462	\$16,041	
	Steuben	Bald RK	59-036	N/A	
		Eastern I	79-843	\$20,000	
		Pop I	79-832	\$21,000	
		Sheep I	79-835	\$48,000	
	Machias	Yellow Head I	79-290	\$53,200	
	Washington Total				\$6,042,086
	York	Biddeford	Wood	81-015	\$173,800
		Kennebunkport	Folly I	81-101	\$4,800
		Kittery	Appledore I	81-191	\$2,265,900
		Saco	Eagle I	81-010	\$3,500
	York Total				\$2,448,000
	Grand Total				\$282,387,076



## Appendix H



*Shorebird migration*  
Photo by Bob Buchanan

# Seabird Viewing Study Results

- Home States of Seabird/Island Recreationists
- Reported Number of Visits per year for Coastal Recreation
- Seabird Watching of Maine Island Trail Association Members
- Location of Bird-watching Activity

Prepared by Dr. Charles Colgan, Professor of Public Policy and Management, University of Southern Maine, 1995

**Home States of Seabird/Island Recreationists**

Maine Audubon Society			Maine Island Trail Association		
State	N	% of Total	State	N	% of Total
AZ	1	0.1%	AK	1	0.1%
CT	3	0.3%	CA	10	0.9%
DE	1	0.1%	CO	2	0.2%
FL	2	0.2%	CT	40	3.7%
MA	13	1.2%	DC	2	0.2%
MD	2	0.2%	FL	9	0.8%
ME	177	16.2%	GA	2	0.2%
NH	10	0.9%	IL	1	0.1%
NJ	1	0.1%	IN	1	0.1%
NY	3	0.3%	LA	2	0.2%
PA	1	0.1%	MA	136	12.4%
RI	2	0.2%	MD	12	1.1%
SC	1	0.1%	ME	435	39.8%
Missing	2	0.2%	MI	2	0.2%
<b>TOTAL</b>	<b>219</b>	<b>20.0%</b>	MN	3	0.3%
			MO	2	0.2%
			NC	4	0.4%
			NH	79	7.2%
			NJ	20	1.8%
			NM	1	0.1%
			NY	35	3.2%
			OH	5	0.5%
			PA	18	1.6%
			QUEBEC	2	0.2%
			RI	7	0.6%
			SC	1	0.1%
			TX	2	0.2%
			VA	5	0.5%
			VT	26	2.4%
			WA	4	0.4%
			WI	2	0.2%
			Missing	4	0.4%
			<b>TOTAL</b>	<b>875</b>	<b>80.0%</b>

### Reported number of visits per year for coastal recreation

	1-5	6-10	11-20	21-40	41-60	>60	Missing
Maine Residents	202	269	45	40	10	6	39
Non Maine Residents	320	95	33	8	8	6	13
Maine Residents	33.1%	44.0%	7.4%	6.5%	1.6%	1.0%	6.4%
Non Maine Residents	66.3%	19.7%	6.8%	1.7%	1.7%	1.2%	2.7%

### Seabird Watching of Maine Island Trail Association Members

	N	Percent
Do you consider sea bird viewing or photography as a...		
Regular part of island recreation	518	59.2%
Occasional part of island recreation	275	31.4%
Infrequent part of island recreation	42	4.8%
Rarely a part of island recreation	32	3.7%
Missing	8	0.9%

### Location of Bird -Watching Activity

	N	Percent
Kittery to Portland	350	11.8%
Portland to the Kennebec River	507	17.1%
Kennebec River to Port Clyde	564	19.1%
Port Clyde to Verona	520	17.6%
Verona to Blue Hill	520	17.6%
Blue Hill to Schoodic Point	297	10.0%
Schoodic Point to Quoddy Head	201	6.8%



## Appendix I



*Public meeting*  
USFWS photo

# Summary of Public Comments and Service Response

## Draft Comprehensive Conservation Plan and Environmental Impact Statement for Petit Manan National Wildlife Refuge Complex, December 22, 2004

- Introduction
- Summary of Comments Received
- Service Responses to Comments

<b>Contents</b>	<b>Introduction .....</b>	<b>I-3</b>
	<b>Summary of Comments Received .....</b>	<b>I-4</b>
	<b>I. Hunting .....</b>	<b>I-5</b>
	<b>II. Deer Hunting on the Petit Manan Point Division .....</b>	<b>I-5</b>
	<b>III. Furbearer Management .....</b>	<b>I-7</b>
	<b>IV. Waterfowl Management .....</b>	<b>I-7</b>
	<b>V. Environmental Education .....</b>	<b>I-9</b>
	<b>VI. Public Use Infrastructure on Petit Manan Point Division .....</b>	<b>I-11</b>
	<b>VII. Wilderness .....</b>	<b>I-12</b>
	<b>VIII. Land Acquisition .....</b>	<b>I-13</b>
	<b>IX. Seabird Island Management .....</b>	<b>I-16</b>
	<b>X. Bald Eagle Management .....</b>	<b>I-20</b>
	<b>XI. Administration .....</b>	<b>I-21</b>
	<b>XII. Partnerships .....</b>	<b>I-23</b>
	<b>XIII. Impacts on the State and Local Economies .....</b>	<b>I-24</b>
	<b>XIV. Recommended New Alternatives and Revised Scope of Analysis .....</b>	<b>I-28</b>
	<b>XV. Public Involvement .....</b>	<b>I-28</b>
	<b>XVI. General Support for Specific Alternatives in Draft EIS .....</b>	<b>I-29</b>
	<b>XVII. Clarifications and Corrections .....</b>	<b>I-29</b>
	<b>XVIII. Miscellaneous .....</b>	<b>I-30</b>

## Introduction

We published our Draft Comprehensive Conservation Plan (CCP) and Environmental Impact Statement (EIS) for the Petit Manan National Wildlife Refuge Complex and released it for 68 days of public review and public comment from April 30 to July 6, 2004.

This summary responds to those comments. After we had evaluated them, we modified alternative B, our preferred alternative in the EIS. Our modifications include additions, corrections, or clarifications of the preferred actions. Although none of those modifications warranted major revisions between draft and final plans, please note these four important changes in our final EIS.

1. We propose changing the name of the refuge complex to “Maine Coastal Islands National Wildlife Refuge” (see p. I-21). We will use this name in outreach and administration to refer to the five refuges collectively. It does not change the name or status of the individual refuge units.
2. We clarify the new hunting opportunity proposed on Petit Manan Point Division. Our proposal for deer hunting in the draft CCP/EIS did not stipulate which areas or which seasons would be open. We propose opening the deer hunt to (a) hunters with disabilities during the regular rifle season, and (b) hunters of all abilities during the regular muzzle-loader season. The hunting area will lie in the northern half of the division, above the entrance road (see p. I-5).
3. We propose changing the wilderness study area (WSA) boundaries to exclude all private lands and existing rights-of-way on Cross and Bois Bubert Islands, and the common boat landing and Lily Lake on Bois Bubert island. All WSA boundaries will be defined by the mean high water mark surrounding the islands. Appendix D, “Wilderness Inventory and Study” includes those changes.
4. We propose to exclude an 8-acre tract on Wood Island from our expansion proposal. The tract is owned by the Coast Guard and includes an historic lighthouse. The Coast Guard requested we exclude this tract, which is under a licensing agreement with the American Lighthouse Foundation for repair, maintenance, and historic preservation.

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

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

## Summary of Comments Received

We received 594 public responses in oral testimony at public hearings, in phone calls, or in written or electronic documents.

We held four formal public hearings.

- 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 four comments from federal or state agencies.

- U.S. Department of Homeland Security, U.S. Coast Guard
- U.S. Environmental Protection Agency
- National Park Service, Acadia National Park
- Maine Department of Inland Fisheries and Wildlife

We received 20 comments from local and national conservation organizations, associations, groups, or clubs.

- Conservation Law Foundation
- The Ocean Conservancy
- The Wilderness Society
- Maine Chapter of the Wildlife Society
- Friends of Maine Seabird Islands
- Friends of Seguin Island
- Friends of Sears Island
- Boothbay Region Land Trust
- Islesboro Islands Trust
- Vinalhaven Land Trust
- Maine Coast Heritage Trust
- Bagaduce Watershed Association
- Searsport Comprehensive Plan Committee
- The Maine Aquaculture Association
- Atlantic Salmon of Maine

- Home Inc.
- American Lighthouse Foundation
- Friends of Wood Island Lighthouse
- National Audubon Society
- Sierra Club of Maine

We received 543 responses from individuals.

- 492 electronic mailings
- 51 letters and phone calls

The following discussions summarize the issues raised during the public comment period and our responses to them. Several refer to the full-text version of our draft, and indicate how our proposed changes are reflected in this final CCP/EIS. If you would like to obtain a copy of either the draft or the final EIS, in full-text versions, they are available online at <http://library.fws.gov/ccps.htm>. You may also request them on CD-ROM or in print by contacting the refuge headquarters.

Maine Coastal Islands National Wildlife Refuge  
P.O. Box 279, 14 Water Street  
Milbridge, ME 04658-0279  
Phone: (207) 546-2124  
Email: [petitmanan@fws.gov](mailto:petitmanan@fws.gov)

## I. Hunting

**Comment.** Some comments opposed any form of hunting on national wildlife refuges, and expressed concern that hunting is inconsistent with the very meaning of the phrase “refuge for wildlife.”

**Response.** The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) identifies hunting as one of six priority, wildlife-dependent public uses that are to receive enhanced consideration in refuge planning. The others are fishing, wildlife observation and photography, and environmental education and interpretation. Our mandate is to provide high-quality opportunities for these priority uses when they are compatible with respective refuge purposes, goals, and other management priorities. The Improvement Act did not establish a hierarchy among the six priority uses, but provides for the refuge managers to facilitate them when they are compatible and appropriate.

We have implemented a hunt program on the refuge during the past four years. We opened the Gouldsboro and Sawyers Marsh mainland divisions for hunting small and big game, migratory game birds, and waterfowl, and allowed hunting for white-tailed deer on Bois Bubert Island. We also opened 22 islands for hunting migratory waterfowl. The success of the hunt program, in combination with requests from the MDIFW, provided the basis for expanding the program. Appendix C includes our compatibility determination on the refuge hunt program.

## II. Deer Hunting on the Petit Manan Point Division

**Comment.** This proposal generated the most comment. Some individuals and the MDIFW support hunting on the Petit Manan Point Division (the Point) and expanding what many consider a traditional activity in Maine. One individual commented that he had seen some overbrowsing by deer of Atlantic white cedar, and believes a hunt will reduce negative impacts on vegetation.

We received 52 comments from individuals who oppose deer hunting on the Point. Many of those do not oppose hunting per se, but rather, oppose hunting on the Point, especially if it is only for recreation. Some of those comments came from private property owners on the Point, or their relatives. We identify each of several reasons they cited for their opposition as separate comments below.

**Response.** We acknowledge the many thoughtful, heartfelt comments that oppose deer hunting on the Point.

After having carefully considered all public comments, and having taken into account our obligation to provide opportunities for this priority public use, where compatible, we have clarified our deer hunting proposal on the Point. We will allow (a) hunters with disabilities to hunt during the regular rifle season (firearms); and, (b) hunters of all abilities to hunt during the regular muzzleloader season. Both hunts will take place north of the entrance road, in the area often referred to as “the Birch Point Trail area.”

We will publish the details of both hunts within the 90 days following the approval of the final CCP. We anticipate restricting the hunters with disabilities to blinds constructed at strategic locations inside the hunt area. We will develop and post a well-defined area for the muzzle-loader hunt.

**Comment.** Several reviewers suggested there is no biological need to control deer on Petit Manan Point and, therefore, opening it to deer hunting is not warranted.

**Response.** Hunting is one method for managing deer populations, but it is also a legitimate and generally accepted recreational activity, and part of the priority public use mandate we mention above. That deer have overpopulated an area or have damaged resources is not the sole justification for a deer hunt on a national wildlife refuge. Here, for example, if the state or the refuge manager determine that a harvestable population lives in wildlife management district 27, the refuge manager can implement a deer hunting program after having determined its compatibility.

**Comment.** Several reviewers suggested that opening Petit Manan Point to deer hunting violates our original purchase and sales agreement with the Mague family.

**Response.** We cannot dispute that the Mague family may have held expectations about hunting. However, our thorough review of all the acquisition documents found no specific language that would restrict our ability to conduct hunting or other priority public uses on the Point.

**Comment.** Several reviewers suggested that opening Petit Manan Point to hunting will impact other priority public users.

**Response.** We recognize that hunting could impact or restrict other priority public uses on the Point during the hunting season. We will provide opportunities for the full range of priority public uses, and attempt to minimize any conflicts among them. Deer hunting will occur in late fall, when refuge visitation is significantly lower than during summer and early fall. We will exclude the southern part of the Point from the hunt area, thus allowing the Hollingsworth Memorial Trail area to remain open during the hunt. State of Maine regulations prohibit hunting on Sunday, so visitors will be able to access both the Birch Point Trail and the Hollingsworth Memorial Trail on that day each week.

**Comment.** Hunting will require additional law enforcement; and, it raises concerns about public safety, the increased potential for trespass and vandalism on adjacent private properties, and increased road damage.

**Response.** We agree that implementing a deer hunt will increase the need for law enforcement. Our preferred alternative proposes adding two refuge staff with law enforcement authority, and working with MDIFW and other Service offices to provide additional law enforcement support during the hunting season.

We believe that hunting on the Point can be conducted safely. Hunters with disabilities will hunt in designated locations. We will clearly post the boundaries of the area open to hunting, so that hunters and non-hunters alike are aware of that area. We will establish well-marked safety zones near residential and other high traffic areas, and will require hunters to adhere to all state safety regulations. The increased road use by hunters would not result in damage to the private section of the road, as all vehicles will be restricted to the refuge portion of the road, and designated parking areas will be available on the refuge for hunters.

We acknowledge that trespass and vandalism have occurred on the refuge and on private land on the Point. We will continue to work with our refuge neighbors on solutions to those problems. We will do our best to reduce or eliminate them on refuge lands, and will reassess or discontinue refuge management actions that contribute to problems on adjacent private land.

### **III. Furbearer Management**

**Comment.** Some individuals opposed the furbearer trapping proposed in alternative C. One believes that killing wildlife by any means is inconsistent with the concept of a refuge. One individual and the MDIFW, who consider trapping a traditional recreational activity, recommended we allow the trapping of furbearers in our preferred alternative, under state and refuge regulations, on the Gouldsboro Bay, Sawyers Marsh, and Petit Manan Point mainland divisions, and on Cross and Bois Bubert islands.

**Response.** Our preferred alternative B did not propose a general furbearer-trapping season for several reasons: (a) the public did not express an interest in a furbearer trapping season before we released our draft; (b) it is not a priority public use; (c) it potentially conflicts with priority public uses; and, (d) no biological need mandates that we manage furbearer populations at this time.

Alternative C, objective 6.7, includes a general furbearer trapping season. Our staff now conducts or authorizes all furbearer management on the refuge in association with seabird restoration projects on offshore islands. We do not see a need at this time to open the refuge to a general trapping program. We will continue our evaluations and discussions with the MDIFW and, later, may consider opening some of the refuge. We will, of course, do another environmental analysis and ask for public review and comment on any future trapping proposal.

### **IV. Waterfowl Management**

**Comment.** One reviewer commented that the CCP should emphasize a need for increased intertidal and coastal marsh protection to benefit waterfowl and other wetland-dependent species of concern.

**Response.** We agree that intertidal and coastal marsh habitats are significant resource areas. Goal 2 specifically identifies the need to maintain high quality wetland habitats on the refuge mainland coast, primarily to benefit migratory birds of high conservation priority, while also supporting other native, wetland-dependent species of concern. Objective 2.1 focuses specifically on the importance of maritime saltmarsh and estuaries and their value to shorebirds and black ducks. Our strategies for that objective indicate how we intend to monitor the habitat and survey the species during the migrating and breeding seasons.

Goal 4 of the plan outlines the need to protect high quality wetland habitats on coastal islands. Objective 4.1 specifically mentions protecting the coastal saltmarsh on Cross Island. That objective includes strategies to monitor threats to the habitat and conduct surveys to determine its use by species of conservation concern.

The refuge protects significant acreage in intertidal habitat. Objective 4.2 recognizes the significance of that habitat to shorebirds and waterfowl. We also recommend additional research on harvesting intertidal species such as rockweed, bloodworm, blue mussel, and periwinkle, to evaluate the impacts of human disturbance and the loss of forage to nesting and migratory birds of conservation concern. Because federal regulations prohibit the removal of any vegetation from a refuge, we do not allow rockweed harvesting.

We also propose further cooperative studies to evaluate the use of intertidal habitats by migratory birds and potential impacts on those habitats. Objectives 4.2, 4.4, and 4.5 further describe those studies. Finally, we propose to acquire additional coastal wetlands in section VIII, “Land Acquisition,” below.

**Comment.** One reviewer commented that the CCP should include more on waterfowl surveys and banding programs, as strategies under our biological objectives, for example.

**Response.** We have worked with biologists from Patuxent Wildlife Research Center to band waterfowl during fall migration on the freshwater impoundments on the Point and a freshwater pond on Bois Bubert Island. However, the low numbers of resident ducks, the arrival of migrating waterfowl late in September, and the difficulty in attracting them with bait due to their preference for stands of wild rice hampered the banding. Bois Bubert Island provides a freshwater resting area, but access depends on sea conditions, and extreme fluctuations in water level make maintaining traps a logistical challenge. Given those considerations, we intentionally did not include strategies for increased waterfowl banding and surveys, except those described below for common eider and wintering harlequin ducks.

Objective 5.8, “Common Eider,” outlines our involvement in cooperative research with the MDIFW and the U.S. Geological Survey in an extensive project for the banding of common eider. That project focuses on eider recruitment and survival rates in the Gulf of Maine. In the past three years, more than 5,000 eiders have been banded, the largest number of banded eiders in state history. That has helped us better understand their movements and annual mortality rates, and will aid us in making more informed management decisions in the future. We count the number of eider nests on refuge islands every five years, to monitor numbers of breeding birds.

We also have participated as observers in annual waterfowl aerial surveys to assess continental, state, and flyway population levels. Those surveys include breeding, fall, and mid-winter counts conducted by the Service. We also participate in winter harlequin duck studies in cooperation with MDIFW and Acadia National Park.

**Comment.** One reviewer suggested that the planning team should involve more wildlife professionals in preparing and implementing the plan.

**Response.** We highlight our existing professional partnerships throughout chapter 3, “Affected Environment.” We are fortunate to have many retired and active professionals in the area who have been a huge asset in planning and implementing current programs. Their assistance in performing botanical surveys, invertebrate inventories, including dragonfly and damselfly surveys, and extensive spider

surveys has expanded our information database. Those surveys have identified several rare species or species of special concern in Maine.

The spider surveys, in particular, have revealed several previously undescribed species, and have created several new records for the state. That would not have been possible if non-Service professionals had not taken a leading role. Many of our biological objectives come directly from existing state or federal species recovery plans, species assessments, or other regional conservation plans developed by wildlife professionals.

We also invited the involvement of Maine's professional wildlife community by contacting the Maine Chapter of The Wildlife Society, whose members include more than 120 wildlife professionals and other concerned individuals from government agencies, academic institutions, private firms, and non-governmental organizations.

In preparing this plan, we consulted with many professionals from state and federal agencies and the private sector (see chapters 5 and 6). We held numerous public forums throughout the planning process to reach as many people as possible. Chapter 5 describes that process, which dates back to 1995. As we move forward with implementing the plan and producing step-down plans, we will continue to seek new opportunities to draw upon the expertise of as many resource professionals as possible.

**Comment.** Two reviewers suggested we provide as much waterfowl hunting as possible.

**Response.** In 2001, we opened parts of the refuge to waterfowl hunting under state regulations for the first time since Service ownership began. Those areas include the Gouldsboro Bay and Sawyer's Marsh divisions and 22 refuge islands. The intertidal areas of all refuge properties are open to waterfowl hunting according to colonial ordinance. We developed the refuge Hunt Plan in coordination with MDIFW biologists. It recognizes the need to keep some areas closed to provide critical waterfowl feeding and resting areas, especially for American black ducks. As before, when we acquire new refuge properties, we will evaluate them for new waterfowl hunting areas.

## V. Environmental Education

**Comment.** Comments enthusiastically supported the proposed Coastal Education Center, and also recommended specific locations. More than 38 individuals and organizations recommended Sears Island, now owned by the State of Maine, including the Friends of Sears Island, Maine Coast Heritage Trust, Bagaduce Watershed Association, Islesboro Islands Trust, Sierra Club, and Searsport Comprehensive Plan Committee.

Boothbay Region Land Trust also supports the development of a coastal education center, but suggested Boothbay as its location. The Friends of Maine Seabird Islands and the Audubon Seabird Restoration Program, fully support the concept, and recommend that one major criteria for selecting the site be its proximity to coastal islands.

**Response.** The level of interest in the project and the suggestions of specific properties for consideration are most encouraging. Once the CCP has received final approval, we will invite a team of interested partners to finalize site selection criteria designed to meet the vision and goals of the Coastal Education Center and our needs for a new refuge headquarters in the mid-coast area. Once we have defined those criteria, we will guide our evaluation of all potential properties by them, conduct an environmental analysis of the properties that qualify, and seek additional public input before our

final decision. For example, if the State of Maine invites us to consider Sears Island, and the island meets the criteria, we will fully analyze it, along with other, prospective locations.

**Comment.** The Acadia National Park (ANP) expressed an interest in establishing a formal partnership with us to engage in environmental education and training at their Schoodic Education and Research Center.

**Response.** We agree that a stronger partnership could benefit both agencies, and help advance the conservation and stewardship of coastal resources. We will pursue additional environmental education opportunities at ANP's Schoodic facility. This fully complements our preferred alternative, which identifies the need to continue exploring partnership opportunities. We will continue to meet with ANP staff to identify ways to expand and formalize our partnership in environmental education, research, island stewardship, and law enforcement.

**Comment.** We received comments asking us to allow school groups access to Seal Island. The island is closed to general public access year-round because of safety concerns over unexploded ordnance.

**Response.** We still believe that non-essential access to Seal Island poses too great a public safety risk, and our preferred alternative will recommend that it stay closed. The following discussion provides a historical overview, summarizes the basis for our concerns, and indicates our past attempts to mitigate those concerns.

We acquired Seal Island from the U.S. Navy in 1972. Before that, the island had served as a practice bombing range from the early 1940s through 1966. In June 1966, a team from Brunswick Naval Air Station conducted a three-day disposal operation to begin the clearing of unexploded ordnance. In July 1978, a fire that burned on Seal Island for several days caused additional ordnance buried in the soil to explode. The intensity of those explosions forced the firefighters to abandon the island.

In February 1983, the Explosive Ordnance Disposal (EOD) team from Brunswick Naval Air Station attempted to clear unexploded ordnance from the island before a seasonal research crew from National Audubon arrived there to restore Atlantic puffin and tern colonies. That search found an intact 8-inch round and numerous bomb fragments, projectiles, rockets, and pyrotechnics. The team concluded that the rocky areas of Seal Island could be considered safe, but the grassy areas still may contain explosive hazards. The team also concluded that the only way to clear the island of all hazards would be to burn the grass off and remove the soil. The team returned to the island in April 1984, and concentrated on clearing pathways from the boat landing area to the research cabin and clearing the shore out to 50 feet.

In 1984, the Service and the National Audubon Society entered into a Cooperative Agreement to restore Atlantic puffins and terns on the island. From May through August each year, our researchers have monitored recovery and conducted other research on the island. However, they are essential personnel fulfilling a mission-critical activity.

Based on comments from researchers that indicated additional, intact ordnance, the Maine Department of Environmental Protection and the Maine State Police Bomb Squad searched the island in June 2001. That team discovered intact 5-inch Zuni rocket heads on exposed rock on the western part of the island and removed them, but did not search any additional areas.

A 2003 report by the U.S. Army Corps of Engineers (ACOE) provides a historical summary of activities on the former Seal Island Gunnery Range (Project Number D01ME003201), and indicates that a safety hazard remains. Despite our contacts with ACOE, Rock Island, we are unaware of any technology that is not prohibitive in cost or would not result in major impacts on nesting habitat.

Our goal is to provide the safest conditions for everyone entering Seal Island NWR. We will continue to investigate opportunities for removing the ordnance. We believe that cost-effective technology will be available one day to do so without damaging habitat.

**Comment.** Some individuals asked that we expand our environmental education to include programs on the seabird nesting islands during the nesting season, in areas where it could be accommodated without affecting nesting success. The reviewers cited as examples of successful programs the opportunities offered on Machias Seal Island (30 landings per day) by private tour companies, and on Stratton Island, which is run by the National Audubon Society.

**Response.** The refuge seabird islands are closed to all public use during the nesting season. Our staff supervise a few trips each year, typically for media outreach or for professional consultations that will directly benefit seabird restoration. On the other hand, we recognize what a unique experience it is, to be on a seabird island during the nesting season, and we fully appreciate the benefits that could derive from an educational program.

After carefully considering public comments, we agree to further evaluate opportunities to expand that unique activity on a limited number of refuge islands. We will establish guidance on visitation to nesting seabird islands in conjunction with the development of our Visitor Services Plan, now scheduled for completion within two years of CCP approval.

We will continue our involvement in the commercial boat tours that bring nearly 30,000 visitors each year to view seabirds from the water. Our preferred alternative proposes that we cooperate more closely with those tour operators to ensure that the information they share with their customers is accurate and includes a strong conservation message.

## VI. Public Use Infrastructure on Petit Manan Point Division

**Comment.** We received comments asking that we move two interpretive displays on the John Hollingsworth Memorial Trail on Petit Manan Point because they were located too close to the water and detracted from the natural landscape.

**Response.** We agree with that suggestion. In 2005, we will move the displays to higher ground, away from the water's edge.

**Comment.** Some reviewers, including adjacent landowners who generally supported increased barrier-free access, expressed their concern about a proposal to add a new parking area and barrier-free viewing platform at the end of the Service-owned portion of the Point access road. Some of those landowners expressed the specific concern that these and other proposals for the Point in our preferred alternative would result in public trespass onto their private property from refuge lands.

**Response.** We discussed the proposed parking area and viewing platform at the end of the refuge road during planning team meetings but, ultimately, decided not to recommend them. Unfortunately, those developments inadvertently remained highlighted on maps we presented at our public meetings and published in our draft (map 2-7). We have corrected that error in this final EIS and CCP.

However, we do intend to explore opportunities for constructing one barrier-free trail and observation platform at the Corea Heath Division, once we have acquired it from the U.S. Navy. The trail would be approximately 1,000 feet long, on an existing, raised road (see map 2-5). A trail and platform are also proposed on both the Gouldsboro Bay (map 2-6) and Sawyers Marsh (map 2-8) Divisions.

As for the concern about refuge visitors who trespass onto private land on the Point, we posted a sign, created a turn-around area, and installed a gate to help curtail that problem for refuge neighbors. We will continue to explore new solutions with those private landowners.

## VII. Wilderness

**Comment.** Many comments from individuals and organizations supported the wilderness proposal in our preferred alternative B.

**Response.** We appreciate the public support for our proposal to recommend eight Wilderness Study Areas (WSAs) for inclusion in the National Wilderness Preservation System (NWPS). If our Director approves the recommendation in the final CCP, we will forward our wilderness recommendations in a wilderness study report from the Director, through the Secretary of the Interior and the President, to Congress. Congress has reserved the authority to make final decisions on designating national wilderness. The comments we received on this proposal are part of the administrative record of this plan, and will be shared in the wilderness study report.

**Comment.** We heard from private landowners on Bois Bubert Island who expressed concern with how wilderness designation would impact their right to access and use their lands.

**Response.** We reviewed Service jurisdiction in the area between mean high and mean low water and private property holdings and rights-of-way on Bois Bubert and Cross islands. That review resulted in several changes in our preferred alternative.

We will change the eight WSA boundaries from mean low water to mean high water, to exclude the area commonly referred to as the “intertidal zone.” Because Service authority in the intertidal zone is limited, that boundary change will remove any potential conflicts with activities that are not under full Service jurisdiction or management control.

We will also modify the WSA boundary on Bois Bubert Island to exclude the existing rights-of-way, common boat landing, private inholdings, and Lily Pond. Although Lily Pond lies within the refuge boundary, private property owners on the island hold a reserved right to access and use that pond. The WSA boundary on Cross Island will also exclude private inholdings.

The new maps in appendix D, “Wilderness Review,” depict those boundary changes. The proposal for wilderness in our final CCP will recommend that, if the Service acquires those private lands or reserved rights, we incorporate by an administrative action each of those exclusions into its respective WSA or designated wilderness area.

**Comment.** The Ocean Conservancy urged us to further examine the impacts of activities in adjacent waters on wilderness character and the natural values required by the Wilderness Act.

**Response.** Our extensive wilderness review (appendix D) considered all refuge land owned in fee. We determined that eight WSAs warranted consideration for inclusion within the NWPS. We evaluated the potential impacts on wilderness values arising from existing or proposed activities on the lands and waters around those areas. We eliminated all of the mainland units and 24 islands from our wilderness proposal because of existing developments or because we needed to retain full management flexibility over the next 15 years.

However, it is important to note that Congress clarified in House Report 95–540 on the Endangered American Wilderness Act of 1978 that we should not disqualify areas from further wilderness study solely on the basis of the “sights and sounds of civilization” located outside those areas. In that act,

Congress also designates a number of wilderness areas near major cities, which illustrates the clarification in its report. Although we agree that future off-site activities potentially could affect WSA viewsheds and impact their naturalness and solitude, the Service has no authority to regulate those activities. We did not use them as a reason for eliminating refuge lands from WSA consideration.

**Comment.** The Maine Aquaculture Association (MAA) expressed concern that our proposal contained “no analysis of the impacts of wilderness designation on potential aquaculture development.”

**Response.** The Service has no jurisdiction to regulate activities off refuge lands, even if the refuge lands are WSAs or designated wilderness. Chapter 1 summarizes the aquaculture lease process and the regulatory authority that lies with the ACOE and State of Maine.

We conducted our wilderness review with the full recognition of the commercial and recreational activities that now take place in waters immediately around the WSAs. Of the WSA islands in our proposal, only Cross Island has an existing aquaculture facility nearby. We determined that its proximity did not diminish the island’s wilderness character and values. We believe those values could be permanently maintained under our management.

As part of our wilderness review, we also consulted with the Maine Department of Marine Resources list of aquaculture facility leases, both active and inactive. That list indicates that no other lease sites lie near WSA islands. We did not attempt to predict where new aquaculture operations may be proposed in the foreseeable future; we determined that prediction lay outside the scope of our analysis.

## VIII. Land Acquisition

**Comment.** Some individuals and organizations opposed additional land acquisition because they believe private landowners can be better land stewards than the federal government.

**Response.** We acknowledge some private landowners are good land stewards, and achieve many of the same conservation goals we pursue. Respectfully, however, that does not guarantee long-term or permanent protection. An economic burden or family change may require a sale. These islands are under tremendous development pressure. Subsequent owners may not share the same conservation ethic. Federal ownership will guarantee that lands and natural resources of concern are conserved in perpetuity. In total, our land acquisition proposal would protect 3.2 percent of Maine’s coastal islands. Most coastal islands would remain in private ownership. Appendix A, “Land Protection Plan”, (LPP), describes our long-standing policy of acquiring land only from willing sellers.

We have a particular interest in ensuring that islands where seabirds nest are permanently protected by a conservation owner with the resources to sustain their presence. In our experience, the most productive and diverse seabird nesting islands are those with active management by on-site personnel. For example, on our seabird restoration islands, we control gulls and other avian and mammalian predators, manipulate vegetation, and manage human activity during the nesting season. Those activities require a level of expertise and funding that most landowners cannot afford.

On the other hand, many private landowners can and will undertake conservation actions, particularly if we provide guidance. We will continue to provide informational materials, and are developing a new island stewardship brochure. We are certainly willing to visit private islands and advise their owners on conservation practices, if they invite us.

**Comment.** Some individuals and organizations opposed additional land acquisition because they believe federal control of lands will restrict their use and access by a privileged few.

**Response.** Our priority is to protect federal trust resources. We allow public access to refuge land to the extent it can occur without impacting those resources. Chapter 2, table 2-1 displays our closure dates. Our preferred alternative B describes why and how we would implement the same closure dates on new lands acquired. Outside those closure dates, we allow public access. In fact, we contend that federal ownership allows the public to access some lands that were in private ownership, and otherwise closed.

**Comment.** We heard from at least 15 private property owners whose islands were included in our LPP. A few indicated their interest in selling to us, while a few others indicated they would never sell, because of trust restrictions, because they oppose additional federal ownership in Maine, or because they believe they are the best conservation stewards for their islands. Some sought clarification on how we selected their island. Others asked about the differences among acquisition methods, including the purchase and sale of full property rights or a conservation easement and the implications for use and access if they sold us only a conservation easement.

**Response.** We directly contacted each of those island owners, to further explain (a) how we determined that their island was nationally significant and not permanently protected; (b) our willing sellers only policy; and, (c) the distinctions between selling the Service full property rights and a conservation easement. All of the owners were satisfied with those explanations, and asked to be kept informed about our final proposal.

**Comment.** We received more than 38 comments recommending Sears Island as the best site for the Coastal Education Center. Most requested specifically that we add Sears Island to our LPP to facilitate those recommendations. The Friends of Sears Island believe that Service acquisition and an education center would be a good match with the town.

A few recommended that the Service acquire Sears Island because its location just off Route 1 makes it particularly accessible to the public, and its characteristics are compatible with other CCP goals and objectives, such as protecting habitat and species diversity, including a nesting pair of bald eagles: “[it] is allegedly the largest undeveloped island on the Eastern Seaboard, which makes it particularly an environmental priority and asset to be protected versus developed for industrial uses...”; and, “the island would fulfill the Biological, Land Acquisition, and Public Use Program criteria promoted by Alternative B.”

**Response.** We consider Sears Island nationally significant. However, our LPP list of islands proposed for Service acquisition did not include it, because it does not meet our criteria for a nationally significant island in need of permanent protection. We consider it permanently protected already, because the State of Maine owns it and manages it in adherence to state regulations on protecting wildlife and habitats.

**Comment.** The American Lighthouse Foundation, the Friends of Wood Island Lighthouse, and the U.S. Coast Guard urged us to withdraw Wood Island from our LPP. Their particular concern is the 8 acres now owned by the Coast Guard in which the American Lighthouse Foundation is interested. The U.S. Coast Guard states that the Wood Island Light is currently licensed to the American Lighthouse Foundation for repair, maintenance and historic preservation, an arrangement they indicate is mutually beneficial to their respective entities. The lighthouse organizations believe Service acquisition would adversely impact their work on the lighthouse. As they point out, “the community has seized upon the idea that the lighthouse will be their landmark and will be owned by the group that they are part of, rather than remaining property of the federal government.”

**Response.** We identified Wood Island as a nationally significant island because of nesting seabirds, and included it in our LPP because it does not meet our criteria for being in a permanent protection status. Of the two owners on this 45-acre island, the majority landowner prefers that the island stay on the LPP list. We state in our draft and final EIS that the Service is not interested in acquiring additional historic structures, including lighthouses, unless the purchase is necessary to protect federal trust resources. However, since the Coast Guard has specifically requested we not include their 8-acre tract in the LPP, we have removed it from our final proposal.

**Comment.** We received comments indicating that our draft did not address the need to acquire additional wetlands on the mainland.

**Response.** Objectives 7.3 and 7.4 in our preferred alternative B outline the ongoing protection of those vital habitats. Using primarily the goals and objectives of the North American Waterfowl Management Plan, we have worked closely with the Maine Wetlands Protection Coalition Team in developing their land protection and conservation plan to identify Maine coastal properties important for federal trust resources and to pursue their long-term protection. We plan to be a full partner in implementing the recommendations of their final plan.

Objective 7.3 in our preferred alternative specifically states that we will evaluate mainland properties the Maine Wetlands Protection Coalition Team or any of a number of other land conservation entities propose for Service ownership. We expect that team to recommend properties for Service acquisition within the next three years, and will consider those under a separate environmental analysis and public review process.

Frequently, we work with partners to identify important wildlife habitats in need of protection or conservation. For example, we are involved in a project in Greater Pleasant Bay, Washington County, to protect more than 750 acres of high value wetland and adjacent upland buffer habitat. That area has high biological productivity, extensive intertidal mudflats, and relatively pristine shoreline, which provides outstanding habitat for large concentrations of wintering and migrating black ducks, other waterfowl, and migrating shorebirds.

Our LPP identifies mainland properties with wetlands for Service acquisition. We are working with the U.S. Navy to arrange the transfer at no cost of 400 acres of coastal peatland we refer to as “Corea Heath,” on the Schoodic peninsula in the Town of Gouldsboro. In 1950, the Navy designated 240 acres as an Ecological Preserve Area.

We also identified the Sprague Neck parcel, 153 acres of the former U.S. Navy Computer and Telecommunications Station Center, in the Town of Cutler, Washington County. That parcel and its adjacent vast mudflats provide important feeding and roosting habitat for 19 species of shorebirds. More migratory shorebirds are found on Sprague Neck than anywhere else in Maine. The parcel lies on Little Machias Bay, which the Atlantic Coast Black Duck Wintering Habitat Plan has identified as a Focus Area in the North American Waterfowl Management Plan Joint Venture, and ranks second of 32 sites in Maine.

**Comment.** Many organizations and individuals supported our land acquisition proposal, “Appendix A, Land Protection Plan.” Most recognized the importance of protecting valuable, unique wildlife habitats in danger of loss and the role of the Service in protecting it. For example, the Maine Coast Heritage Trust stated “the refuge plays a unique and vital role in acquiring and stewarding the highest priority nesting islands.”

**Response.** Public support for our LPP is essential to its success. We were very pleased at the number of positive responses we received. To be sure, it is an ambitious plan, based on many prerequisites, not the least of which are the availability of properties for sale from willing sellers and our ability to secure funding. If the LPP is approved, implementing it will become one of our highest priorities.

## IX. Seabird Island Management

**Comment.** One reviewer recommended that we minimize additional seabird island acquisition and, instead, focus our limited funding and staffing on broadening research, conducting inventories, and monitoring the refuge islands, particularly, to document their use by migratory birds.

**Response.** We also acknowledge the need for additional research, inventories, and monitoring on refuge islands. We are now doing, or have proposed in the preferred alternative, a great deal of monitoring on various islands, including migratory landbird and raptor surveys in spring and fall (objective 3.4), botanical inventories (objective 3.5), rare plant communities (objective 3.6), intertidal invertebrate studies (objective 4.2), fall shorebird migration (objective 4.4), winter waterfowl and shorebird monitoring (objective 4.5), Leach's storm-petrel monitoring (objective 5.7), and gull and eider censuses (objective 5.10). We are monitoring the resources that use these coastal islands, and anticipate significant increases in that monitoring. We are also working on a Habitat and Species Inventory and Monitoring Plan that will prioritize our monitoring.

**Comment.** One reviewer wrote that we made inaccurate claims about our involvement in the recovery of puffins and murres in Maine.

**Response.** We do not believe we misrepresented our involvement or that of our conservation partners in species recovery in Maine. We also do not support the claim that several of the species identified in the CCP (e.g., Atlantic puffins and murres) would simply be experiencing natural population recovery in Maine, at the level we have observed, without intervention by conservation agencies. We acknowledge that a small number of puffins were breeding on Matinicus Rock before large-scale restoration began. We also agree that some level of natural dispersal and population growth could have been expected from Matinicus Rock and Machias Seal islands. On the other hand, we still believe the management actions by the Service, MDIFW, and The National Audubon Society, significantly contributed to population growth. For example, more than 900 puffin chicks were brought to Seal Island between 1984-1989 to jump start a breeding population there.

Although no individual projects were established specifically for common murre, we believe murre have benefited from our predator control and management for puffins. Murre have only colonized managed islands in Maine. On Matinicus Rock, murre decoys and a sound system have been used to attract birds to the island. The only islands in Maine that routinely have murre visiting and exhibiting courtship behavior are three refuge islands: Matinicus Rock, Petit Manan, and Seal islands. We still believe that having a breeding population of common murre in Maine would represent a significant milestone in restoring seabird diversity.

**Comment.** One reviewer stated we were incomplete in our description of the status of great cormorants.

**Response.** We clarified our statements regarding the population status of cormorants in Maine (objective 5.11) in the final EIS. We acknowledge the considerable amount of recent monitoring of the great cormorants' population status, but we do not believe we have sufficient information on productivity rates or factors that may be limiting population growth.

**Comment.** One reviewer disagrees with our use of the term “restoration” instead of “management” when we discussed our seabird projects, and suggests our use of the term restoration was simply “fundraising spin” to assist in promoting our projects.

**Response.** We agree that we used these terms interchangeably in our draft. However, we believe that either term could define our seabird projects accurately. Although we have not determined a need to differentiate between those terms in the program, we have revised our glossary to include a definition of “seabird restoration.”

**Comment.** Two reviewers recommended we continue to acquire seabird nesting islands, but that we secure long-term funding to manage our current seabird projects as a priority.

**Response.** We still believe that one of our highest priorities is to acquire the nationally significant seabird nesting islands that remain unprotected. Without conservation ownership, many of those islands face threats from development and uncontrolled access. Also important, the funds we use to acquire islands are not the same as the funds we use to manage them. We acquire land with funds allocated from the Land and Water Conservation Fund; they are restricted to that single purpose. Management and research funds typically derive from the annual appropriations for refuge operations, and cannot be used to acquire land.

We acknowledge the need to secure annual, long-term funding for the six seabird restoration projects now underway, and will continue to seek alternate means of securing consistent funding for those islands. Recently, we have had to rely on grants and other sources to fund those programs.

**Comment.** MAA asserts the Service should not acquire any additional seabird islands because the refuge already includes 25 islands that could support seabird restoration.

**Response.** We do not concur that our foregoing the acquisition of additional seabird nesting islands over the next 15 years is a good long-term management strategy for conserving seabird diversity in the Gulf of Maine. Although some of the 25 refuge islands referred to by MAA support nesting seabirds and waterfowl, most do not meet the criteria established by the Roseate Tern Recovery Team for consideration as a sustainable tern restoration project.

Many of those islands do not provide suitable nesting substrate for terns, are too close to the mainland, have not supported nesting terns in the past, harbor mainland-based predators, lack suitable landing conditions for safe access by our staff, or do not increase the geographic distribution of the colonies in the Gulf of Maine. On the other hand, many of those 25 islands provide valuable nesting habitat for a variety of other seabirds or bald eagles, as well as important migratory bird habitat for numerous shorebirds and landbirds of conservation concern.

We still believe that ensuring conservation ownership in the near term and protection from future development in the long term for those islands is the first crucial step in conserving seabird diversity throughout the Gulf of Maine.

**Comment.** MAA comments that our draft has no documentation to “support the supposition that aquaculture operations in Maine may have resulted in lower nesting productivity and higher nest abandonment on more than one site.” They also express concern over our having included a reference to a study from Canada, which they believe is not relevant, and our having omitted a reference to a study by Norm Famous (Famous 1991) from Maine, which they believe is relevant.

**Response.** Objective 4.3 of the draft inadvertently refers to impacts on seabird nesting, when we intended it to refer only to documented impacts on bald eagle nesting. We have corrected that over-

sight in this final EIS. We know of no studies that evaluate the direct impacts of aquaculture facilities close to nesting seabird islands in Maine.

However, in our professional opinion, studies by the Canadian Wildlife Service (CWS) in British Columbia are relevant for Maine, and provide valuable information and recommendations regarding the best management practices for aquaculture operations close to seabird nesting sites. Objective 4.3 also states that we would develop and implement research and monitoring programs to evaluate that relationship.

We acknowledge that the 1991 Famous report does not indicate that the operation of the Cross Island facility significantly affected seabirds. However, two factors must be considered in evaluating its findings: (1) no pre-development monitoring occurred, so we are unable to assess any changes that may have resulted from the development and operation of the 45-acre finfish operation; and, (2) Cross Island does not have nesting seabirds; it is a densely forested island.

**Comment.** MAA suggested that the Service should have conducted its own research on the interactions between seabird nesting and aquaculture operations if we thought a significant risk existed. They stated that perhaps ours was an active choice not to do it, based on aquaculture's relatively low level of threat to the resource.

**Response.** We disagree with MAA's assertion that our lack of research on the impacts of aquaculture operations on nesting seabirds demonstrates a lack of concern or an assumption of low risk to seabirds. Before the Little Libby aquaculture site was established in July 2004, no finfish pens in Maine had been located adjacent to a seabird nesting island. In fact, there had been no opportunities to study interactions between nesting seabirds in Maine and aquaculture operations. As a result, we have relied on reports published in other regions and on our professional judgment.

In December 2003, representatives of Atlantic Salmon of Maine and we had agreed on a project development schedule that would allow us time for baseline research and monitoring before the site development at Little Libby Island. A subsequent change in project development and stocking dates by Atlantic Salmon of Maine precluded the opportunity for us to obtain any pre-development baseline data.

Nevertheless, we recognize the need to conduct research on the relationship between aquaculture operations and nesting birds. Objective 4.3 mentions the need to evaluate aquaculture operations and their potential effects on bald eagles, wading birds, and seabirds. In this and other objectives, we encourage industry representatives to assist in that evaluation.

**Comment.** The MAA expressed concern that the plan does not quantify or assess the cumulative impacts on nesting seabirds caused by the activities of refuge staff, researchers, or conservation partners.

**Response.** Our management actions on refuge seabird projects were specifically developed and recommended in a number of documents we cited in chapter 1, including the Roseate Tern Recovery Plan, the Tern Management Plan, and MDIFW Species Assessments. Each of those documents were prepared or reviewed by a variety of professional biologists representing a number of agencies and conservation organizations. We also participate in the Gulf of Maine Seabird Working Group, which consists of a variety of professional entities, including the University of Maine, University of New Brunswick, National Audubon Society, Maine Audubon Society, MDIFW, USFWS, and numerous interested individuals. That group meets twice a year to review restoration progress and discuss management concerns.

We design all of our management techniques to enhance nesting success. We have closely monitored the productivity rates at each of these colonies, and have written protocols designed to minimize researchers' disturbance of the nesting birds. Those protocols were all derived from peer-reviewed documents. We have also developed a compatibility determination that establishes the conditions under which research activities can occur and still remain compatible with refuge purposes.

Refuge islands now support more than 80 percent of the common terns and more than 97 percent of the Arctic terns that nest in Maine. The results of more than 20 years of monitoring the colonies clearly indicate that the terns demonstrate significantly higher nesting densities and productivity rates on islands where the researchers control nesting gulls. Although we acknowledge that our presence on the islands creates some level of disturbance, the absence of gull control likely would result in significantly lower tern productivity and, eventually, their abandoning the colony. The continued monitoring allows management agencies to annually assess productivity, prey availability, predation rates, and potential health concerns before any of those become a significant concern.

**Comment.** The Ocean Conservancy, Conservation Law Foundation, The Wilderness Society, and several individuals expressed concern with certain seabird habitat management practices, recommending the practices either be eliminated or used with extreme caution and their effects be monitored closely. Sheep grazing, using herbicides or avicides, prescribed burning, and mowing were mentioned.

**Response.** The premise of our entire seabird nesting islands management is based on the goal of sustaining healthy and productive nesting seabirds. We work with other professionals managing seabirds in the Gulf of Maine and rely on our past experiences to determine the best mix of actions on each island to achieve that goal. We are also interested in conserving our resources of time and money, to be as effective and efficient as possible in achieving it.

We do not conduct all of these activities on any one island. Indeed, we have already determined that some actions are ineffective on particular islands. In each case, a very individualized prescription requires adaptive management strategies. The acreage figures in the plan in chapter 4 for burning, mowing, and using herbicides are combined annual maximums for the mainland and islands. We describe the potential consequences of each of these activities on the human and natural environment. We are now intensively managing only six islands with multiple types of treatment. We offer the following descriptions, in addition to our discussions in chapter 4, to lend perspective on our island management.

Applying herbicides. We have used Roundup on less than 1 acre on Petit Manan Island to control raspberries. We have adhered to all federal requirements for its application.

Burning prescribed fires. We have limited prescribed burning to 8 acres on Petit Manan Island. We adhere to our Fire Management Plan, which includes stipulations to minimize impacts on air quality and soil productivity. The conditions we typically encountered resulted in a very light burn.

Mowing vegetation. We have restricted mowing to less than 2 acres on Petit Manan Island, to maintain suitable tern nesting habitat and fire breaks.

Grazing sheep. We allow sheep grazing to maintain suitable tern nesting habitat on two refuge islands: Metinic, and Nash. We now have 8 years' experience with sheep grazing close to seabirds nesting on Metinic Island. We have been monitoring its vegetation during that time. In our professional judgment, we have found grazing to be an effective method of managing vegetation at tern nesting sites that requires a minimal commitment of resources. We believe that the appropriate management of

grazing, including the exclusion of sheep from nesting areas during the nesting season, eliminates concerns over trampled nests and eggs. Management under special use permit will allow us to minimize impacts on soil by controlling the stocking rates and timing of grazing. However, because of the dynamic conditions on those islands, we have agreed to reevaluate the effectiveness of sheep grazing within 5 years of CCP approval (see appendix C).

Applying avicides. We are using avicides only in combination with non-lethal techniques, in the first 2 years of a seabird restoration project, and only when nesting gull populations are too high to control by any other means. The type of avicide is approved and regulated by EPA. We describe our use of this product in chapter 3, and its impacts in chapter 4. The Denver Research Center has tested the product extensively for nontarget impacts or secondary poisoning effects. We have not observed any impacts on nontarget species during post-treatment monitoring.

We have established monitoring protocols to evaluate the responses of seabirds and vegetation to those management activities. They will be incorporated into the Inventory and Monitoring step-down plan to be developed within 2 years of CCP approval.

**Comment.** One reviewer suggested the CCP should include more gull and cormorant control.

**Response.** We control gulls only on seabird restoration islands where competition and predation by gulls adversely affects seabird restoration. Other than those control measures, we do not believe additional gull control is warranted or necessary to achieve refuge purposes. We do not control cormorants, nor do we foresee the need for taking action anytime soon to achieve our refuge purposes.

**Comment.** The Wilderness Society opposes our modifying the public access closure date on eider or gull nesting islands from August 31 to July 31.

**Response.** We based that change in closure dates on the nesting chronology of gulls and common eiders. They have finished nesting by July 31. Although we did not modify the dates simply to accommodate additional recreational activities, we do point out in chapter 4 that this change in dates will allow for an additional month of compatible public access. Our dates also coincide with those of the State of Maine.

## X. Bald Eagle Management

**Comment.** MAA states that we should remove from our plan any assertion without documentation that bald eagles are sensitive to disturbance and will only nest in areas away from human activity. MAA claims its members' experiences counteract that assertion: some have seen eagles establish nests next to operations that have been active for years.

**Response.** Objective 3.1 states "During the nesting season, eagles are sensitive to disturbance and will typically nest in areas with minimal human disturbance." Numerous publications document the need to protect nesting eagles and their breeding habitat from human disturbance and habitat loss.

We added two references in the final EIS and CCP: "The Bald Eagle," M.Stalmaster, 1987, Universe Books, 227 pages; and, "A summary of conservation and management concerns specific to eagles in Maine," in McCollough et. al., 2003, Maine's Endangered and Threatened Wildlife, Maine Department of Inland Fisheries and Wildlife, 117 pages. MDIFW also recognizes that potential disturbance, and developed essential habitat legislation to regulate activities within one-quarter mile of bald eagle nests.

During the 1990s, MDIFW documented four examples of finfish aquaculture facilities having been developed near nesting eagles: Salt Pond Blue Hill Bay, Treat Island in Eastport, Eastern Bay in Jonesport, and Hardwood Island in Tremont. In all four examples, the facilities lay close to the nesting eagles and directly in their line of sight from the nest. All four examples showed impacts on nesting success: the eagles either abandoned the nest or showed decreased reproduction (C.Todd pers.comm.).

Objective 4.3 acknowledges that aquaculture and eagles can coexist, with sufficient visual screening and adequate distance between the pens and the nests. For example, the aquaculture facility at Cross Island is located 2,800' from the nesting pair of eagles, and we did not document any disturbance related to facility operations.

Only two aquaculture facilities are located near nesting eagles. MDIFW is monitoring nesting success as part of their statewide census. The Hardwood Island project in Tremont remains in operation, and the eagles nest within one-quarter mile of the pens. Unfortunately, that pair has experienced a reproductive rate of 0.40 young per pair, less than half the statewide average (C. Todd pers. comm.) The other example is Stone Island, where aquaculture operations have been intermittent and the pair of eagles has not consistently nested in recent years. Both of these examples involved extensive, continued consultation among the operators, MDIFW, and the Service.

## XI. Administration

**Comment.** We received requests to consider changing the name “Petit Manan NWR Complex” to a name that reflects the current mission and geographic coverage of the refuge.

**Response.** We agree with those comments, and propose to change the name of the entire refuge complex from the “Petit Manan” to the “Maine Coastal Islands National Wildlife Refuge.” The name “Petit Manan,” taken in 1976, refers to the early and important refuge units Petit Manan Point and Petit Manan Island. Although those are still very important in refuge management, the refuge has expanded to include islands ranging from the Canadian to the New Hampshire border. We determined that the name “Maine Coastal Islands National Wildlife Refuge” better reflects the goals of the refuge and its geographic coverage.

**Comment.** The MAA expressed concern that the plan contained a violation of the prohibition on federal employees lobbying elected officials.

**Response.** We do not intend to lobby elected officials. We intend to provide both the community and public officials with an understanding of the operations and significance of the refuge mission, although we now understand how readers could have misinterpreted the wording of draft objectives 8.3 and 8.4 as potential violations of the prohibition against lobbying. We will change that wording in our final EIS and CCP to lessen the likelihood of its being misconstrued as an intent to lobby elected officials.

**Comment.** We received comments that our staff and funds are already spread too thin, and we should not expand or initiate new programs at the expense of meeting current program needs.

**Response.** We face a real challenge in implementing refuge programs using present staff and funding. The spirit of this plan lies in looking to the future for opportunities to add resource protection. Our preferred alternative identifies funding and staffing needs to accomplish its priorities. The CCP outlines project proposals for the next 15 years. As we receive our annual budget allocations, we will determine to which of those projects we should assign priority.

We also emphasize partnerships throughout the plan for meeting many of its objectives. Partnerships are an important component; they will help offset the cost of new initiatives. Objective 8.3 also promotes an increase in volunteers, who will play a valuable role in fulfilling the mission of the refuge.

**Comment.** We received comments that requested more public access to Petit Manan, Seal, and Matinicus Rock islands, and suggested that, if the access occurred only in prescribed areas, the birds would adapt to the visitation, which would nourish public interest in seabirds. Some mentioned that preferential treatment is sometimes given to certain special visitors, such as allowing them access during the closed season when the public is not allowed.

**Response.** Seasonal closures on all of the refuge seabird and eagle nesting islands reduce disturbance during critical periods. Access usually is restricted to the essential personnel necessary to conduct research and protect sites from disturbance. Under special circumstances, and under close supervision, some visitors have been allowed on islands during the nesting season. In most cases, we have granted that exception for educational, media outreach or the fund-raising activities of partners, when there is a direct benefit to Service programs.

Nevertheless, in response to this concern, we agree to develop guidance on appropriate protective measures required for visitation to nesting islands within two years of CCP approval, in conjunction with the development of our Visitor Services Plan. As in our discussion of environmental education, above, we will also evaluate whether opportunities exist for educational programs on nesting islands (see objective 6.1).

**Comment.** The MAA commented that the “Refuge does not have adequate resources to meet their cultural resource public trust responsibilities (p4-44) and yet they are proposing the acquisition of new properties on which they have no clear inventory of what additional responsibilities they may be adding.”

**Response.** We acknowledge in our draft that maintaining our historic resources, namely, the lighthouses and associated light keepers buildings, is very expensive. Chapter 3, “Affected Environment,” lays out our expenses over the last 5 years under current management. We designed objectives 7.7 and 7.8 in our preferred alternative to address those challenges. We will develop a Cultural Resources Plan, establish partnerships, and seek alternate sources of funding to help meet our trust responsibilities. Accomplishing those objectives would result in a significant increase in our ability to meet and carry out national mandates to protect cultural resources on refuge lands.

One good example of a partnership worth pursuing is the American Lighthouse Foundation. That group has stated its interest in forming a partnership with the Service to protect some of the Service-owned lighthouses. Finally, our preferred alternative recommends that the Service acquire no additional historic structures, unless absolutely necessary to protect resources.

**Comment.** The Wilderness Society opposes any commercial activities on the refuge, and specifically mentions the grazing of sheep, the commercial harvesting of resources in the intertidal areas, and the picking of blueberries as examples.

**Response.** We do not regulate commercial harvesting in intertidal areas. That is regulated by the State of Maine, although draft objective 4.2 identifies our interest in monitoring the impacts of those activities on resources of concern. The blueberry harvesting allowed is limited to personal use only, and no raking is allowed. As in “Seabird Management,” above, we use sheep grazing only as a vegetation

management tool to promote seabird nesting. Appendix C includes compatibility determinations for recreational blueberry picking and sheep grazing.

## XII. Partnerships

**Comment.** The National Park Service, Acadia National Park (ANP), recommended we establish a partnership with them to facilitate island research and monitoring.

**Response.** We agree that establishing a formal partnership with ANP would mutually benefit our agencies and help advance the conservation and stewardship of coastal resources. This fully complements our preferred alternative, which identifies the need to continue exploring partnership opportunities, including those promoting research, surveys, monitoring, island stewardship, and law enforcement. We will continue to meet with ANP staff to search for ways to act as partners in those activities.

**Comment.** The MAA commented that the Service ignores the potential assistance that the aquaculture and commercial fishing industries can give in critical management functions. They also suggested we consider industry representatives as potential island stewards.

**Response.** We acknowledge that establishing new partnerships is always beneficial for refuge programs. We have relied heavily on partners to assist in virtually all aspects of refuge management because of the large size of the refuge complex and the small size of its staff. Chapter 3, "Affected Environment," outlines some of our partnerships. One of the significant issues in chapter 1 is building effective partnerships to protect coastal habitats. Drawing upon all available partnership resources as we move forward in implementing the goals and objectives of our final plan will be crucial if we hope to achieve them.

We routinely talk with commercial fisherman who work on the waters adjacent to refuge islands, and value their insight and observations of natural processes. We plan to start an island stewardship program (objective 6.6), and would welcome the opportunity to talk with any interested parties.

Objective 4.3 states we will begin to determine the effects of present and proposed commercial aquaculture facilities in the waters adjacent to refuge islands supporting nesting seabirds, wading birds, and bald eagles. One strategy for that objective clearly identifies the aquaculture industry as a research partner. An additional strategy specifies that we will continue working with the industry to minimize the potential adverse effects of future aquaculture projects, including site location, cage design, stocking levels, fish age, netting characteristics, and project initiation intervals. We will also explore other opportunities for partnerships with industry representatives.

**Comment.** Several reviewers suggested that the Service has failed to recognize that private island owners are capable of conservation stewardship, and recommended that we develop a landowner outreach program and provide information and programs to assist landowners in meeting resource objectives.

**Response.** Many individuals are doing an exceptional job of managing their islands. We heard from other island owners who had no interest in selling their island, but who would like to have us distribute information and conduct programs to guide resource management on their islands. Based on those comments, we are developing a guide for island owners to assist in the effective stewardship of seabird nesting islands. Other conservation partners are developing resource guides, and we will direct landowners to those sources once they become available. And as always, our staff are available to provide information upon request.

We have also secured grant funding and have produced a sign designed to alert the public to the closures of seabird islands during the nesting season. Those signs will be available free of charge to private island owners who are interested beginning in May 2005.

We will continue to pursue opportunities to increase the dialogue among our staff, other Service programs, private island owners, and other organizations involved in protecting and conserving islands. Private island owners will always play a major role in island conservation and stewardship.

### **XIII. Impacts on the State and Local Economies**

**Comment.** MAA noticed we had omitted one word from our quotation of the Governor’s Final Task Force Report on the Planning and Development of Marine Aquaculture in Maine: We had omitted the word “unreasonably” before the word “interfere.” According to MAA, the task force members had selected that adverb as a “carefully considered word and specifically intended to convey the need to balance uses.” Our having omitted it from our quotation, according to MAA, seriously mischaracterized that report’s findings.

**Response.** We acknowledge our omission of the word “unreasonably” in quoting that report. Our omission was inadvertent, and was not meant in any way to misconstrue the findings of the report. In fact, we fully support the need to engage the aquaculture industry, state and federal agencies, and conservation interests in defining and implementing actions to achieve balance among them.

**Comment.** According to MAA, our draft plan paints an overly pessimistic view of the potential for salmon aquaculture in the state. They agree that the salmon farming sector has suffered a number of setbacks. However, they note that the potential for continued, sustainable development is significant and, that our plan should give a more balanced view on the potential for development.

**Response.** We agree with MAA’s comment that sustainable domestic production of seafood is in the national interest. Chapter 3, “The Affected Environment,” acknowledges that the salmon industry, in particular, is very important to Maine’s economy. Our describing some of the industry’s setbacks in recent years was not meant to diminish its significance. We hope it remains a very viable industry in Maine. Our intent certainly was not to convey an overly pessimistic view of the future of the industry, as we have no expertise to predict its future; instead, we were merely trying to convey the challenges to us, as industry observers, of predicting the location or timing of new operations.

**Comment.** MAA notes that aquaculture acts as a novel tourist attraction and, that our plan ignores any negative impacts on the tourism industry that may occur as a result of restricting aquaculture operations or future development.

**Response.** We are unaware of any commercial boat tours using aquaculture facilities as their main attraction. We acknowledge that operators will take boats by aquaculture facilities and other interesting sites such as lighthouses, as part of their tours; however, those visits are incidental to the main purpose of the trip to view wildlife and natural scenery.

Our seabird management program supports commercial viewing opportunities (see chapter 4); expanding it may afford one new opportunity in a new area after 8 to 10 years.

**Comment.** MAA claims that the EIS should contain a more up-to-date, comprehensive, and balanced assessment of the impacts the refuge complex has on local and state tax bases, including the income and business taxes paid by commercial operators that may be impacted.

MAA also states that the analysis of the refuge expansion impacts on property taxes in our EIS is misleading, and that our plan contains no analysis of the impact of the current refuge landholdings on property taxes.

**Response.** Chapter 4, “Environmental Consequences,” describes in detail the contribution of current and proposed refuge activities to state and local economies. We have responded to the concern with impacts on commercial harvesting in other responses in this section.

Dr. Charles Colgan, Professor of Public Policy, University of Southern Maine completed our analysis of the property tax impacts of proposed refuge expansion. Dr. Colgan has published extensively on the economics of natural-resource-based industries in Maine. Our analysis did not include current refuge islands, as their impacts on property taxes were described in previous NEPA documents. Rather, the analysis in this EIS focuses on the potential property tax consequences resulting from the expansion proposed in each alternative.

Chapter 4 summarizes Dr Colgan’s analysis, and appendix G provides detailed information on the property tax implications arising from Service acquisition of individual islands in their respective towns. We rely on Dr. Colgan’s expert opinion to describe the impacts on towns; he refers to the property tax impacts for the region as “quite small” (alternative A), “small” (alternative B), and “relatively small” (alternative C).

Appendix G identifies those islands not included in the analysis because (1) they already exist in a non-tax status; (2) no information was available from the town; or, (3) they are bald eagle nesting islands over 200 acres in size. Two islands proposed for Service acquisition in our preferred alternative and LPP fall into category (1).

We recognize that some may view our property tax data from 2000-2003 as outdated now. Unfortunately, that has to do with the time span required to develop an EIS, coupled with the dynamic nature of property tax values in coastal Maine. Property values have risen sharply in the last couple of years, which may also reduce mil rates, so that the actual tax impacts would not fully reflect recent real estate markets (Colgan, pers com, 2004). We have included more explicit statements in chapter 4 and appendix G that, although those values were the best information available to us at the time, it is likely that they underestimate impacts now, given the current realty climate in coastal Maine.

**Comment.** MAA expressed concern that our draft suggests the current seabird viewing industry is constrained by a lack of viewing opportunities and, that our draft uses that assertion to argue that a refuge expansion would generate increased economic activity.

**Response.** Chapter 3 describes the economic significance to coastal Maine of its seabird viewing industry. Two refuge islands are now the focus of tour boat trips: Petit Manan Island, where seabirds nest, and Cross Island, where eagles nest. Machias Seal Island, managed under a MOU with the State of Maine, is another popular island for commercial seabird viewing tours.

Chapter 4 describes the foreseeable effects on the local and regional economies of implementing each of the alternatives. It specifically refers to information provided by Dr. Colgan on the potential expansion of the seabird-viewing industry. According to that information, the industry does not have the potential to significantly expand, given the current distribution of active seabird colonies of sufficient numbers and in locations readily accessible to viewing, to make new commercial ventures based on that activity worthwhile.

Chapter 4 also states that it is impossible to differentiate among the effects of alternative nesting habitat protection strategies from the perspective of economic value. We do not justify our proposed refuge expansion solely on the basis that it would generate increased economic activity in the wildlife viewing industry. Although expanding the refuge to protect additional habitat will help maintain and may even expand seabird viewing opportunities over the long term, we also identify its economic costs.

**Comment.** MAA expresses concern over our assertion that the refuge complex would not impact present or future aquaculture operations. They claim the refuge has already had a “significant chilling effect” on aquaculture investments in the state, and that the refuge has already effectively precluded the development of a number of prime potential aquaculture sites. MAA and several other reviewers expressed particular concern over the potential for further restrictions, if the proposed refuge expansion is implemented.

**Response.** Chapter 1 describes the potential impacts on the aquaculture industry as an “Issue Outside the Scope of this EIS/CCP.” Furthermore, our refuge staff has no jurisdiction in the aquaculture lease process. The federal jurisdiction to approve and issue permits lies with the ACOE, which also is responsible for completing a NEPA compliance document before it issues a permit. We spoke with Jay Clement, ACOE, who confirms that no aquaculture permit has been denied at the Federal level simply due to its adjacency to Federal lands (Clement, pers com, 2004). Our contacts with Mary Costigan and Laurice Churchill, State of Maine DMR, confirm that no permit has been denied at the State level for that reason for at least 10 years (Costigan, pers com, 2004; and Churchill, pers com, 2004).

Chapter 4 mentions that no active aquaculture leases lie in the vicinity of any island proposed for acquisition. Should a lease adjacent to a Service-owned island be proposed, our Maine Field Office probably would recommend to the ACOE that they establish a quarter-mile buffer around the island; they have consistently done so in the past. However, it is important to note that that recommendation has not always been incorporated into permit conditions.

Under our preferred alternative, the Service would expand the existing refuge boundary to acquire 87 additional islands. Assuming that we could acquire all 87, the total in Service ownership would represent less than 4 percent of the islands along the coast of Maine. Although the Service does have limited authority to mean low water, the designation of land as refuge land does not preclude commercial activities in adjacent areas, evidenced by the salmon aquaculture facility permitted off Cross Island refuge and the lobster pots off virtually every refuge island. We still predict no significant impacts on the salmon aquaculture industry from refuge land acquisition or management.

**Comment.** MAA states that we should include estimates of the economic impact of the refuge complex and its proposed expansion on the sustainable harvest of soft clams, seaweed, and worms.

**Response.** We have prohibited rockweed harvesting on refuge lands since 2001, under federal regulations which prohibit the taking of plants off refuge lands, and contacted all state-licensed rockweed harvesters at that time. We would implement that prohibition on all islands we acquire in the future.

Chapter 4 acknowledges that we cannot estimate accurately the potential economic loss, because we do not know the level of the rockweed harvest or the number of harvesters on the islands proposed for acquisition. Further, Dr. Colgan was unaware of any entity tracking reliable statistics on the rockweed harvesting industry (Colgan, pers comm., 2004), nor could we locate any on the Maine DMR website.

The State of Maine regulates the harvesting of soft clams and worms. Some statistics on those industries are available at [www.maine.gov/dmr/commercialfishing](http://www.maine.gov/dmr/commercialfishing). As we note in the discussion of aquaculture, above, the Service has limited authority to mean low water, and designating land as refuge land does not necessarily preclude commercial activities such as these. As a result, we did not predict any impacts on those activities, and did not conduct a detailed economic analysis.

**Comment.** MAA suggests that we should use the same approaches (monitoring, education, and best management practices) to management with respect to aquaculture as we use for ecotourism and other activities that impact or occur on refuge property. They also assert that the proposed trail construction and subsequent increase in public visitation will adversely affect resources at a much greater rate than allowing an aquaculture lease within a quarter-mile of a nesting island.

**Response.** We believe MAA's comparison of adverse effects on refuge resources from aquaculture operations (in off-shore waters) versus trail construction (on the mainland) has no basis, given the locations of these activities and the locations of our predicted increases in visitation. Our prediction in the preferred alternative that overall visitation would increase to 25 percent annually, or 11,750 visitors, attributes that increase in visitation primarily to increases in commercial seabird viewing tours.

"Effects on Public Access, Educational and Recreational Opportunities" in chapter 4 describes the consequences of implementing our proposed public use program, including developments on the mainland. We predict an additional 2,700 annual visitors on the mainland, primarily attributed to group educational and interpretive programs. We plan to improve the public use infrastructure on our mainland divisions to improve the quality of the experience, and chose locations that would minimize disturbance and habitat alterations. Our preferred alternative includes the development of a Visitor Services Plan, which will establish thresholds of acceptable change resulting from visitor impacts on natural resources.

We also predict an additional 940 on-island visitors, whose visits would occur outside of nesting closure periods and would spread out over our expanded island ownership. Our seasonal island closures allow access only by mission-critical personnel during the nesting season. Even they must adhere to strict protocols on the islands to minimize the disturbance of nesting birds.

We have developed voluntary best management practices for the seabird viewing industry operating in the waters adjacent to refuge islands. Although we have no authority to require them to implement those practices, our observations indicate that most operators are complying.

Objective 4.3 proposes that we continue to work with the aquaculture industry to develop best management practices that minimize the potential adverse effects of future aquaculture projects, including site location, cage design, stocking levels and fish age, netting characteristics, and project initiation intervals. We will also explore other opportunities for partnerships with the industry.

**Comment.** MAA commented that our LPP seriously understates the potential socioeconomic and cultural impacts.

**Response.** As above, "Effects on the Local and Regional Economy" in chapter 4 describes the foreseeable socioeconomic impacts we can predict from the land acquisition proposed in each alternative. We asked Dr Charles Colgan, Professor of Public Policy, University of Southern Maine, to analyze property taxes. Appendix G provides detailed information on his analysis. Appendix A, our LPP, does not dismiss those economic impacts. Instead, it refers to the predictions in chapter 4, but does not repeat the entire discussion.

#### XIV. Recommended New Alternatives and Revised Scope of Analysis

**Comment.** MAA proposed a new alternative, “No Refuge Complex Expansion,” to refocus additional resources on managing existing refuge properties rather than on acquiring new properties.

**Response.** We evaluated four alternatives in detail, and considered but did not fully develop an additional one. We believe we have evaluated the reasonable range of alternatives required by the National Environmental Policy Act of 1969. NEPA does not require that all possible combinations of actions be evaluated.

First, we would like to clarify the distinction between the phrases “no new refuge acquisition” and “no refuge expansion.” No new refuge acquisition means we would not acquire an additional acre, no matter where that acre lay. No refuge expansion means we are not seeking approval to expand our existing boundary.

In chapter 2, “Actions Common to All Alternatives” and “Alternatives or Actions Considered But Not Fully Developed” describe the importance of our acquiring the land within the existing, approved refuge acquisition boundary. That land is very important for achieving refuge purposes. Service ownership will allow more effective and efficient refuge management. Therefore, all four alternatives propose that we acquire it.

Chapter 2 also states that no federal or state agency, elected official, individual, or organization previously has suggested we pursue an alternative that precludes any additional refuge acquisition. Three of the four alternatives we evaluated in detail propose an expansion of the approved refuge boundary. Alternative A proposes an expansion of 30 islands and 153 acres on the mainland. Our preferred alternative B proposes 87 islands and 153 acres on the mainland. Alternative C proposes 151 islands and 153 acres on the mainland. Alternative D proposes that we acquire only the land within the existing, approved refuge acquisition boundary. We would not pursue a refuge expansion. We trust that the range of those proposals is reasonable and meets the intent of NEPA.

**Comment.** MAA does not support our claims that the refuge impacts on aquaculture are not significant, do not merit detailed analysis, and fall outside the scope of the EIS. They believe the impact on the aquaculture industry merits categorization as a “significant issue,” based on its potential socioeconomic impacts on surrounding communities.

**Response.** Our response to a comment above in “Impacts on State and Local Economies” addresses MAA’s contention that the refuge is already having a very real impact on existing aquaculture operators. Chapter 1 describes why we determined that a detailed analysis of the impacts on aquaculture activities lies outside the scope of our EIS. We support that determination as a thorough and reasonable one.

#### XV. Public Involvement

**Comment.** Some people commented that our notifications of public hearings were inadequate; in particular, that we should have contacted the owners of the islands in alternative C directly; also, that refuge staff should communicate directly with the owners of all the islands listed.

**Response.** It is correct that we did not contact directly the 94 owners whose islands are included in alternative C but are not included in our preferred alternative B. We focused on contacting the 87 owners whose islands we included in our preferred alternative. We apologize for any inconvenience or concern that may have caused the additional 94 owners included in alternative C.

We acknowledge that the notifications we published may not have reached everyone who was interested in our draft. Nevertheless, we notified a mailing list of more than 1,200 individuals, organizations, federal and state agencies, and town officials. We contacted all of the island owners whose islands we proposed for Service acquisition in our preferred alternative and the LPP. In the “Federal Register” of April 30, 2004, we published the dates, times, and locations of all the public hearings.

We contacted more than 15 media sources with the same information. The Portland Press Herald, Bangor Daily News, and Boston Sunday Globe wrote feature articles on the project, and alerted readers to the hearings. We paid for five advertisements announcing the hearings in major daily newspapers. National Public Radio announced the meetings. We posted notification of the meetings on our website. We posted notices at refuge kiosks. The Friends of Maine Seabird Islands helped advertise the meetings. Several conservation organizations posted the meetings on their websites, and encouraged their members to attend. Other organizations posted notices in newsletters. We also alerted MDIFW and congressional representatives.

## **XVI. General Support for Specific Alternatives in Draft EIS**

**Comment.** We did not receive any comments that preferred either alternative A or D in its entirety, although some preferred specific actions in those alternatives. For example, some reviewers preferred the no change in management on Petit Manan Point in the former while others preferred the limited management on refuge islands in the latter. Some advocated alternative C, because it includes the most land acquisition and is the “most protective one” or because they viewed it as the most expansive plan. The Ocean Conservancy strongly supports alternative C, largely because of its research program.

Other organizations, such as the Conservation Law Foundation, ask that we incorporate some aspects of alternative C into our preferred alternative B. The Maine Chapter of the Wildlife Society suggests moving the land acquisition proposal in C to B. The Wilderness Society supports the designation of wilderness in both alternatives, but prefers the land acquisition proposal in alternative C, and further suggests a combination of alternatives B, C, and D.

The Ocean Conservancy strongly prefers alternative C to alternative B, citing C’s combined land acquisition, increased research, and recommended WSAs.

We received 428 comments that supported our preferred alternative from individuals and from a wide range of conservation organizations, including the Islesboro Islands Trust, Friends of Maine Seabird Islands, Maine Coast Heritage Trust, Bagaduce Watershed Association, Boothbay Region Land Trust, and National Audubon Society Seabird Restoration Program.

**Response.** As we mention above, NEPA requires that a reasonable range of alternatives be analyzed. It does not require that we analyze all possible combinations of actions. We believe the combination of actions in the alternatives we analyzed in detail best meets the intent of analyzing potential alternate ways to achieve the Refuge System mission and refuge purposes and goals.

## **XVII. Clarifications and Corrections**

**Comment.** One reviewer expressed concern over our definitions and analysis of impacts on minority and low income populations in “Environmental Justice” in chapter 4.

**Response.** We believe we have used accepted definitions from reliable sources, and that we have met their intent in our analysis.

President Clinton’s Executive Order No. 12898, February 11, 1994, states that federal agencies will achieve environmental justice by identifying and addressing, as appropriate, any disproportionately high and adverse human health or environmental effects resulting from its programs, policies, and activities on minority and low income populations in the United States and its territories. We obtained our information on minority and low income populations from the U.S. Census Bureau 2000.

We used those statistics on poverty to assess impacts on low income populations. According to the Census Bureau website, “Poverty status is defined by family—either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine poverty status are number of people, number of related children under 18, and whether the primary householder is over age 65. An income threshold is determined given a particular family’s set of characteristics; if that family’s income is below that threshold, the family is in poverty” (<http://www.census.gov/hhes/poverty/povdef.html>).

The Census Bureau website uses the term “minority populations” as inclusive of the following races: Black, Hispanic, Asian, Pacific Islander, or American Indian/Alaska Native. Those racial classifications conform to the October 30, 1997, Federal Register Notice entitled, “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity” issued by the Office of Management and Budget (OMB). Those standards govern the categories used to collect and present federal data on race and ethnicity. The OMB requires five minimum categories for race: American Indian and Alaska Native, Asian, Black or African American, Native Hawaiian and Other Pacific Islander, and White. Some federal surveys include a sixth category, “Some other race,” added with OMB approval (<http://quickfacts.census.gov/qfd/states/23/23029.html>).

### XVIII. Miscellaneous

**Comment.** According to MAA, our reference to mercury loading in chapter 3 (p. 3-12) is not substantiated.

**Response.** We acknowledge the inaccuracy of that statement; and, we will correct it in the final EIS and CCP. Although several studies have documented elevated levels of PCBs and other organochlorines in pen-raised fish, we are not aware of any studies that reported elevated levels of mercury in aquaculture fish.

**Comment.** The Sierra Club, The Wilderness Society, and one individual recommend that our plan address inventory and monitoring of water quality in more detail to benefit habitat quality for aquatic species and important wetlands habitats.

**Response.** Chapter 3 summarizes our concerns about water quality in coastal Maine. Assessments of water quality are done primarily by two state agencies: the Department of Marine Resources and the Department of Environmental Protection. The Maine State Planning Office published a report titled “Marine Monitoring Programs in the Gulf of Maine: An Inventory” (June 2001), which provides a good overview of monitoring water quality in coastal waters ([www.gulfofmaine.org/library](http://www.gulfofmaine.org/library)). We will continue to work with those agencies to address water quality concerns that affect or are affected by refuge resources.

**Comment.** The Wilderness Society expressed concern over the lack of detailed information on air quality, and recommended our plan address inventory and monitoring of air quality in more detail.

**Response.** Both state and federal agencies monitor air quality in response to state and federal requirements. In the vicinity of the refuge, we are aware of air quality monitoring stations at Moosehorn Refuge and Acadia National Park. We will rely on those sources for information on air quality impacts in coastal Maine. Chapter 4 describes how our activities may affect air quality, and how we attempt to minimize any negative impacts.

**Comment.** MAA notes that the “Literature Cited” section of our plan did not list three of its references in text: on page 2-102, Kellog, 1982 and Yesner, 1980, and on page 3-76, Famous 1991.

**Response.** We inadvertently omitted them, but have included them in this final EIS in “Literature Cited.”



## Appendix J



*Bald eagle chicks.*  
USFWS photo

# Consultation under the Endangered Species Act

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Linda Welch  
Petit Manan National Wildlife Refuge  
P.O. Box 279  
14 Water Street  
Millbridge, ME 04658  
207 546-2124

Date: request dated September 17, 2004

**I. Region:** R5

**II. Service Activity (Program):** Petit Manan National Wildlife Refuge Complex, Draft Comprehensive Conservation Plan and Environmental Impact Statement

Log # 04-395

**Pertinent Species and Habitat:**

**A. Listed species and/or their critical habitat within the action area:**

Bald eagle (*Haliaeetus leucocephalus*)  
Roseate tern (*Sterna dougallii*)

There is no Critical Habitat in the action area.

**B. Proposed species and/or proposed critical habitat within the action area:**

none

**C. Candidate species within the action area:**

none

**Geographic area or station name and action:** Petit Manan National Wildlife Refuge

**V. Location (attach map):**

**A. Ecoregion Number and Name:**

The proposed refuge expansion would be in the U.S. portion of the Gulf of Maine Rivers ecosystem: in particular, the 7,691 acres on our mainland refuges and 42 refuge islands, and the 151 nationally significant coastal nesting islands not permanently protected of York, Cumberland, Sagadahoc, Lincoln, Knox, Hancock, and Washington counties.

**B. County and State:** York, Cumberland, Sagadahoc, Lincoln, Knox, Hancock, and Washington Counties, Maine

**C. Section, township, and range (or latitude and longitude):** The preferred alternative for refuge expansion includes 87 islands from the Isles of Shoals on the Maine/New Hampshire border to Little River Island in Cutler in eastern Maine.

**D. Distance (miles) and direction to nearest town:** Varies

**E. Species/habitat occurrence:**

The 42 islands in the existing Refuge Complex display incredibly diverse habitats and associated fish, wildlife, plant, and insect species. Some are Federal or State-listed as threatened, endangered, or special concern; among them, bald eagles, roseate terns, common terns, Arctic terns, Atlantic puffins, razorbill, and harlequin ducks. The coast of Maine supports approximately half of Maine's 340 pairs of nesting eagles and all 240 pairs of nesting roseate terns.

**VI. Description of proposed action (attach additional pages as needed):**

This plan describes four alternatives for refuge expansion. The preferred alternative B would expand the refuge by 2,467 acres and notably increase habitat management and opportunities for compatible, wildlife-dependent recreation. Selecting this alternative would expand the Petit Manan refuge by 2,314 acres beyond the current approved boundary on 87 nationally significant seabird, wading bird, or bald eagle coastal nesting islands and 153 acres of wetlands on the mainland. It would add six new seabird restoration projects to the present six, and intensify the focus of the refuge biological programs on birds of high conservation priority in the Gulf of Maine. Alternative B would increase opportunities for wildlife-dependent recreation, especially in the refuge's environmental education and interpretation programs, build new trails on the Gouldsboro Bay, Sawyers Marsh, and Corea Heath divisions, and open the Petit Manan Point division for deer hunting. Alternative B would recommend that 13 Refuge Complex islands in 8 wilderness study areas be included in the National Wilderness Preservation System. Refuge staffing and budgets would increase commensurately.

Goals of the proposed refuge expansion are to:

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

**Goal 2:** Maintain high quality wetland communities on Refuge Complex 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 Refuge Complex islands to sustain high quality habitat for nesting bald eagles and migratory songbirds and raptors and protect rare plant sites.

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

**Goal 5:** Protect and restore nesting seabird populations on Refuge Complex islands to contribute to regional and international seabird conservation goals.

**Goal 6:** Promote the public 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 advance the mission of the National Wildlife Refuge System.

## **VII. Determination of effects:**

### **A. Explanation of effects of the action on species and critical habitats in items III.A, B, and C (attach additional pages as needed):**

Four alternatives were considered in the CCP plan. Alternatives A, B, and C would maintain the seasonal closures to protect roseate terns and bald eagles nesting on the Refuge Complex. Alternative D would close Refuge Complex islands to public use year-round. Roseate terns are nesting on two Refuge Complex islands, and bald eagles are nesting on four islands and the Gouldsboro Bay Division. Alternatives A, B and C would continue to manage the six seabird restoration projects, which provide nesting or foraging sites for roseate tern. Alternative C, with the largest expansion proposal, would provide the greatest long-term benefits to roseate tern and bald eagles by protecting existing and potential future nesting sites, and would contribute the most to those species' recovery goals. Alternative B would provide the second greatest long-term benefits, followed by alternative A. Alternative D does not propose an expansion, and would provide the least support to recovery goals.

The preferred alternative, B, would acquire existing eagle nesting islands and expand nesting opportunities for roseate terns by adding 6 new seabird restoration islands. This option would maintain permanent protection of active and historic bald eagle and roseate tern nesting sites on current refuge lands, including predator control and seasonal closures. The preferred alternative would appreciably increase protection of active bald sites; 37 islands in the proposed expansion are bald eagle nesting sites, and 2 are historic roseate tern nesting sites.

This refuge expansion proposal provides habitat for bald eagles and roseate terns to expand to new areas.

Alternative C would appreciably increase protection of active bald eagle sites; 101 islands in this expansion proposal are bald eagle nesting sites, and 2 are historic roseate tern nesting sites. This refuge expansion proposal provides habitat for bald eagles and roseate terns to expand to new areas.

All of the alternatives are intended to maintain or improve biological resources on the Refuge Complex, in coastal Maine, and within the Gulf of Maine Rivers ecosystem. The combination of our management actions with other organizations' actions could result in significant, beneficial cumulative effects by (1) increasing protection and management for Federal and State-listed threatened and endangered species; (2) improving uplands and wetlands habitats that are regionally declining; and (3) reducing invasive, exotic plants and animals.

All four alternatives for future management of Petit Manan Wildlife would benefit bald eagles and roseate terns. Since the refuge is managed to benefit these species, no negative or adverse effects will take place. The Maine Field Office concurs that the CCP, and especially alternatives B and C, will provide only positive effects and no adverse effects to bald eagles and roseate terns.

**B. Explanation of actions to be implemented to reduce adverse effects:**

Bald eagle nesting islands would be closed to public use during the nesting season. Roseate tern nesting islands would be closed to public use during the nesting season. Seabird nesting islands would be managed by resident biologists during the nesting season.

**VIII. Effect determination and response requested: [\* optional]**

**A. Listed species/critical habitat:**

<u>Determination</u>	<u>Response requested</u>
no effect (species: _____)	*Concurrence
is not likely to adversely affect (species: <u>bald eagle and roseate tern</u> _____)	X_Concurrence *Formal Consultation
is likely to adversely affect (species: _____)	Formal consultation

**B. Proposed species/proposed critical habitat: No Critical Habitats**

<u>Determination</u>	<u>Response requested</u>
no effect (species: _____)	*Concurrence
is not likely to adversely affect (species: _____)	____ Concurrence
is likely to adversely affect (species: _____)	____ Informal conference
is likely to jeopardize/adverse modification of critical habitat (species: _____)	____ Conference

**C. Candidate species:      No candidate species**

<u>Determination</u>	<u>Response requested</u>
no effect (species: _____)	*Concurrence
is likely to jeopardize (species: _____)	____ Conference

This concludes informal consultation on the Petit Manan National Wildlife Refuge CCP. Accordingly, no further action is required under Section 7 of the ESA, unless: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.


9/27/04  
 \_\_\_\_\_  
 Mark McCollough      Date  
 Endangered Species biologist  
 Maine Field Office

## Appendix K



*Historic photo of Petit Manan Island Lighthouse*  
Photo from The National Archives

# Consultation with the Maine Historic Preservation Commission



ANGUS S. KING, JR.  
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION  
55 CAPITOL STREET  
65 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333

EARLE G. SHETTLEWORTH, JR.  
DIRECTOR

November 24, 2003

Nancy L. McGarigal  
Planning Team Leader  
U.S. Fish & Wildlife Service  
Region 5, Refuges and Wildlife  
300 Westgate Center Drive  
Hadley, MA 01035-9589

Subject: MHPC #2501-03 - Internal Draft; Comprehensive Conservation Plan (CCP) and Environmental Impact Statement (EIS) for Petit Manan National Wildlife Refuge (NWR) Complex

Dear Ms. McGarigal:

In response to your recent request, our Commission has reviewed the Petit Manan NWR Draft CCP/EIS. The subject document was reviewed pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

The Draft CCP/EIS is acceptable as written in all respects and we concur with the findings therein. Please contact Mike Johnson of my staff if we can be of further assistance in this matter.

Sincerely,

Earle G. Shettleworth, Jr.  
State Historic Preservation Officer

EGS/mj



PHONE: (207) 287-2132

FAX: (207) 287-2335



**Maine Coastal Islands National Wildlife Refuge**

P.O. Box 279, Water Street

Milbridge, ME 04658-0279

207/546-2124

[petitmanan@fws.gov](mailto:petitmanan@fws.gov)

<http://petitmanan.fws.gov>

**U.S. Fish and Wildlife Service Website**

<http://www.fws.gov>

**For National Wildlife Refuge System Information:**

1800/344 WILD

<http://www.refuges.fws.gov>

**Federal Relay Service**

for the deaf or hard of hearing

1800/877 8339

April 2005

