



U.S. Fish and Wildlife Service

Maine Coastal Islands National Wildlife Refuge Complex

Hunting Plan

August 2021



Photo Credit: Kirk Rogers

Appendix A – Hunting Compatibility Determination

Appendix B – Environmental Assessment

Appendix C – Intra-Service Section 7 Evaluation

Appendix D – Finding of No Significant Impact

**Maine Coastal Islands
National Wildlife Refuge Complex
Hunting Plan**

August 2021

U.S. Fish and Wildlife Service

Petit Manan National Wildlife Refuge
Cross Island National Wildlife Refuge
Seal Island National Wildlife Refuge
Franklin Island National Wildlife Refuge
Pond Island National Wildlife Refuge

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MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPLEX HUNTING PLAN

I. Introduction

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System), the purposes of an individual refuge, U.S. Fish and Wildlife Service (Service) policy, laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act (NWRSA) of 1966, as amended by the Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations (CFR) and Fish and Wildlife Service Manual (FWS).

The Maine Coastal Islands National Wildlife Refuge Complex (MCINWRC, Refuge Complex) is made up of five refuges, all of which are covered in this plan (see maps 1 through 5 at the end of this Hunting Plan). Each refuge is established under specific legislation. Similarly, each refuge has one or more specific legal purposes for which it was established. The establishing legislation and purposes for the refuges covered in this plan are provided below.

Table 1. Refuge Purposes and Establishing Authorities

Refuge	Establishing Authorities	Refuge Purposes
Petit Manan NWR	<p>Migratory Bird Conservation Act, 16 U.S.C. 715d. Established July 3, 1974.</p> <p>Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes, 16 U.S.C. 667b-667d</p> <p>Refuge Recreation Act, 16 U.S.C. 460k-1</p> <p>Emergency Wetlands Resource Act of 1986, 16 U.S.C. 3901(b), 100 Stat. 3583</p>	<p>“...for use as an inviolate sanctuary, or any other management purposes, for migratory birds.”</p> <p>“...particular value in carrying out the national migratory bird management program.”</p> <p>“(1) Incidental fish and wildlife-oriented recreational development; (2) The protection of natural resources; (3) The conservation of endangered species or threatened species”</p> <p>“...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...”</p>

Refuge	Establishing Authorities	Refuge Purposes
Franklin Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Established September 19, 1973. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C. 667b-667b, as amended	"...particular value in carrying out the national migratory bird management program."
Pond Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Established March 3, 1973. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C. 667b-667d, as amended	"...particular value in carrying out the national migratory bird management program."
Seal Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Established July 24, 1972. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C. 667b-667d, as amended	"...particular value in carrying out the national migratory bird management program."
Cross Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Established July 3, 1980.	"...for use as an inviolate sanctuary, or any other management purposes, for migratory birds."

The Service proposes to expand hunting opportunities at MCINWRC and better align with State programs. We propose the following changes as part of the update to this existing hunting program:

1. Species changes: Expand opportunities for waterfowl, big game, small game, and upland and migratory bird hunting.
2. Huntable acreage: Open 122 acres recently acquired on the mainland and 19.2 acres on Little Bois Bubert Island to big game, small game, and upland and migratory game bird hunting. Waterfowl hunting will be permitted on 20 additional islands (160.82 acres). A total of 48 refuge islands will be open to waterfowl hunting.

3. Method of take changes: No changes.
4. Seasons: Better align hunting seasons with the State of Maine (with some exceptions).

The mission of the Refuge System, as outlined by the NWRSA, as amended by the Refuge System Improvement Act (16 U.S.C. 668dd et seq.), is to:

“...administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The NWRSA mandates the Secretary of the Interior in administering the Refuge System to (16 U.S.C. 668dd(a)(4):

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System;
- Ensure that the biological integrity, diversity, and environmental health of the Refuge System are maintained for the benefit of present and future generations of Americans;
- Ensure that the mission of the Refuge System described at 16 U.S.C. 668dd(a)(2) and the purposes of each refuge are carried out;
- Ensure effective coordination, interaction, and cooperation with owners of land adjoining refuges and the fish and wildlife agency of the States in which the units of the Refuge System are located;
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System and the purposes of each refuge;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the Refuge System through which the American public can develop an appreciation for fish and wildlife;
- Ensure that opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses; and
- Monitor the status and trends of fish, wildlife, and plants in each refuge.

Therefore, it is a priority of the Service to provide for wildlife-dependent recreation opportunities, including hunting and fishing, when those opportunities are compatible with the purposes for which the refuge was established and the mission of the Refuge System.

Petit Manan NWR

Petit Manan NWR (PMNWR) is 6,760 acres and consists of 62 islands, 4 mainland divisions (Petit Manan Point, Sawyer's Marsh, Gouldsboro Bay, and Corea Heath) and the Richards Unit. The Petit Manan Point Division consists of 2,234 acres in Steuben, Washington County (Figure 1). The area has a diversity of habitats including rocky ledges, sphagnum bogs, cedar swamps, jack pine stands, spruce-fir forests with some mixed hardwoods, coastal raised heath peatlands, fresh and saltwater marshes, and old hayfields. The Point also includes over 10 miles of shoreline. The refuge maintains 3 freshwater impoundments (112 acres) on the division, which provides valuable foraging habitat for waterfowl during the fall migration.

The refuge continues to actively acquire offshore islands that provide breeding, staging, and migratory habitats for seabirds, bald eagles, neotropical migrants, and shorebirds. These new acquisitions are administered under PMNWR. Currently, the Service owns 57 islands and holds conservation easements on an additional five islands that are all managed under PMNWR.

In 2007, a limited area of Petit Manan Point (655 acres) was opened to a 1-week muzzleloader hunting season for white-tailed deer (USFWS 2007). The refuge also opened 1,028 acres of the Sawyer's Marsh Division and the 623-acre Gouldsboro Bay Division to hunting and currently allows the hunting of upland and migratory game birds, waterfowl, small, and big game. Waterfowl hunting was also authorized on 24 PMNWR islands. The Corea Heath Division and the Richard's Unit remain closed to all hunting.

Franklin Island NWR

This refuge is 12 acres and was acquired in transfer from the U.S. Coast Guard. Franklin Island NWR supports approximately 8 acres of red spruce forest and 4 acres of dense raspberry thickets and mixed grasses. This island is currently open to waterfowl hunting.

Pond Island NWR

This refuge is 10 acres and was acquired in transfer from the U.S. Coast Guard. The landscape on Pond Island NWR is dominated by mixed grasses, exposed granite ledges, and pockets of sandy beach. Between May and August, the island also supports an active tern restoration project that is cooperatively managed with National Audubon Society. This island is currently open to waterfowl hunting.

Seal Island NWR

This refuge is 65 acres and was acquired in transfer from the U.S. Navy. Seal Island NWR has unexploded ordnance so public use, including hunting, is not permitted on Seal Island NWR.

Cross Island NWR

This refuge, comprised of six islands, is 1,703 acres. Due to restrictions in the deed transfer, Cross Island NWR would remain closed to all hunting.

The entire Refuge Complex consists of 5 mainland parcels and 72 islands, stretching over 250 miles of the Maine coastline and protecting 8,550 acres. It is an ecologically diverse complex, providing both food and shelter to a tremendous variety of resident and migratory species. Habitats found on the refuge include red and white spruce forests, balsam fir stands, mixed

hardwood forests, jack pine stands, coastal raised heath peatlands, blueberry barrens, old hayfields, cedar swamps, fresh and saltwater marshes, raspberry thickets, grass- and shrub-covered islands, granite-lined shores and cobble beaches. A primary objective of the refuge has been to protect and restore populations of colonial nesting seabirds, protect bald eagle nesting areas, and provide important migratory stopover points for neotropical migrants, waterfowl, and shorebirds along the coast of Maine. In recent years, efforts have focused on land acquisition, obtaining additional biological information on both mainland and island properties, and providing high quality interpretive trails.

MCINWRC has 3 mainland divisions and 28 offshore islands currently open to some level of hunting of big game, small game, upland and migratory game birds, and waterfowl. According to the Maine Department of Inland Fisheries and Wildlife (MDIFW), white-tailed deer, moose, black bear, bobcat, raccoon, and wild turkey are designated as big game species, and ruffed grouse, red squirrel, grey squirrel, coyote, opossum, porcupine, snowshoe hare, fox, skunk and woodchuck are small game species (MDIFW 2019).

This plan sets forth guidance on the expansion and implementation of hunt programs at Petit Manan, Pond Island, and Franklin Island NWRs. All three of these refuges are currently open for hunting. Sections of the refuge not specifically mentioned in this document will remain closed to all hunting.

II. Statement of Objectives

The objectives of a hunting program on MCINWRC are to:

1. Provide the public with a high quality recreational experience on refuge lands and waters and increase opportunities and access for hunters. The Refuge System Improvement Act of 1997 identified hunting, where compatible, as one of the six priority public uses on NWRs.
2. Design a hunting program that is administratively efficient and manageable with existing staffing levels and in alignment with MDIFW regulations when possible;
3. Implement a hunting program that is safe for all refuge users;
4. Design a hunting program that aligns with refuge habitat management objectives.

Hunting is consistent with two of the goals outlined in the Refuge Complex's Comprehensive Conservation Plan (CCP) (USFWS 2005):

- **Goal 6:** Promote enjoyment and stewardship of coastal Maine wildlife and their habitats by providing priority, wildlife-dependent recreational and educational opportunities;
- **Goal 8:** Communicate and collaborate with local communities, Federal, State, local and Tribal representatives, and other organizations throughout coastal Maine to further the mission of the Refuge System.

III. Description of Hunting Program

A. Areas to be Opened to Hunting

Petit Manan NWR

Hunting would be maintained on the Petit Manan Point and Gouldsboro Bay Divisions and expanded on Sawyer's Marsh Division, Bois Bubert Island, and Little Bois Bubert Island. Waterfowl hunting would be expanded from 26 to 46 islands on PMNWR. The Corea Heath Division and Richards Unit would remain closed to all hunting.

Petit Manan Point Division

A 655-acre hunt area on the Petit Manan Point Division in Steuben, Washington County would remain open to white-tailed deer hunting during Maine's 1-week muzzleloader season (Figure 1). This division would remain closed to all other hunting.

Sawyer's Marsh Division

MCINWRC opened 1,028 acres within Sawyer's Marsh Division in Milbridge, Washington County (Figure 2) to hunting in 2007 and currently allows the hunting of upland and migratory game birds (excluding crow), waterfowl, small game, and big game (USFWS 2007). We would open 122 acres recently acquired by MCINWRC to upland and migratory game bird, waterfowl, small game, and big game hunting. Due to the small size of the moose and wild turkey populations in this region of the coast, this division would remain closed to hunting for these two species. In addition, the Refuge Complex anticipates building a new parking lot and trail on this division in 2021, which can facilitate both consumptive and non-consumptive uses.

Gouldsboro Bay Division

The Gouldsboro Bay Division in Gouldsboro, Hancock County (Figure 3) consists of 623 acres along the upper portion of West Gouldsboro Bay. The refuge opened this division to hunting in 2007 and currently allows upland and migratory game bird, waterfowl, small game, and big game hunting (USFWS 2007). Due to the small size of the moose and wild turkey populations in this region of the coast, this division would remain closed to hunting for these two species.

Bois Bubert and Little Bois Bubert Islands

MCIWNR opened 1,302 acres on Bois Bubert Island to white-tailed deer hunting in 2007 (Figure 4) (USFWS 2007). Bois Bubert and Little Bois Bubert Island (19.4 acres) would be opened to big game, small game, and upland and migratory game bird hunting. Due to the small size of the moose and wild turkey populations in this region of the coast, these two islands would remain closed to moose and turkey hunting.

MCINWRC Islands

Totalling 667 acres, 48 MCINWRC islands would be open to waterfowl hunting (Table 2). No other hunting opportunities could be offered on these islands because they do not support resident populations of big or small game species.

Petit Manan NWR

The MCINWRC 2007 Hunt Plan authorized waterfowl hunting on 24 PMNWR islands and 2 additional PMNWR islands were later opened via authorization from our Island Pre-Acquisition CD (USFWS 2005, USFWS 2007). We would be opening an additional 20 islands to waterfowl hunting (Table 2) (Figure 5).

Franklin Island NWR and Pond Island NWR

Waterfowl hunting would remain open on Franklin Island and Pond Island NWRs.

Table 2. Waterfowl Hunting Opportunities on MCINWRC

Islands	Acreage	CIR Number*	Town, County	Waterfowl
Spectacle	4.76	79-132	Eastport, Washington	N
Libby	43	79-360	Machiasport, Washington	C
Stone	57	79-356	Machiasport, Washington	N
Eastern Brothers	17	79-573	Jonesport, Washington	C
Halifax	75	79-570	Jonesport, Washington	C
Schoppee	16.5	79-566	Roque Bluffs, Washington	C
Inner Sand	18	79-614	Addison, Washington	C
Jordan's Delight	27	79-922	Milbridge, Washington	C
Petit Manan	10	79-933	Steuben, Washington	C
Pop	2.8	79-832	Steuben, Washington	N
Sheep	7.9	79-835	Steuben, Washington	N
Sally	1	79-836	Steuben, Washington	C
Abbott	3.5	79-837	Steuben, Washington	C
Eastern	3	79-843	Steuben, Washington	N
Sally	5.3	59-037	Gouldsboro, Hancock	N
Egg Rock	13	59-301	Winter Harbor, Hancock	C
North Twinnie	3.6	59-160	Bar Harbor, Hancock	N
South Twinnie	3.3	59-161	Bar Harbor, Hancock	C
Ship	11.2	59-341	Tremont, Hancock	C
Trumpet	3.2	59-340	Tremont, Hancock	C
East Barge	0.5	59-342	Tremont, Hancock	C
West Barge	0.5	59-343	Tremont, Hancock	C
Mahoney	6.9	59-933	Brooklin, Hancock	N
John's	43	59-483	Swan's Island, Hancock	C
Gooseberry	5.4	59-398	Swan's Island, Hancock	N
Little Marshall	14	59-470	Swan's Island, Hancock	C
Three Bush	1.6	59-980	Swan's Island, Hancock	N
Compass	7	59-790	Deer Isle, Hancock	N

Islands	Acreage	CIR Number*	Town, County	Waterfowl
Brimstone	32	63-176	Vinalhaven, Knox	N
Little Brimstone West	4	63-179	Vinalhaven, Knox	N
Little Brimstone East	1.34	63-180	Vinalhaven, Knox	N
Little Brimstone North	0.89	63-178	Vinalhaven, Knox	N
Holden Ledge	0.56	63-182	Vinalhaven, Knox	N
Two Bush	8	63-653	Muscle Ridge Shoals Twp, LURC	C
Matinicus Rock	28	63-940	Matinicus Isle, LURC	C
Two Bush	5.88	63-901	Matinicus Isle, LURC	C
Hay Ledge	5	63-582	St. George, Knox	N
Brothers (North)	3.8	63-579	St. George, Knox	N
Brothers (Central)	0.56	63-580	St. George, Knox	N
Brothers (South)	7.4	63-581	St. George, Knox	N
Hart	13	63-833	St. George, Knox	C
Little Thrumcap	8.5	65-267	South Bristol, Lincoln	C
Outer White	16	65-278	Boothbay, Lincoln	C
Outer Heron	66	65-279	Boothbay, Lincoln	C
Ram	10	55-605	Harpswell, Cumberland	C
Upper Flag	30	55-415	Harpswell, Cumberland	C
Pond Island NWR				
Pond Island	10	73-282	Phippsburg, Sagadahoc	C
Franklin Island NWR				
Franklin Island	12	63-707	Friendship, Knox	C

C = Currently Opened, N = New Opportunity

** Maine's Coastal Island Registry (CIR) was created in 1973 as a means of clarifying title to the more than 2,000 islands scattered along its coastal shores.*

Waterfowl hunting would not be permitted on 21 MCINWRC islands due to a combination of factors including unexploded ordnance, partial island ownership, livestock, deed restrictions, or limitations on management authority with easements (Table 3).

Seal Island NWR and Cross Island NWR

The 65-acre Seal Island NWR would remain closed to all public access including hunting due to unexploded ordnance. The 6 islands (1,703 acres) within Cross Island NWR would remain closed to all hunting due to deed restrictions at the time the property was transferred to the Service.

Table 3. MCINWRC Islands to Remain Closed to Hunting

Islands	Acreage	CIR Number	Town, County	
Cross	1,654	79-347	Cutler, Washington	Restrictions in deed transfer
Scotch	10	79-350	Cutler, Washington	Restrictions in deed transfer
Inner Double Head Shot	14	79-352	Cutler, Washington	Restrictions in deed transfer
Outer Double Head Shot	8	79-351	Cutler, Washington	Restrictions in deed transfer
Mink	11	79-345	Cutler, Washington	Restrictions in deed transfer
Old Man	6	79-313	Cutler, Washington	Restrictions in deed transfer
Nash	5	79-627	Addison, Washington	Partial ownership, livestock
Bar	17.2	59-244	Tremont, Hancock	Partial ownership, seasonal homes
Mark	31	63-339	North Haven, Knox	Restriction in deed transfer
Crow	11.7	63-651	Muscle Ridge Shoals Twp, LURC	Restriction in deed transfer
Little Spoon	23	63-289	Isle au Haut, Knox	Restriction in deed transfer
Roberts	10	63-174	Vinalhaven, Knox	Restriction in deed transfer
Little Roberts	1	63-175	Vinalhave, Knox	Restriction in deed transfer
Seal	65	63-923	Vinalhaven, Knox	Unexploded ordnance
Metinic	163.2	63-584	Matinicus Isle, LURC	Partial ownership and livestock
Crane	12	63-705	Friendship, Knox	Easement property ¹
Inner White	5	65-276	Boothbay, Lincoln	Easement property ¹
Lower Mark	9.5	65-461	Southport, Lincoln	Easement property ¹
Smuttynose	40	81-182	Kittery, York	Easement property ¹
Duck	9	81-181	Kittery, York	Unexploded ordnance
Malaga	3	81-193	Kittery, York	Easement property ¹

¹Hunting rights not acquired with easement purchase

B. Species to be Taken, Hunting Periods, Hunting Access

Hunting seasons for big game, small game, upland and migratory game birds, and waterfowl would be in accordance with the State's seasons with the exception of those restrictions outlined in Table 4 and Table 5. The majority of the seasonal restrictions were implemented to minimize conflict with other priority public uses on our mainland divisions and adjacent landowners. The

restrictions also aim to minimize disturbance to priority wildlife species like bald eagles nesting on the refuge and low population sizes of particular species (i.e. moose and wild turkey). Hunters must use and possess only non-toxic shot while hunting small game, upland and migratory game birds. Hunters will be strongly encouraged to use non-toxic shot for all other game species on the refuge.

Table 4. Hunting Opportunities on Petit Manan Point, Bois Bubert and Little Bois Bubert Islands

Species	Petit Manan Point (Hunt Area: 655 acres)	Bois Bubert Island (1,302 acres) and Little Bois Bubert Island (19.4 acres)
Big Game		
White-tailed deer	Muzzleloader season only	Open in alignment with State for seasons and method of take
Moose	Closed	
Black bear	Closed	Hunting only permitted during firearm season for white-tailed deer. No hunting over bait or using pursuit dogs.
Bobcat and raccoon	Closed	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and no night hunting of raccoon
Wild turkey	Closed	
Small Game		
Ruffed grouse	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Red squirrel, porcupine, and woodchuck	Closed	No hunting from April 1 to October 31 Non-toxic shot only.
Gray squirrel and skunk	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Snowshoe hare and fox	Closed	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and non-toxic shot only.
Coyote	Closed	No hunting from April 1 to October 31, no hunting over bait or pursuit dogs, no night hunting, and non-toxic shot only.
Upland and Migratory Game Birds		
Migratory game birds	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Waterfowl	Closed	
Crow	Closed	

Table 5. Hunting Opportunities on Gouldsboro Bay and Sawyer’s Marsh Divisions

Big Game	
White-tailed deer	Open in alignment with State for seasons and method of take
Moose	Closed
Black bear	Hunting only permitted during firearm season for white-tailed deer. No hunting over bait or using pursuit dogs.
Bobcat and raccoon	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and no night hunting of raccoon.
Wild turkey	Closed
Small Game	
Ruffed grouse	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Red squirrel, porcupine, and woodchuck	No hunting from April 1 to October 31 and non-toxic shot only.
Gray squirrel and skunk	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Snowshoe hare and fox	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and non-toxic shot only.
Coyote	No hunting from April 1 to October 31, no hunting over bait, pursuit dogs or night hunting, and non-toxic shot only.
Upland and Migratory Game Birds	
Migratory game birds	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Waterfowl	Open in alignment with State and Federal regulations for seasons and method of take
Crow	Closed

Waterfowl hunting would be authorized on the 48 islands identified in Table 2. There are no additional hunting opportunities for big or small game hunting on these islands, and they would remain closed to all other hunting seasons.

Big Game

White-tailed Deer

White-tailed deer hunting would be maintained on Gouldsboro Bay and Bois Bubert Island in alignment with State seasons and methods of take. Little Bois Bubert Island would be opened to white-tailed deer hunting. Within the Sawyer’s Marsh Division, 122 acres of recently acquired property would be opened to white-tailed deer hunting, bringing the total acreage open to deer hunting on this division to 1,150 acres. On Petit Manan Point, a designated 655-acre hunt area would remain open to deer hunting during the 1-week muzzleloader season only. With the exception of the Petit Manan Point Division, hunting season and method of take would comply with State of Maine regulations.

Moose

Due to the small size of the moose population in this region of Maine, all lands within MCINWRC would remain closed to moose hunting. Should the moose population increase, the

Refuge Complex can revisit this decision in future planning documents.

Black Bear

Black bear hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to bear hunting on this division to 1,150 acres. Bear hunting would be opened on Bois Bubert and Little Bois Bubert islands. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to bear hunting. Bear hunting on MCINWRC is only permitted during the firearm season for white-tailed deer. In addition, we do not permit the use of pursuit dogs for bear hunting due to conflicts with adjacent landowners and priority public uses on our mainland divisions. MDIFW does not authorize the use of pursuit dogs for bear hunting after November 1, so pursuit dogs are not permitted during the general firearm season for deer.

Bobcat and Raccoon

Bobcat and raccoon hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to bobcat and raccoon hunting on this division to 1,150 acres. Bobcat and raccoon hunting would also be opened on Bois Bubert and Little Bois Bubert islands. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to bobcat and raccoon hunting. Bobcat and raccoon hunting on MCINWRC would be open in alignment with MDIFW for seasons and methods of take, with the exception of no pursuit dogs. We do not permit the use of pursuit dogs for bobcat and raccoon hunting due to conflicts with adjacent landowners and priority public uses.

Wild Turkey

Wild turkey hunting would remain closed due to the small size of the turkey population on the Refuge Complex lands. Turkeys have recently colonized this region of Maine, and populations are not sufficient to offer a hunting season at this point in time. We can revisit this decision in the future once the turkey population on the Refuge Complex has had an opportunity to grow.

Small Game

Ruffed Grouse

Ruffed grouse hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to grouse hunting on this division to 1,150 acres. We would also open Bois Bubert and Little Bois Bubert islands to grouse hunting. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to grouse hunting. Ruffed grouse hunting on MCINWRC would align with all MDIFW seasons and methods of take during that period. The use of non-toxic shot is required.

Red Squirrel, Porcupine, and Woodchuck

Red squirrel, porcupine, and woodchuck hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to red squirrel, porcupine, and woodchuck hunting on this division to 1,150 acres. We would also open Bois Bubert and Little Bois Bubert islands to hunting these three species. As a result of this Hunting Plan, 3,094 acres of MCINWRC would

be open to red squirrel, porcupine, and woodchuck hunting. MCINWRC does not permit hunting for these species from April 1 through October 31. Outside of that period, red squirrel, porcupine and woodchuck can be hunted with no daily or seasonal limits. The use of non-toxic shot is required.

Gray Squirrel and Skunk

Gray squirrel and skunk hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to gray squirrel and skunk hunting on this division to 1,150 acres. We would open gray squirrel and skunk hunting on Bois Bubert and Little Bois Bubert islands. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to gray squirrel and skunk hunting in accordance with MDIFW seasons, bag limits, and methods of take. The use of non-toxic shot is required.

Snowshoe Hare and Fox

Snowshoe hare and fox hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to snowshoe hare and fox hunting on this division to 1,150 acres. We would open snowshoe hare and fox hunting on Bois Bubert and Little Bois Bubert islands. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to snowshoe hare and fox hunting. Snowshoe hare and fox hunting on MCINWRC would be open in alignment with MDIFW for seasons and methods of take, with the exception of pursuit dogs being prohibited. We do not permit the use of pursuit dogs for snowshoe hare and fox hunting due to conflicts with adjacent landowners and priority public uses. The use of non-toxic shot is required.

Coyote

Coyote hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to coyote hunting on this division to 1,150 acres. We would open Bois Bubert and Little Bois Bubert islands to coyote hunting. As a result of this Hunting Plan, 3,094 acres of MCINWRC would be open to coyote hunting. Within MCINWRC, coyote hunting is not permitted from April 1 through October 31. Hunting over bait or using pursuit dogs to hunt coyote are not permitted. We do not permit the use of pursuit dogs for coyote hunting due to conflicts with adjacent landowners and priority public uses. The use of non-toxic shot is required.

Migratory Game Birds

Migratory game bird hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to migratory game bird hunting on this division to 1,150 acres. We would open Bois Bubert and Little Bois Bubert islands to migratory game bird hunting. As a result of this Hunting Plan, 3,094 acres of refuge lands would be open to migratory game bird hunting. The use of non-toxic shot is required. Migratory game bird hunting would remain closed on the Petit Manan Point Division and the remaining 71 Refuge Complex islands.

Migratory Game Birds and Waterfowl

Migratory Game Birds

Migratory game bird hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to migratory game bird hunting on this division to 1,150 acres. We would open Bois Bubert and Little Bois Bubert islands to migratory game bird hunting. As a result of this new Hunt Plan, 3,094 acres of MCINWRC would be open to migratory game bird hunting. Migratory game bird hunting would remain closed on the Petit Manan Point Division and the remaining 71 MCINWRC islands.

Waterfowl

Waterfowl hunting would be maintained on Gouldsboro Bay Division. Within the Sawyer's Marsh Division, 122 acres of recently acquired property would be opened, bringing the total acreage open to waterfowl hunting on this division to 1,150 acres. Pond Island NWR and Franklin Island NWR would remain open to waterfowl hunting. Waterfowl hunting would be maintained on 28 MCINWRC islands and opened on 20 MCINWRC islands (Table 2). As a result of this Hunting Plan, 2,441 acres including 48 MCINWRC islands would be open to waterfowl hunting. Waterfowl hunting would remain closed on Bois Bubert and Little Bois Bubert islands, Petit Manan Point Division and the remaining 21 MCINWRC islands.

Hunter Access

The Refuge Complex will allow hunters access to all areas open to hunting. The intention is to provide safe, quality hunting opportunities that consider the welfare of the wildlife resources. In addition, MCINWRC is planning to add a parking lot and new trail on the Sawyer's Marsh Division in 2021 that should facilitate increased public access on this property.

C. Hunter Permit Requirements

All persons hunting on the Refuge Complex will be required to obtain the necessary State and federal licenses, permits, and stamps.

D. Consultation and Coordination with the State

National wildlife refuges, including Petit Manan, Pond Island, and Franklin Island NWRs, conduct hunting programs within the framework of State and Federal regulations. The Refuge Complex has moved forward with developing this hunting plan based upon earlier formal coordination with MDIFW as well as the intervening informal discussions.

In developing this plan, we reviewed hunting regulations for the State of Maine to find consistency where possible. On August 20, 2020, refuge leadership and MCINWRC staff met with James Connolly, Kelsey Sullivan, and Steve Dunham from MDIFW to discuss proposed changes to MCINWRC hunting plans.

We will continue to consult and coordinate with MDIFW to maintain consistent regulations and programs, monitor populations of proposed hunt species, and set harvest goals. We will work together to ensure safe and enjoyable recreational hunting opportunities with law enforcement officers from both agencies working together to conduct patrols, safeguard hunters and visitors, and protect both game and nongame species. The Environmental Assessment (EA) (Appendix B)

associated with this hunting plan will be shared with MDIFW.

E. Law Enforcement

Hunting regulations on MCINWRC will be enforced by refuge law enforcement officers with the assistance of Maine Department of Marine Resource and Maine State Game Wardens. The Refuge Complex has worked closely with State law enforcement personnel throughout the years, and anticipates future cooperative efforts. Information concerning boundaries, refuge-specific regulations, hunt brochures, and maps will be distributed to all interested parties.

The following methods are used to control and enforce hunting regulations:

- Refuge and hunt area boundaries will be clearly posted.
- An annual Hunt Brochure will be printed and provided at all refuge kiosks and both office locations. The brochure will include maps of all refuge areas open to hunting.
- MCINWRC law enforcement staff will randomly check hunters for compliance with Federal and State Laws.
- Refuge Hunt Regulations and Brochure will be available on the MCINWRC webpage at: https://www.fws.gov/refuge/maine_coastal_islands/.

F. Funding and Staffing Requirements

There are sufficient funds within the annual operating budget of MCINWRC to conduct the expanded hunting program as proposed (Table 6). There would be little difference for law enforcement needed with the proposed expanded plan. During the hunt season, current law enforcement efforts are focused on compliance with State and refuge regulations, reducing user conflicts on the refuges and ensuring a safe hunt. The Refuge Complex has successfully implemented hunting programs on all Petit Manan, Pond Island, and Franklin Island NWRs for over 13 years.

Table 6. Annual Hunt Program Funding and Staffing Requirements

Identifier	Cost
Hunt Program Staff (Maintenance, Administration, Biologist, Managers)	\$500
Annual posting of hunt zone signs (materials and labor)	\$700
Outreach: Signage and brochures, reports	\$600
Law Enforcement	\$8,000
Total Annual Cost	\$9,800

IV. Conduct of the Hunting Program

A. Hunter Permit Application, Selection, and/or Registration Procedures

All hunting on MCINWRC will be conducted according to State and Federal regulations. Any deviations from MDIFW species, season length, or method of take are outlined in this Plan (Tables 4 and 5).

B. Refuge-Specific Hunting Regulations

To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting must be conducted in accordance with State and Federal regulations as supplemented by refuge-specific regulations. Listed below are Service and refuge-specific regulations that pertain to hunting on MCINWRC as of the date of this plan. These regulations may be modified as conditions change or if refuge expansion continues.

- *Access.* Hunters are allowed on the refuge from 1 hour before legal sunrise to 1 hour after legal sunset. Deer hunting on Petit Manan Point during the muzzleloader season is only authorized in the designated hunt zone. Hunters may enter the non-hunt zone area to recover legally harvest deer, but may not carry a bow or firearm with them.
- *Blinds.* Only temporary or portable blinds or ladders are authorized for use on MCINWRC. Migratory game bird hunters are required to remove all portable or temporary blinds and decoys from the refuge following each day's hunt.
- *Tree Stands.* Big game hunters must remove all tree stands, blinds, and ladders from the refuge on the last day of muzzleloader deer season.
- *Dogs.* MCINWRC only allows pointing, flushing and retrieving dogs. No pursuit hounds may be used to hunt animals such as raccoon, fox, hare, bobcat, coyote and bear.
- *Seasons.* Red squirrel, porcupine and woodchuck may not be hunted from April 1 to October 31. Coyote may not be hunted April 1 to October 31. Black bear may only be hunted during the deer firearms season. White-tailed deer hunting on Petit Manan Point is limited to a 1-week muzzleloader season.
- *Ammunition.* MCINWRC prohibits the use of toxic ammunition for small game and upland game bird hunting (in addition to the Federal non-toxic requirement for hunting migratory game birds).

C. Relevant State Regulations

All hunters on MCINWRC must follow the licensing guidelines set by the State of Maine. Hunters must secure and possess a State of Maine hunting license at all times while hunting on the Refuge Complex (50 CFR:32.2(a)). We allow youth hunting during the State-prescribed youth hunting days in accordance with State regulations and bag limits.

V. Public Engagement

A. Outreach for Announcing and Publicizing the Hunting Program

MCINWRC will disperse information about the hunting program in a number of ways. Hunt brochures containing information about rules and regulations for hunters are available at kiosks located on two of the mainland divisions open to hunting (Petit Manan Point and Gouldsboro Bay), as well as refuge offices in Milbridge and Rockland. Upon completion of the parking lot and hiking trail at Sawyer's Marsh Division, we will be able to post hunting information at that trailhead. The hunt brochure will also be available online on the Refuge Complex webpage.

B. Anticipated Public Reaction to the Hunting Program

Hunting is a priority public use of the Refuge System, and it has been found compatible at Petit Manan, Pond Island, and Franklin Island NWRs. In developing our Hunt Plan in 2007, the majority of issues raised by the public focused on the Petit Manan Point Division (USFWS 2007). That area supports the majority of our public use activities and has significant private in-holdings. To balance the needs of all refuge visitors and to address the public safety concerns of our neighbors we restrict hunting on the Petit Manan Point Division to a 1-week muzzleloader white-tailed deer hunt in early December. This allows refuge visitors to continue using our trails throughout the fall period and accommodates many of the refuge neighbors that are seasonal residents and depart the area by the middle of November. Some form of hunting has now been an ongoing activity on the Refuge Complex for 13 years, so the public is familiar with the presence of hunters on the refuge landscape during certain times of year.

Information on kiosks and brochures remind all consumptive and non-consumptive users of the other activities that may be ongoing at the same time. Additionally, hunting is also not allowed in the State of Maine on Sundays, thereby decreasing user conflicts.

During the 90-day public comment period for the draft version of this plan, no comments were received. No substantive changes were made to the plan from the draft to final version.

C. How Hunters Will Be Informed of Relevant Rules and Regulations

General information regarding hunting can be obtained at the refuge offices in Milbridge and Rockland or from the hunt brochures available in refuge kiosks. Hunting information is also available on the Refuge Complex website. Dates, island list, maps, and refuge-specific requirements related to the hunt program will be available on the station websites at:

https://www.fws.gov/refuge/maine_coastal_islands/

VI. Compatibility Determination

Hunting and all associated program activities proposed in this plan are found compatible with the purposes of the Refuge Complex. Allowing hunting for the previously mentioned species on Petit Manan, Pond Island, and Franklin Island NWR contributes to and does not materially interfere with or detract from the mission of the Refuge System and the purposes for which the refuges were established. See Appendix A for the complete Compatibility Determination for hunting on Petit Manan, Pond Island, and Franklin Island NWRs.

VII. References

MDIFW. 2019. Summary of Maine Hunting Laws: 2019-2020, Maine Department of Inland Fisheries and Wildlife, Augusta, ME, 41pp.

USFWS, 2005, Maine Coastal Islands National Wildlife Refuge Final Comprehensive Conservation Plan, 388 pp.

USFWS, 2007, Hunt Plan: 2007, Petit Manan National Wildlife Refuge (Maine Coastal Islands National Wildlife Refuge), USFWS, Milbridge, ME, 19pp.

Figure 1. Petit Manan Point

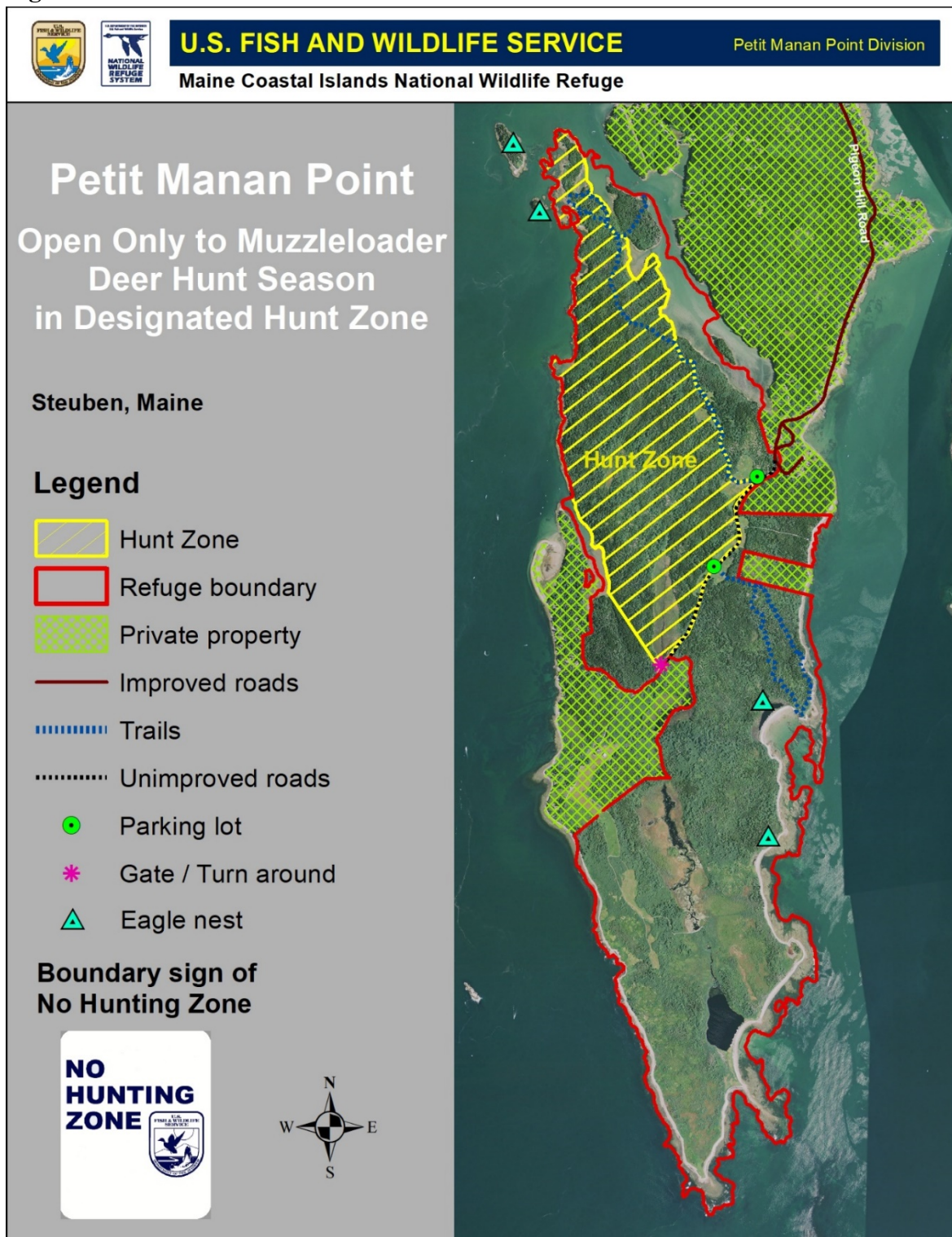


Figure 2. Sawyer's Marsh Division

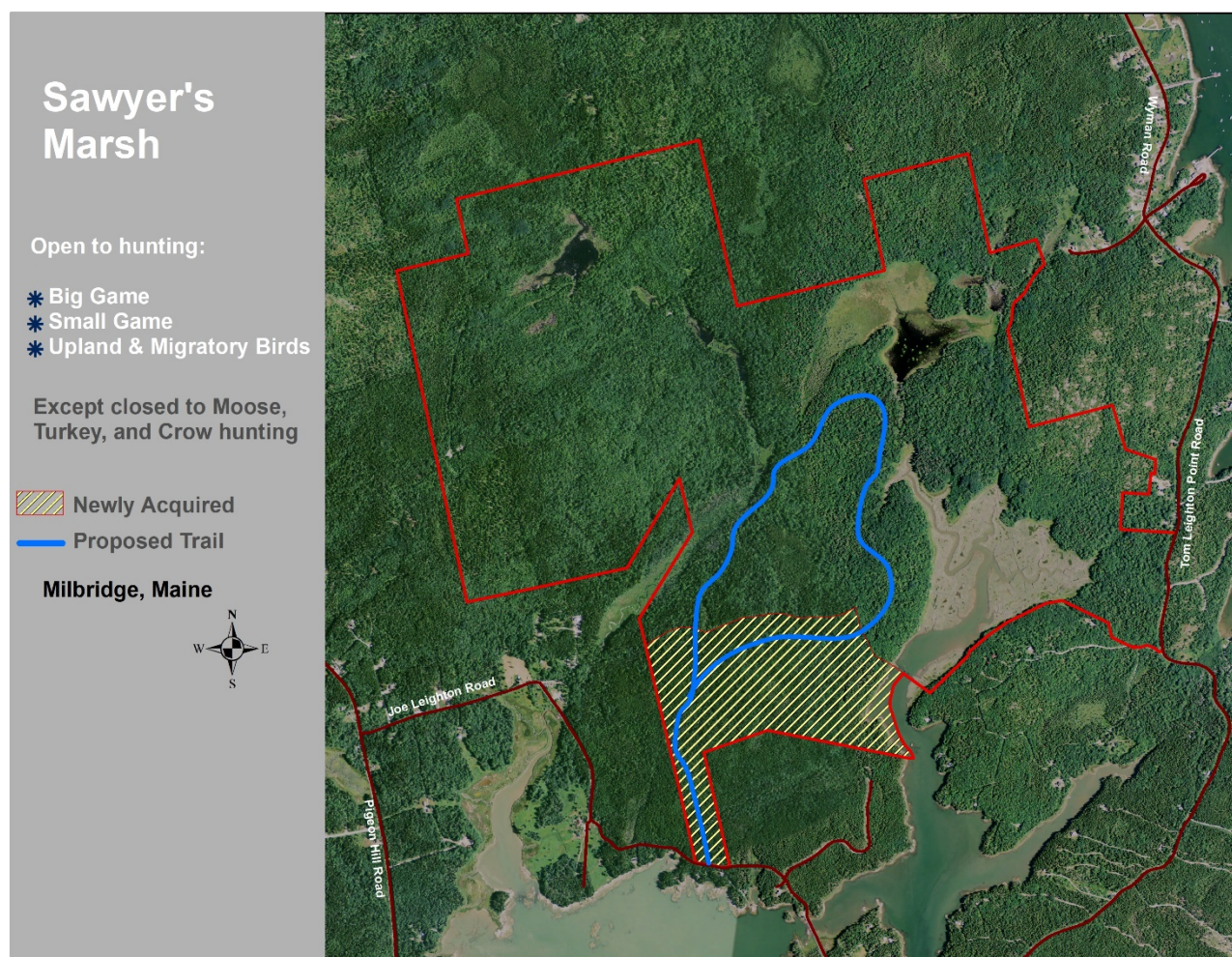


Figure 3. Gouldsboro Bay Division

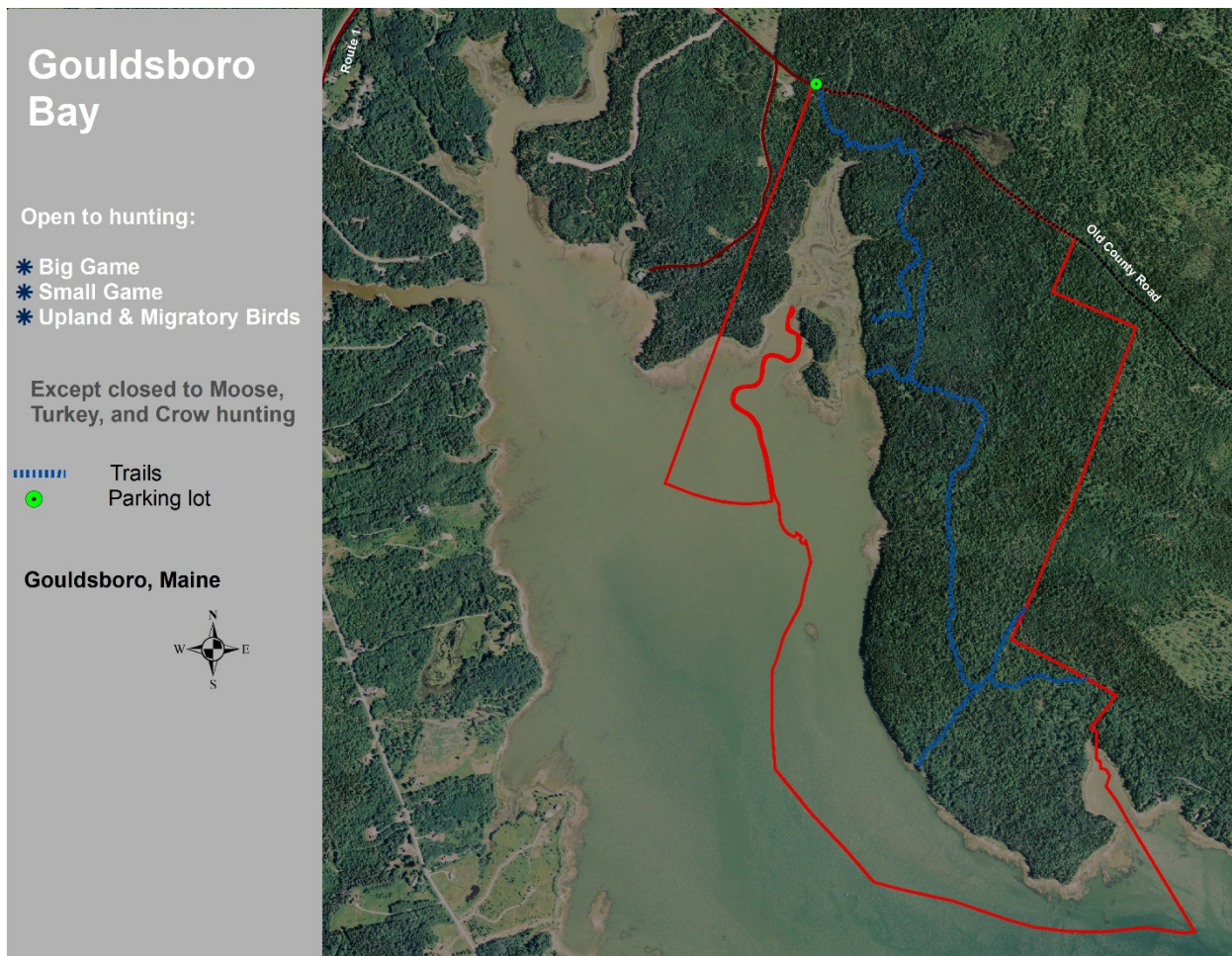


Figure 4. Bois Bubert and Little Bois Bubert Islands

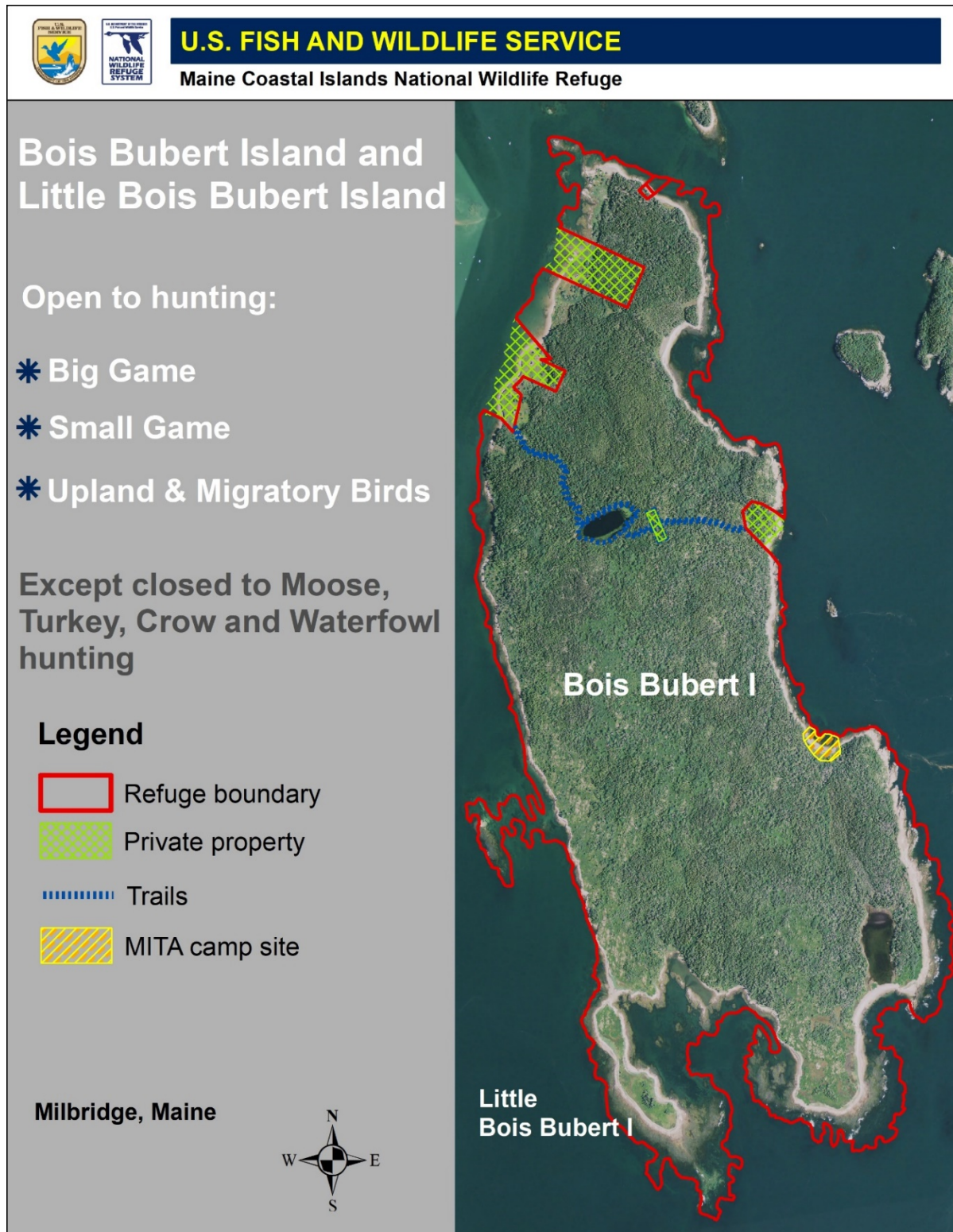
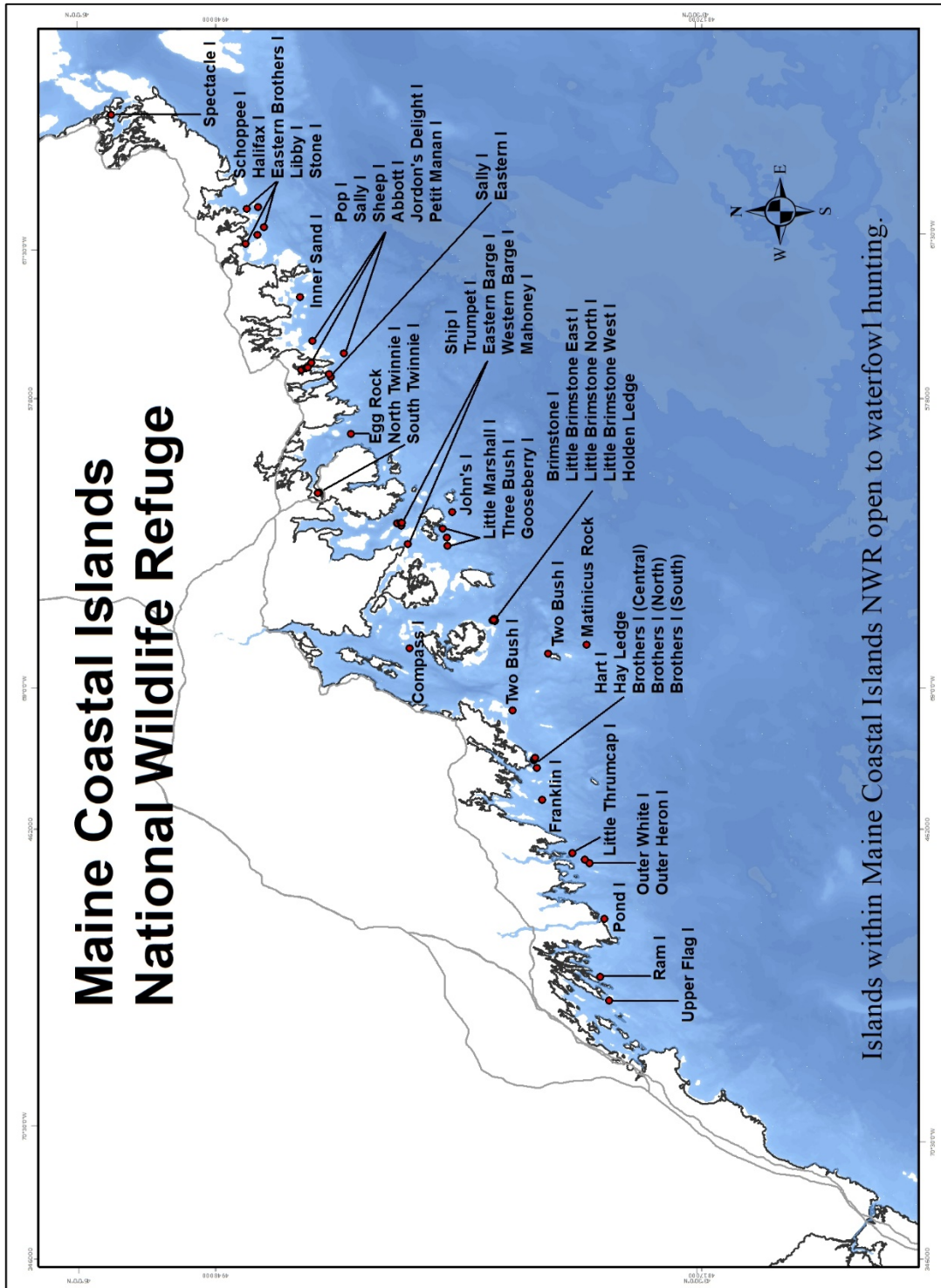


Figure 5. MCINWRC Islands Open to Waterfowl Hunting



Compatibility Determination

USE: Hunting

REFUGE NAME: Maine Coastal Islands National Wildlife Refuge Complex (MCINWRC, Refuge Complex). Five refuges within the State of Maine are managed collectively by MCINWRC. The refuges covered in this plan include:

- Petit Manan National Wildlife Refuge (PMNWR)
- Cross Island National Wildlife Refuge (NWR)
- Seal Island NWR
- Franklin Island NWR
- Pond Island NWR

DATE ESTABLISHED:

Petit Manan NWR: July 3, 1974

Cross Island NWR: July 3, 1980

Seal Island NWR: July 24, 1972

Franklin Island NWR: September 19, 1973

Pond Island NWR: March 3, 1973

REFUGE PURPOSES, ESTABLISHING and ACQUISITION AUTHORITIES

Table A-1. Refuge Purposes and Establishing Authorities

Refuge	Establishing Authorities	Refuge Purposes
Petit Manan NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes, 16 U.S.C. 667b-667d Refuge Recreation Act, 16 U.S.C. 460k-1	“...for use as an inviolate sanctuary, or any other management purposes, for migratory birds.” “...particular value in carrying out the national migratory bird management program.” “(1) Incidental fish and wildlife-oriented recreational development; (2) The protection of natural resources; (3) The conservation of

Refuge	Establishing Authorities	Refuge Purposes
	Emergency Wetlands Resource Act of 1986, 16 U.S.C. 3901(b), 100 Stat. 3583	endangered species or threatened species” “...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...”
Franklin Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C. 667b-667b, as amended	“...particular value in carrying out the national migratory bird management program.”
Pond Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C. 667b-667d, as amended	“...particular value in carrying out the national migratory bird management program.”
Seal Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d. Act Authorizing the Transfer of Certain Real Property for Wildlife or Other Purposes, 16 U.S.C.. 667b-667d, as amended	“...particular value in carrying out the national migratory bird management program.”
Cross Island NWR	Migratory Bird Conservation Act, 16 U.S.C. 715d.	“...for use as an inviolate sanctuary, or any other management purposes, for migratory birds.”

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

The mission of the National Wildlife Refuge System (Refuge System) is “to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (Refuge System Improvement Act of 1997, Public Law 105-57).

DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?

The use is public hunting of big game (white-tailed deer, black bear, bobcat, and raccoon), small game (ruffed grouse, red squirrel, gray squirrel, porcupine, woodchuck, skunk, fox, coyote, snowshoe hare), upland and migratory game birds, and waterfowl at Petit Manan, Pond Island, and Franklin Island NWRs.

Hunting was identified as one of six priority public uses of the Refuge System by the National Wildlife Refuge System Administration Act (NWRSA) of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57), when found to be compatible.

(b) Where would the use be conducted?

Petit Manan NWR

PMNWR includes 4 mainland divisions (Petit Manan Point, Gouldsboro Bay, Sawyer's Marsh, and Corea Heath), the Richards Unit, and 62 islands. Hunting would be maintained on Petit Manan Point, and expanded on Gouldsboro Bay and Sawyer's Marsh Divisions. Corea Heath Division and the Richards Unit would remain closed to all hunting.

Petit Manan Point Division

A 655-acre Hunt Area on the Petit Manan Point Division in Steuben, Washington County would remain open to white-tailed deer hunting during Maine's 1-week muzzleloader season (Figure 1: Petit Manan Point Division, in Hunting Plan). This division would remain closed to all other hunting.

Sawyer's Marsh Division

MCINWRC opened 1,028 acres within Sawyer's Marsh Division in Milbridge, Washington County (Figure 2 in Hunting Plan) to hunting in 2007 and currently allows the hunting of upland and migratory game birds, waterfowl, small, and big game (USFWS 2007). We would open 122 acres recently acquired by MCINWRC to hunting of upland and migratory game birds, waterfowl, small, and big game. In addition, the Refuge Complex anticipates building a new parking lot and trail on this division in 2021. This should facilitate both consumptive and non-consumptive uses of this property.

Gouldsboro Bay Division

The Gouldsboro Bay Division in Gouldsboro, Hancock County (Figure 3 in Hunt Plan) consists of 623 acres along the upper portion of West Gouldsboro Bay. The Refuge Complex opened this division to hunting in 2007 and currently allows the hunting of upland and migratory game birds, waterfowl, small, and big game (USFWS 2007). No new hunting opportunities would be provided on this division.

Corea Heath Division

The Corea Heath Division is an approximately 431-acre raised coastal peatland situated on the Schoodic Peninsula in the Town of Gouldsboro, Washington County. The site had been occupied by the U.S. Navy since the 1950s and was transferred to the refuge in 2005. Ecological communities occurring on the Corea Heath include open bog, forested bog, open fen, acidic

ledges, coniferous and birch woodlands, and more than a mile of boulder and cobble shoreline. The Navy had designated a 240-acre portion of the heath as an Ecological Preserve Area. The Maine Natural Areas Program has designated the majority of the bog a rare plant community (coastal plateau bog ecosystem), and there are two State-listed plants (screwstem and Pickering's reed grass) located on the property. In an effort to protect the fragile plant communities in the heath and to eliminate safety concerns for people walking on the bog, the Corea Heath Division would remain closed to all hunting.

Richards Unit

The Richards Unit is a 21-acre lot located in Rockport, Knox County. The property was acquired by MCINWRC through donation in 2011. There is a home used for refuge quarters and a boat storage facility located on the property, and the surrounding area is residential. This unit would remain closed to all hunting.

Bois Bubert and Little Bois Bubert Islands

MCIWNRC opened 1,302 acres on Bois Bubert Island to white-tailed deer hunting in 2007 (Figure 4 in Hunting Plan) (USFWS 2007). Bois Bubert and Little Bois Bubert Island (19.4 acres) would be opened to big game, small game, and upland and migratory game bird hunting. The islands are connected at low tide, and wildlife and people can easily walk between the two islands.

Waterfowl Hunting on Refuge Complex Islands

The MCINWRC 2007 Hunt Plan also authorized waterfowl hunting on 24 PMNWR islands and 2 additional islands were later opened via authorization from our Island Pre-Acquisition Compatibility Determination (CD) (USFWS 2007, USFWS 2005). Pond Island NWR and Franklin Island NWR have also been open to waterfowl hunting. We would be opening an additional 20 islands to waterfowl hunting (Table A-2) (Figure 5 in Hunting Plan). In total, 48 islands would be open to waterfowl hunting, totaling 667 acres. None of these islands support resident populations of big or small game species, so no other hunting opportunities are permitted on these islands.

Table A-2. Existing and Expanded Waterfowl Hunting Opportunities on MCINWRC Islands

Islands	Acreage	CIR Number*	Town, County	Waterfowl
Spectacle	4.76	79-132	Eastport, Washington	N
Libby	43	79-360	Machiasport, Washington	C
Stone	57	79-356	Machiasport, Washington	N
Eastern Brothers	17	79-573	Jonesport, Washington	C
Halifax	75	79-570	Jonesport, Washington	C
Schoppee	16.5	79-566	Roque Bluffs, Washington	C
Inner Sand	18	79-614	Addison, Washington	C
Jordan's Delight	27	79-922	Milbridge, Washington	C
Petit Manan	10	79-933	Steuben, Washington	C
Pop	2.8	79-832	Steuben, Washington	N
Sheep	7.9	79-835	Steuben, Washington	N

Islands	Acreage	CIR Number*	Town, County	Waterfowl
Sally	1	79-836	Steuben, Washington	C
Abbott	3.5	79-837	Steuben, Washington	C
Eastern	3	79-843	Steuben, Washington	N
Sally	5.3	59-037	Gouldsboro, Hancock	N
Egg Rock	13	59-301	Winter Harbor, Hancock	C
North Twinnie	3.6	59-160	Bar Harbor, Hancock	N
South Twinnie	3.3	59-161	Bar Harbor, Hancock	C
Ship	11.2	59-341	Tremont, Hancock	C
Trumpet	3.2	59-340	Tremont, Hancock	C
East Barge	0.5	59-342	Tremont, Hancock	C
West Barge	0.5	59-343	Tremont, Hancock	C
Mahoney	6.9	59-933	Brooklin, Hancock	N
John's	43	59-483	Swan's Island, Hancock	C
Gooseberry	5.4	59-398	Swan's Island, Hancock	N
Little Marshall	14	59-470	Swan's Island, Hancock	C
Three Bush	1.6	59-980	Swan's Island, Hancock	N
Compass	7	59-790	Deer Isle, Hancock	N
Brimstone	32	63-176	Vinalhaven, Knox	N
Little Brimstone West	4	63-179	Vinalhaven, Knox	N
Little Brimstone East	1.34	63-180	Vinalhaven, Knox	N
Little Brimstone North	0.89	63-178	Vinalhaven, Knox	N
Holden Ledge	0.56	63-182	Vinalhaven, Knox	N
Two Bush	8	63-653	Muscle Ridge Shoals Twp, LURC	C
Matinicus Rock	28	63-940	Matinicus Isle, LURC	C
Two Bush	5.88	63-901	Matinicus Isle, LURC	C
Hay Ledge	5	63-582	St. George, Knox	N
Brothers (North)	3.8	63-579	St. George, Knox	N
Brothers (Central)	0.56	63-580	St. George, Knox	N
Brothers (South)	7.4	63-581	St. George, Knox	N
Hart	13	63-833	St. George, Knox	C
Little Thrumcap	8.5	65-267	South Bristol, Lincoln	C
Outer White	16	65-278	Boothbay, Lincoln	C
Outer Heron	66	65-279	Boothbay, Lincoln	C
Ram	10	55-605	Harpswell, Cumberland	C
Upper Flag	30	55-415	Harpswell, Cumberland	C

Islands	Acreage	CIR Number*	Town, County	Waterfowl
Pond Island NWR				
Pond Island	10	73-282	Phippsburg, Sagadahoc	C
Franklin Island NWR				
Franklin Island	12	63-707	Friendship, Knox	C

C = Currently Opened, N = New Opportunity

** Maine's Coastal Island Registry (CIR) was created in 1973 as a means of clarifying title to the more than 2,000 islands scattered along its coastal shores.*

Franklin Island NWR and Pond Island NWR

Waterfowl hunting would remain open on Franklin Island and Pond Island NWRs.

Seal Island NWR and Cross Island NWR

The 65-acre Seal Island NWR would remain closed to all public access including hunting due to unexploded ordnance. The six islands (1,703 acres) within Cross Island NWR would remain closed to all hunting due to deed restrictions at the time the property was transferred to the Service.

Waterfowl hunting would not be permitted on 21 MCINWRC islands due to a combination of factors including unexploded ordnance, partial island ownership, livestock, deed restrictions, or limitations on management authority with easements (Table A-3).

Table A-3. Islands Closed to all Hunting

Islands	Acreage	CIR Number	Town, County	
Cross	1,654	79-347	Cutler, Washington	Restrictions in deed transfer
Scotch	10	79-350	Cutler, Washington	Restrictions in deed transfer
Inner Double Head Shot	14	79-352	Cutler, Washington	Restrictions in deed transfer
Outer Double Head Shot	8	79-351	Cutler, Washington	Restrictions in deed transfer
Mink	11	79-345	Cutler, Washington	Restrictions in deed transfer
Old Man	6	79-313	Cutler, Washington	Restrictions in deed transfer
Nash	5	79-627	Addison, Washington	Partial ownership, livestock
Bar	17.2	59-244	Tremont, Hancock	Partial ownership, seasonal homes
Mark	31	63-339	North Haven, Knox	Restriction in deed transfer
Crow	11.7	63-651	Muscle Ridge Shoals Twp, LURC	Restriction in deed transfer
Little Spoon	23	63-289	Isle au Haut, Knox	Restriction in deed transfer

Islands	Acreage	CIR Number	Town, County	
Roberts	10	63-174	Vinalhaven, Knox	Restriction in deed transfer
Little Roberts	1	63-175	Vinalhave, Knox	Restriction in deed transfer
Seal	65	63-923	Vinalhaven, Knox	Unexploded ordnance
Metinic	163.2	63-584	Matinicus Isle, LURC	Partial ownership and livestock
Crane	12	63-705	Friendship, Knox	Easement property ¹
Inner White	5	65-276	Boothbay, Lincoln	Easement property ¹
Lower Mark	9.5	65-461	Southport, Lincoln	Easement property ¹
Smuttynose	40	81-182	Kittery, York	Easement property ¹
Duck	9	81-181	Kittery, York	Unexploded ordnance
Malaga	3	81-193	Kittery, York	Easement property ¹

¹Hunting rights not acquired with easement purchase

(c) When would the use be conducted?

Hunt seasons for big game, small game, upland and migratory game birds, and waterfowl would be in accordance with State seasons with the exception of those restrictions outlined in Tables A-4 and A-5. The majority of the seasonal restrictions were implemented to minimize disturbance to priority wildlife species nesting on the refuge, including bald eagles, and to balance priority public uses on our mainland divisions.

Table A-4. Hunting on Petit Manan Point, Bois Bubert and Little Bois Bubert Islands

Species	Petit Manan Point Division (655 acres)	Bois Bubert Island (1,302 acres) and Little Bois Bubert Island (19.4 acres)
Big Game		
White-tailed deer	Muzzleloader season only	Open in alignment with State for seasons and method of take
Moose	Closed	
Black bear	Closed	Hunting only permitted during firearm season for white-tailed deer. No hunting over bait or using pursuit dogs.
Bobcat and raccoon	Closed	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs. No night hunting of raccoon.
Wild turkey	Closed	
Small Game		
Ruffed grouse	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Red squirrel, porcupine, and woodchuck	Closed	No hunting from April 1 to October 31. Non-toxic shot only.

Species	Petit Manan Point Division (655 acres)	Bois Bubert Island (1,302 acres) and Little Bois Bubert Island (19.4 acres)
Gray squirrel and skunk	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Snowshoe hare and fox	Closed	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and non-toxic shot only.
Coyote	Closed	No hunting from April 1 to October 31, no hunting over bait or pursuit dogs, no night hunting, and non-toxic shot only.
Upland and Migratory Game Birds		
Migratory game birds	Closed	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Waterfowl	Closed	
Crow	Closed	

Table A-5. Hunting on Gouldsboro Bay and Sawyer's Marsh Divisions

Big Game	
White-tailed deer	Open in alignment with State for seasons and method of take
Moose	Closed
Black bear	Hunting only permitted during firearm season for white-tailed deer. No hunting over bait or using pursuit dogs.
Bobcat and raccoon	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs. No night hunting of raccoon.
Wild turkey	Closed
Small Game	
Ruffed grouse	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Red squirrel, porcupine, and woodchuck	No hunting from April 1 to October 31 and non-toxic shot only.
Gray squirrel and skunk	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Snowshoe hare and fox	Open in alignment with State for seasons and method of take, with the exception of no pursuit dogs and non-toxic shot only.
Coyote	No hunting from April 1 to October 31, no hunting over bait or pursuit dogs, no night hunting, and non-toxic shot only.
Upland and Migratory Game Birds	
Migratory game birds	Open in alignment with State for seasons and method of take. Non-toxic shot only.
Waterfowl	Open in alignment with State and Federal regulations for seasons and method of take
Crow	Closed

(d) How would the use be conducted?

To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting must be conducted in accordance with State and Federal regulations, as supplemented by refuge-specific regulations (50 CFR 32.38). Hunt methods for big game, small game, upland and migratory game birds, and waterfowl would be in accordance with State of Maine regulations, with the exceptions outlined in Tables A-4 and A-5. All persons hunting on the Refuge Complex will be required to obtain the necessary State licenses, permits and stamps. Migratory game bird hunters will be required to have a Federal Migratory Bird Hunting and Conservation Stamp (“Duck Stamp”). In addition, hunters intending to hunt migratory game birds or waterfowl must have indicated on their license their intent to harvest these species. This information is compiled by the Service’s Harvest Information Program (HIP) and is used by the Service and our State partners to manage these migratory game bird populations. Listed below are Service and refuge-specific regulations that pertain to hunting on MCINWRC as of the date of this plan. These regulations and procedures may be modified as conditions change or if refuge expansion continues.

- *Access.* Hunters are allowed on the refuge from 1 hour before legal sunrise to 1 hour after legal sunset.
- *Blinds.* Only temporary or portable blinds or ladders are authorized for use on MCINWRC. Migratory game bird hunters are required to remove all portable or temporary blinds and decoys from the refuge following each day’s hunt.
- *Tree Stands.* Big game hunters must remove all tree stands, blinds, and ladders from the refuge on the last day of muzzleloader deer season.
- *Dogs.* MCINWRC only allows pointing, flushing and retrieving dogs. No pursuit hounds may be used to hunt animals such as raccoon, fox, hare, bobcat, coyote and bear.
- *Seasons.* Red squirrel, porcupine and woodchuck may not be hunted from April 1 to October 31. Coyote may not be hunted April 1 to October 31. Black bear may only be hunted during the deer firearms season.
- *Ammunition.* MCINWRC prohibits the use of toxic ammunition for small game and upland game bird hunting (in addition to the Federal non-toxic requirement for hunting migratory game birds).

The Refuge Complex will make a reasonable effort to allow hunters access to all portions of the hunt areas. The intention is to provide safe, quality hunting opportunities that consider the welfare of the refuge wildlife resources. Access to the Refuge Complex for all hunt seasons is through walking, snowshoeing, or boat. All Refuge Complex properties open to hunting and refuge-specific regulations will be identified in our annual hunt brochure.

(e) Why is the use being proposed?

Hunting is a healthy, traditional recreational use of renewable natural resources deeply rooted in America’s heritage, and it can be an important wildlife management tool. During the 2005 MCINWRC Comprehensive Conservation Plan (CCP) process, the Service identified a goal to

provide opportunities for wildlife-dependent recreation, including hunting, where appropriate and compatible with refuge purposes (USFWS 2005). Therefore, this use is consistent with our efforts to meet objectives outlined in our CCP.

Department of the Interior Secretarial Order 3356 directs the Service to enhance and expand public access to lands and waters on national wildlife refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. The proposed action would promote one of the priority public uses of the Refuge System, and providing opportunities for visitors to hunt would promote stewardship of our natural resources and increase public appreciation and support for the refuges.

AVAILABILITY OF RESOURCES:

There are sufficient funds within the annual operating budget of the MCINWRC to conduct the expanded hunting program as proposed (Table A-6). There will be little difference in the amount of law enforcement needed under the previous hunting plan and this proposed expanded plan at Petit Manan, Pond Island, and Franklin Island NWRs. During the hunt season, current law enforcement efforts are focused on compliance with State and refuge regulations, reducing user conflicts in the refuge and ensuring a safe hunt. The refuge has successfully implemented hunting programs on all three refuges for over 13 years.

Table A-6. Annual Hunt Program Funding and Staffing Requirements

Identifier	Cost
Hunt Program Staff (Maintenance, Administration, Biologist, Managers)	\$500
Annual posting of hunt zone signs (materials and labor)	\$700
Outreach: Signage and brochures, reports	\$600
Law Enforcement	\$8,000
Total Annual Cost	\$9,800

ANTICIPATED IMPACTS OF THE USE:

Hunting has the potential to have positive or negative effects on wildlife resources and refuge visitors. A positive effect of increasing access to the refuge would be the additional wildlife-dependent recreational opportunities on both our mainland and island properties. This can translate into more widespread and stronger support for MCINWRC, the Refuge System, and the Service. Although we anticipate this to be minimal, potential negative effects may include user conflict during hunting seasons.

White-tailed Deer

All of the MCINWRC properties open to white-tailed deer hunting are located within MDIFW Wildlife Management District (WMD) 27. In 2017, hunters harvested 27,233 deer in Maine with 697 harvested in WMD 27 or 2.5 percent of total Maine harvest (MDIFW 2018). Only 503 deer were harvested during the muzzleloader season, representing less than 2 percent of the total Statewide harvest. In addition, MDIFW estimates there is an average harvest of 95 deer per 100 square miles of habitat in WMD 27. Within Maine, the number of deer harvested ranges from 5

to 562 deer per 100 square miles of habitat (MDIFW 2018). Given the low number of deer harvested in this region of the State and the low number of deer harvested using muzzleloaders, we do not anticipate that continuing to allow hunting or the opening of an additional 122 acres to hunting would have any significant effect on the number of deer harvested or local and regional deer populations.

Moose

Moose populations in this region of the State are relatively low, and in 2019, no moose were harvested in the towns supporting our three mainland divisions that are open to big game hunting. At this point in time, Refuge Complex staff do not believe there are a sufficient number of moose on MCINWRC to offer a hunting season for this species. Should the density of moose in this region of the coast increase in the future, we may reconsider opening the Refuge Complex to moose hunting.

Black Bear

Black bear hunting on Gouldsboro Bay, Sawyer's Marsh, Bois Bubert, and Little Bois Bubert islands during the firearm season for white-tailed deer would not have any significant effect on the local or regional black bear population. In 2015, MDIFW estimated the Maine black bear population to be at least 36,000 bears. In 2017, hunters harvested 2,897 bears in Maine, with only 3 percent harvested during the deer hunting season. In particular, hunters in WMD 27 only harvested 4 bears during the 2017 firearm season for deer (MDIFW 2018).

Wild Turkey

Turkey populations have recently expanded in WMD 27, and birds were first observed on MCINWRC within the last 3 years. At this point in time, Refuge Complex staff do not believe there are a sufficient number of turkeys on MCINWRC to offer a hunting season for this species. As the population continues to expand, we may reconsider opening the Refuge Complex to turkey hunting at a future date.

Small Game

Disturbance to small game species on the Refuge Complex would occur during the hunting season, although the disturbance is considered negligible as the number of anticipated hunters is thought to be very small. Potential impacts to target species include direct mortality or injury and indirect changes in behavior. MCINWRC anticipates that hunting pressure for small game species on the Refuge Complex would be minimal. In addition, the Refuge Complex has limited the season length and methods of take for some small game species to minimize conflicts with other Refuge Complex users and species of conservation concern. To mitigate potential adverse impacts, MCINWRC prohibits the use of toxic ammunition for small game hunting.

Upland, Migratory Game Birds and Waterfowl

Hunting would not have a significant impact on local, regional, or Atlantic Flyway migratory game birds or waterfowl populations because the percentage taken on the Refuge Complex, though possibly additive to existing hunting take, would measure a fraction of a percent of the estimated migratory game birds populations. Petit Manan Point Division, Bois Bubert Island and Little Bois Bubert Island are known to support important numbers of waterfowl during fall migration, and all three of these areas would remain closed to waterfowl hunting. Although we

currently allow or would be opening waterfowl hunting on 48 MCINWRC islands, we anticipate the actual number of hunters traveling to offshore islands in the winter to hunt these species would be minimal. MCINWRC prohibits the use of toxic ammunition for upland game bird hunting and the USFWS requires the use of non-toxic shot when hunting upland and migratory birds. Potential impacts to target migratory game bird species include direct mortality or injury and indirect changes in behavior. In addition to direct mortality, hunting could result in some short-term redistribution due to disturbance.

Non-target Species

Hunting can have impacts on both target and non-target species. These impacts include direct mortality of individuals, changes in wildlife behavior, changes in wildlife population structure, dynamics, and distribution patterns, and disturbance from noise and hunters walking on- and off-trail (Cole and Knight 1990, Cole 1990, Bell and Austin 1985). However, under the anticipated levels of use on MCINWR, these impacts are expected to be minimal. We anticipate that hunters would likely focus their efforts to the areas surrounding existing public use trails, and therefore large areas of Refuge Complex land would remain undisturbed by hunters.

Vegetation

The number of hunters we have observed hunting on MCINWRC in recent years and those initiating hunting as a result of these expanded opportunities comprise a small fraction of the Refuge Complex's total annual visitation. Hunting could negatively affect vegetation by trampling or creating footpaths, although we anticipate this effect would be minimal. With the exception of the 122 acres, we propose opening to hunting on Sawyer's Marsh, hunting already occurs on both the Gouldsboro Bay and Sawyer's Marsh Divisions. We have not observed any adverse effects on refuge vegetation due to hunting and do not anticipate that opening these divisions to moose hunting would create any significant increase in hunting pressure. We would also be opening waterfowl hunting on 20 Refuge Complex islands but anticipate that most hunting activities would occur in the intertidal area or the rocky ledges surrounding many of the islands. The physical effects on Refuge Complex vegetation from hunting are expected to be minimal based on anticipated levels of use.

Negative impacts of recreational hunting include the temporary trampling of vegetation and light soil erosion. Most hunting activities occur during the fall, and impacts are projected to be minimal. Some hunt seasons extend into winter when plants are dormant and the ground is frozen and/or covered in snow. Hunters would have minimal impacts on plants during this period. For these reasons, hunting is expected to have minimal adverse impacts on vegetation.

Soils

It is anticipated that hunting on the Refuge Complex would have minor impacts to soils. The hunt program has the potential to cause some compaction and/or erosion because off-trail foot travel would occur. However, with a limited number of hunters dispersed across the Refuge Complex during the hunting season, impacts would be minimal. At the anticipated levels of use, hunting is expected to have minimal adverse impacts on soils.

Hydrology (Water Resources and Wetlands)

Hydrology impacts from hunting would be minimal and only result from the use of roads and

trails. Unsurfaced trails are susceptible to a variety of impacts including vegetation loss and compositional changes, soil compaction, erosion and muddiness, exposure of plant roots, trail widening, and the proliferation of visitor-created side trails (Marion and Leung 2001). However, hunters are generally dispersed, and hunting is expected to have minimal adverse effects on soils.

Threatened and Endangered Species

Federally threatened Northern long-eared bats have been documented on MCINWRC during the summer months when the bats are likely raising young. MCINWRC conducted acoustic surveys from 2010 to 2014 and Northern long-eared bats were detected on three of our mainland divisions (Petit Manan, Sawyer's Marsh, and Gouldsboro Bay). Bat activity on all properties significantly decreased by the end of September, prior to the proposed hunting season. Roseate terns breed, or have bred, on several of the MCINWRC seabird restoration islands. Migratory red knots and piping plovers have been observed on a number of MCINWRC islands, although the number of individuals observed is generally low (<5 individuals). While no longer protected under the Endangered Species Act, the Refuge Complex does support multiple pairs of nesting bald eagles that are sensitive to disturbance during the nesting period (March through July).

Lead shot can be used on parts of PMNWR during hunting seasons as detailed in the Hunting Plan, in accordance with State and refuge-specific regulations. The amount of lead introduced to the environment as a result of hunting, however, is negligible. Lead shot is prohibited for small game, upland game bird, and migratory game bird hunting. Therefore, it can only be used for hunting big game species during the appropriate season (usually November to January). The above listed species could not be exposed to lead shot, as they are not present on the refuge during the hunting season and hunters targeting waterfowl in intertidal areas, where these birds forage, are required to use non-toxic shot. Furthermore, some participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic ammunition and fishing tackle, and will educate hunters and anglers about lead. As a result, there are no anticipated adverse impacts to any of the above listed species.

Other Visitors and Users

Under the proposed action, MCINWRC would be open to priority public uses including wildlife observation, environmental education, interpretation, photography, and hunting. With the addition of new hunt areas and species open to hunting, a slight increase in the number of conflicts among user groups can be expected. However, the majority of our public use occurs on the Petit Manan Point Division, and with the exception of the 1-week muzzleloader season for white-tailed deer, this division would remain closed to hunting. We anticipate that hunting pressure would continue to be low on the Gouldsboro Bay and Sawyer's Marsh Divisions, but non-hunters may elect to limit Refuge Complex visits to Sundays (when hunting is not authorized in Maine) or they may avoid the Refuge Complex altogether.

PUBLIC REVIEW AND COMMENT:

This Compatibility Determination (CD) is part of the Maine Coastal Islands NWR Complex Hunting Plan and the accompanying Environmental Assessment (EA). The proposal has been thoroughly coordinated with all interested and/or affected parties, including MDIFW staff. Public notification and review of this CD included a 90-day comment period, from April 7 to

July 6, 2021. We informed the public through local venues, the refuge website and social media. No comment letters were received from the public. No substantive modifications were incorporated into the final plan and decision documents.

DETERMINATION (CHECK ONE BELOW):

_____ Use is not compatible

 X Use is compatible, with the following stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

To ensure compatibility with the refuge's purpose and the Refuge System mission, hunting can occur at MCINWRC in accordance with State and Federal regulations, and special refuge-specific regulations (50 CFR 32.38) to ensure that wildlife and habitat management goals are achieved, and that the program is providing a safe, high-quality hunting experience for participants. This hunting program will be monitored and potentially modified or eliminated if any the program's components are found not compatible. Adherence to the regulations are detailed in the hunting plan and associated hunt-specific brochures will ensure compatibility with the purpose for which the refuge was established. The following stipulations are necessary to ensure compatibility:

- We allow hunters to enter the refuge 1-hour prior to legal sunrise and remain on the refuge until 1-hour after legal sunset.
- No pursuit hounds may be used to hunt animals such as raccoon, fox, hare, bobcat, coyote and bear.
- Only temporary or portable blinds or ladders are authorized for use on MCINWRC. Migratory game bird hunters are required to remove all portable or temporary blinds and decoys from the refuge following each day's hunt.
- All tree stands must have the name and address of the owner clearly printed on any stand that is left overnight. Hunters must obtain verbal or written permission from the refuges to erect or use a portable or permanent ladder or observation platform. Big game hunters must remove all tree stands, blinds, and ladders from the refuge on the last day of muzzleloader deer season.
- Deer hunting on Petit Manan Point during the muzzleloader season is only authorized in the designated hunt zone. Hunters may enter the non-hunt zone area to recover legally harvest deer, but may not a carry a bow or firearm with them.
- Red squirrel, porcupine and woodchuck may not be hunted from April 1 to October 31. Coyote may not be hunted April 1 to October 31. Black bear may only be hunted during the deer firearms season. No night hunting or raccoon or coyote.

- MCINWRC prohibits the use of toxic ammunition for small game and upland game bird hunting.

JUSTIFICATION:

Hunting is a priority wildlife-dependent use for the Refuge System through which the public can develop an appreciation for fish and wildlife. Service policy is to provide expanded opportunities for wildlife-dependent uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management.

Hunting satisfies a recreational need, but hunting on national wildlife refuges can also be an important, proactive management action that can prevent overpopulation and the deterioration of habitat. Disturbance to other species would occur, but this disturbance is generally short-term. Suitable habitat exists on refuge lands to support hunting as proposed.

This activity would not conflict with any of the other priority public uses or adversely impact biological resources. Therefore, through this CD process, we have determined that hunting on the Refuge Complex, in accordance with the stipulations provided above, is a compatible use that will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purpose(s) of the refuge.

SIGNATURE:

Refuge Manager

(Signature)

(Date)

CONCURRENCE:

Regional Chief

(Signature)

(Date)

MANDATORY 15 YEAR RE-EVALUATION DATE:

(Date)

References:

- Bell, D.V. and L.W. Austin. 1985. The Game-fishing Season and Its Effects on Overwintering Wildfowl. *Biological Conservation*, 33(1985)65-80.
- Cole, D.N. 1990. Ecological impacts of wilderness recreation and their management. In J.C. Hendee, G.H. Stankey, and R.C. Lucas (Eds.), *Wilderness Management* (pp. 425-466). Golden, CO: North American Press.
- Cole, D.N. and Knight, R.L. 1990. Impacts of recreation on biodiversity in wilderness. *Natural Resources and Environmental Issues*, 0, 33-40.
- Marion, J.L. and Leung, Y.-F. 2001 Indicators and Protocols for Monitoring Impacts of Formal and Informal Trails in Protected Areas. 217.
- Maine Department of Inland Fisheries and Wildlife. 2018. Wildlife Research and Management Report 2018, 105pp.
- USFWS, 2005, Maine Coastal Islands National Wildlife Refuge Final Comprehensive Conservation Plan, 388 pp
- USFWS, 2007, Hunt Plan: 2007, Petit Manan National Wildlife Refuge (Maine Coastal Islands National Wildlife Refuge), USFWS, Milbridge, ME, 19pp.

Environmental Assessment for Hunting Expansion and Trail Construction at Maine Coastal Islands National Wildlife Refuge Complex

This Environmental Assessment (EA) is being prepared to evaluate the effects associated with this proposed action and complies with the National Environmental Policy Act (NEPA) in accordance with Council on Environmental Quality regulations (40 CFR 1500-1509) and Department of the Interior (43 CFR 46; 516 DM 8) and U.S. Fish and Wildlife Service (550 FW 3) regulations and policies. NEPA requires examination of the effects of proposed actions on the natural and human environment. A list of laws and executive orders evaluated through this EA is included at the end of this document.

Proposed Action

The U.S. Fish and Wildlife Service (Service) is proposing to open or expand hunting opportunities at Maine Coastal Islands National Wildlife Refuge Complex (MCINWRC, Refuge Complex) for big game (white-tailed deer, black bear, bobcat, and raccoon), small game (ruffed grouse, red squirrel, gray squirrel, coyote, porcupine, snowshoe hare, fox, skunk, and woodchuck) and upland and migratory game birds (excluding crow) in accordance with the Refuge Complex's Hunting Plan. We are proposing to open or expand hunting opportunities on Service-owned lands when found to be compatible and consistent with Federal, State, and refuge hunting regulations. In addition, we propose to construct a new parking lot and hiking trail to increase public access opportunities on the Sawyer's Marsh Division in 2021.

This proposed action is often iterative and evolves over time as the Service refines its proposal and learns more from the public, Tribes, and other agencies. Therefore, the final proposed action may be different from the original. The final decision on the proposed action will be made at the conclusion of the public comment period for the EA.

Background

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System), the purposes of an individual refuge, Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act (NWRSA) of 1966, as amended by the Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations (CFR) and Service Manual.

The Refuge Complex is made up of Petit Manan, Cross Island, Seal Island, Pond Island, and Franklin Island National Wildlife Refuges (NWRs), all addressed in this EA. Petit Manan NWR (PMNWR) is currently 6,760 acres and consists of 62 islands, four mainland divisions (Petit Manan Point, Sawyer's Marsh, Gouldsboro Bay, and Corea Heath), and the Richards Unit. The Gouldsboro Bay Division and portions of Petit Manan Point and Sawyer's Marsh are open to hunting.

Franklin Island NWR is a 12-acre island that is currently open to waterfowl hunting. Pond Island NWR is a 10-acre island that supports an active tern restoration project and the island is currently

open to waterfowl hunting. Seal Island NWR has unexploded ordnance and therefore public use, including hunting, is not permitted. Cross Island NWR consists of six islands and will remain closed to all hunting due to restrictions in the deed transfer.

Each refuge is established under specific legislation. Similarly, each refuge has one or more specific legal purposes for which it was established. The establishing legislation and purposes for all five refuges of the Refuge Complex are detailed in Section 1 of the Hunting Plan. All of the refuges are managed as part of the Refuge System whose mission, as outlined by the NWRSA, and as amended by the Refuge System Improvement Act (16 U.S.C. 668dd et seq.) is to:

“administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans”

The NWRSA mandates the Secretary of the Interior in administering the Refuge System to (16 U.S.C. 668dd(a)(4):

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System;
- Ensure that the biological integrity, diversity, and environmental health of the Refuge System are maintained for the benefit of present and future generations of Americans;
- Ensure that the mission of the Refuge System described at 16 U.S.C. 668dd(a)(2) and the purposes of each refuge are carried out;
- Ensure effective coordination, interaction, and cooperation with owners of land adjoining refuges and the fish and wildlife agency of the States in which the units of the Refuge System are located;
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System and the purposes of each refuge;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the Refuge System through which the American public can develop an appreciation for fish and wildlife;
- Ensure that opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses; and
- Monitor the status and trends of fish, wildlife, and plants in each refuge.

This plan sets forth guidance on the expansion and continued implementation of hunt programs at Petit Manan, Pond Island, and Franklin Island NWRs. All three refuges have been open to hunting since 2007.

Purpose and Need for the Proposed Action

Hunting is identified as one of the priority public uses legislatively mandated by the NWRSA of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57) and reinforced as a priority use by Department of the Interior Secretarial Order 3356 (September 15, 2017). The need for action revolves around hunting as a priority use and the requirement to allow hunting that is compatible with the purpose of the refuge and consistent with State of Maine regulations. Additionally, hunting is a healthy, traditional recreational use of renewable natural resources deeply rooted in America's heritage, and can be an important wildlife management tool.

The purpose of this proposed action is to expand opportunities for compatible hunting opportunities on Petit Manan NWR and to continue hunting opportunities on Pond Island and Franklin Island NWRs. Hunting on these three refuges is conducted within the framework of Federal and State regulations. By maintaining hunting regulations that are as or more restrictive than the State of Maine's, individual refuges ensure that they are maintaining seasons which are supportive of management on a local and regional basis. Hunters on the refuge are expected to be ethical and respectful of other hunters, non-consumptive users, wildlife species, and the environment while on refuge lands. Construction of a new parking lot and hiking trail on the Sawyer's Marsh Division would increase public access on the property and support priority public use activities on the Refuge Complex.

The objectives of the hunting program and the new trail construction on MCINWRC are to:

1. Provide the public with a quality recreational experience on refuge lands and waters and increase opportunities and access for consumptive and non-consumptive users of the refuge. The Refuge System Improvement Act of 1997 identified hunting, where compatible, as one of the six priority public uses on refuges;
2. Design a hunting program that is administratively efficient and manageable with existing staffing levels and in alignment with Maine Department of Inland Fisheries and Wildlife (MDIFW) regulations when possible;
3. Implement a hunting program that is safe for all refuge users; and
4. Design a hunting program that aligns with refuge habitat management objectives.

Department of the Interior Secretarial Order 3356 directs the Service to enhance and expand public access to lands and waters on refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. The proposed action would also promote the priority public uses of the Refuge System, and would promote stewardship of our natural resources and increase public appreciation and support for the refuge by providing opportunities for visitors to hunt on refuge lands as well as hike on our new trail on the Sawyer's Marsh Division. To address the needs stated above, the proposed action would bring the refuge into compliance with management guidance detailed in the orders, policy, and Federal law to "recognize compatible wildlife-dependent recreational uses as the priority general uses of the Refuge System" and "ensure that

opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses” (16 U.S.C. 668dd(a)(4)).

This EA serves as the NEPA document that analyzes the impacts on environmental, cultural, and historical resources of expanding hunting, developing a parking lot and hiking trail, and other outdoor recreational opportunities on the refuges.

Alternatives

Alternative A: No Action Alternative – Current Management

The No Action Alternative would continue the Refuge Complex’s current hunting program, which allows for hunting on specific areas of Petit Manan, Pond Island, and Franklin Island NWRs as described in the 2007 refuge-specific EA and Hunt Plan. Under this alternative, waterfowl hunting would be permitted on Pond Island and Franklin Island NWRs. PMNWR permits white-tailed deer, black bear, bobcat, raccoon, ruffed grouse, red squirrel, gray squirrel, coyote, porcupine, snowshoe hare, fox, skunk, woodchuck, and upland and migratory game bird hunting. Hunting regulations for these refuge lands are generally consistent with State hunting regulations, but the Refuge Complex does not permit moose or turkey hunting. Additional refuge-specific regulations also apply.

Under this alternative, hunting opportunities would not change on the Petit Manan Point or Gouldsboro Bay Divisions. Public use opportunities would remain limited on the Sawyer’s Marsh Division due to the lack of a suitable parking location or any developed trails. While the Sawyer’s Marsh Division is currently “open” to public use, visitors must cross private land to access the property. Hunting opportunities on Bois Bubert Island would be limited to white-tailed deer. Waterfowl hunting would continue to be authorized on 28 MCINWRC islands.

Alternative B: Proposed Action Alternative – Expand Consumptive and Non-Consumptive Opportunities at Maine Coastal Islands NWR

The Refuge Complex has prepared a Hunting Plan, which is presented in this document as part of the Proposed Action Alternative.

Under the Proposed Action Alternative, hunting would be maintained or expanded on 4,417.2 of 6,760 acres currently owned or managed by MCINWRC. This would include opening 302 acres to hunting for the first time. Waterfowl hunting would be expanded from 26 islands to 46 islands within PMNWR. Waterfowl hunting would continue to be permitted on Pond Island and Franklin Island NWRs. To facilitate public use on the refuge, a new parking lot and hiking trail would be developed on the Sawyer’s Marsh Division in 2021. Corea Heath Division and the Richards Unit would remain closed to all hunting.

Petit Manan Point Division

A 655-acre Hunt Area on the Petit Manan Point Division in Steuben, Washington County would remain open to white-tailed deer hunting during Maine’s 1-week muzzleloader season. This division would remain closed to all other hunting.

Sawyer's Marsh Division

MCINWRC opened 1,028 acres within Sawyer's Marsh Division in Milbridge, Washington County to hunting in 2007. The Refuge Complex currently allows the hunting of upland and migratory game birds, waterfowl, small, and big game. We would open 122 acres recently acquired by MCINWRC to hunting of upland and migratory game birds, waterfowl, small, and big game. A total of 1,150 acres would be open to hunting on Sawyer's Marsh Division. Moose and wild turkey hunting are not authorized on this division due to their low population size in this region of Maine.

In 2021, MCINWRC would construct a parking lot for three to five cars and develop a hiking trail to facilitate both consumptive and non-consumptive public use on the division. These construction activities should greatly improve year-round public use opportunities on the division.

Gouldsboro Bay Division

The Gouldsboro Bay Division in Gouldsboro, Hancock County consists of 623 acres along the upper portion of West Gouldsboro Bay. The Refuge Complex opened this division to hunting in 2007, and currently allows the hunting of upland and migratory game birds, waterfowl, small, and big game. Moose and wild turkey hunting are not authorized on this division due to their low population size in this region of Maine.

Bois Bubert and Little Bois Bubert Islands

MCIWNRC opened 1,302 acres on Bois Bubert Island to white-tailed deer hunting in 2007. Bois Bubert and Little Bois Bubert Island (19.4 acres) would be opened to big and small game, and upland and migratory game bird hunting. Moose and wild turkey hunting would not be authorized on these islands due to the low population size of these species in this region of Maine. Waterfowl hunting would not be authorized on these parcels as the area serves as a waterfowl sanctuary.

Pond Island and Franklin Island NWRs

Waterfowl hunting would continue to be permitted on Pond Island and Franklin Island NWRs.

Mitigation Measures to Avoid Conflicts

Refuge-specific regulations detailed in the Hunting Plan (and in 50 CFR 32.38) are measures under the Proposed Action Alternative that would reduce or avoid impacts, or ensure that the use is compatible. Refuge and State law enforcement officers enforce hunting regulations. The Refuge Complex will continue to provide hunting information through various forums to ensure the public is aware of applicable laws and policies.

Hunting regulations and hunt unit maps (brochures) would be made available to hunters at kiosks, the refuge website, and at the Refuge Complex offices in Milbridge and Rockland, Maine. To help reduce interaction between hunters on the refuges, other user groups off the refuge, and adjacent landowners, refuge boundaries and hunt area boundaries would be clearly posted. On Petit Manan Point, we only allow a 1-week muzzleloader hunt for white-tailed deer to reduce conflicts on our two most popular hiking trails and to reduce the concerns and conflicts

with adjacent landowners. On MCINWRC, we prohibit the use of pursuit dogs for bear, coyote, snowshoe hare, fox, raccoon, and bobcat to minimize conflicts with adjacent landowners.

This proposed alternative offers increased opportunities for public hunting and fulfills the Service's mandate under the Refuge System Improvement Act of 1997. The Service has determined that the hunting program as designed is compatible with the purposes of the Petit Manan, Pond Island, and Franklin Island NWRs and the mission of the Refuge System.

Alternative(s) Considered, But Dismissed From Further Consideration

In developing hunting plans for refuges, we often receive comments and requests from some members of the public to eliminate hunting. An alternative that would close the Refuge Complex to all hunting was therefore considered but dismissed from detailed analysis. A "No Hunting Alternative" would not accomplish the purposes we seek as described in the "Purpose and Need" section of this EA. Closing the Refuge Complex to hunting would conflict with the Refuge System Improvement Act, which provides that hunting is an appropriate and priority use of the Refuge System, and shall receive priority consideration in refuge planning and management. It mandates that hunting opportunities should be facilitated when feasible and directs the Service to administer the Refuge System to "provide increased opportunities for families to experience compatible wildlife-dependent recreation, particularly opportunities for parents and their children to safely engage in traditional outdoor activities, such as fishing and hunting." Furthermore, Department of the Interior Secretarial Order 3356, signed in 2017, directs the Service to enhance and expand public access to lands and waters on national wildlife refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. An alternative that failed to provide any opportunity to participate in hunting activities, where such activities are compatible with the purposes of the Refuge System, would also fail to meet the goals of the Refuge System.

Refuge staff have worked closely with stakeholders and MDIFW to develop the current proposed hunting plan. There are no unresolved conflicts about the Proposed Action with respect to alternative uses of available resources. Additionally, the Proposed Action builds on an existing hunt program that was implemented in 2007. Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310).

Affected Environment and Environmental Consequences

This section is organized by affected resource categories and for each affected resource discusses both (1) the existing environmental and socioeconomic baseline in the action area for each resource and (2) the effects and impacts of the proposed action and any alternatives on each resource. The effects and impacts of the proposed action considered here are changes to the human environment, whether adverse or beneficial, that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives. This EA focuses on the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Resources that would not be more than negligibly impacted by the action may be dismissed from further analyses (see Table B-1). We determine significance by considering the degree of effects to that environment, and connected actions are used to assist in determining significance.

The Refuge Complex is an ecologically diverse complex, providing both food and shelter to a

tremendous variety of resident and migratory species. Habitats found on the refuges include red and white spruce forests, balsam fir stands, mixed hardwoods, jack pine stands, coastal raised heath peatlands, blueberry barrens, old hayfields, cedar swamps, fresh and saltwater marshes, raspberry thickets, grass- and shrub-covered islands, granite-lined shores and cobble beaches. A primary objective of the Refuge Complex has been to protect and restore populations of colonial nesting seabirds, protect bald eagle nesting areas, and provide important migratory stopover points for neotropical migrants, waterfowl, and shorebirds along the Maine coast.

The mainland divisions of PMNWR are located along the coastal sections of Hancock and Washington Counties, in the eastern region of Maine. The offshore islands within MCINWRC stretch over 250 miles of the Maine coastline, from the Canadian border to the New Hampshire border. The mainland divisions protect 4,439 acres, while the 72 islands within MCINWRC protect 4,098 acres.

As stated above, this section predicts the foreseeable impacts of implementing the hunting program in each of the alternatives. When detailed information may be deficient or unavailable, we base our comparisons on professional judgment and experience. We usually identify potential impacts within a long-range timeframe (i.e., 15 years); beyond that timeframe, they become more speculative.

Please keep in mind the relatively small total land mass of the hunting area of the refuges in comparison with the entire Atlantic Flyway or the breeding ranges of the many birds and wildlife that use it. We recognize that the refuges are not isolated ecologically from the lands around them; however, we may have overstated positive or negative impacts in that larger geographic context. Nevertheless, many of the actions we propose conform to the CCP and other regional landscape plans, and provide positive, incremental contributions to those larger landscape goals.

Table B-1. Potential for Adverse Impacts from Proposed Action and Alternatives

Resources	Not Applicable: Resource does not exist in project area	No/Negligible Impacts: Exists but no or negligible impacts	Greater than Negligible Impacts: Impacts analyzed in this EA
Species to Be Hunted/Fished	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Threatened and Endangered Species and Other Special Status Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Target Wildlife and Aquatic Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat and Vegetation (including vegetation of special management concern)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Geology and Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Resources	Not Applicable: Resource does not exist in project area	No/Negligible Impacts: Exists but no or negligible impacts	Greater than Negligible Impacts: Impacts analyzed in this EA
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wilderness	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Visitor Use and Experience	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Refuge Management and Operations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Socioeconomics and Environmental Justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Big Game (white-tailed deer, moose, black bear, bobcat, raccoon, and wild turkey)

Affected Resource Description

Populations of white-tailed deer, black bear, bobcat, and raccoon are relatively stable in this region of Maine. Moose and wild turkey have recently expanded into the downeast coastal region of Maine, but populations for both species are still considered small. All mainland divisions of the Refuge Complex are within MDIFW Wildlife Management District (WMD) 27.

White-tailed deer

The white-tailed deer population in Maine is estimated to be 275,000 deer. White-tailed deer population levels within WMD 27 are estimated to be 95 deer per 100 square miles (Statewide range 5 to 562 deer per 100 square miles) (MDIFW 2018). Within Maine, the deer hunting season spans 79 days, and consists of five different seasons (archery, expanded archery, general firearm, and two muzzleloader seasons).

Moose

MDIFW estimates there are 60,000 to 70,000 moose in Maine. MDIFW offers five different seasons to hunt moose from September 23 through November 30). However, in this region of Maine, hunters are limited to a 1-week hunt in mid-October. Moose hunters must receive a permit to hunt moose through an annual lottery process. In 2019, 1,949 moose were harvested in Maine but no moose were harvested in the three towns where our mainland divisions are located. MCINWRC staff and visitors rarely see moose on the Refuge Complex. In 2018, only 3 moose were harvested in the entire WMD 27.

Black bear

MDIFW estimates there are 37,000 bears in Maine. The bear population in Maine has been generally increasing since 2004 when the State supported 23,000 bears (MDIFW 2018). MDIFW

offers black bear hunting opportunities from August 26 through November 30. Within Maine, 67 percent of the bears harvested are taken over bait, and that method is not permitted on refuges.

Bobcat

In Maine, the bobcat hunting season is open from December 1 through February 21, and there is no limit on the number of bobcats that can be taken.

Raccoon

In Maine, the raccoon hunting season is open from October 1 through December 31, and there is no limit to the number of raccoons that can be harvested. Maine also allows night hunting of raccoons when the hunter is accompanied by a dog.

Wild turkey

Maine offers both spring and fall hunting seasons for wild turkey. In 2019, hunters harvested 8,952 turkeys in Maine, while only 18 turkeys were harvested in the three towns where our mainland divisions are located, which is less than 1 percent of the State total. Wild turkeys were first observed on the Refuge Complex in 2018, and their numbers are thought to still be low.

Anticipated Impacts

No Action Alternative

Under this alternative, the current hunt program would be maintained. No new public use opportunities would be provided on Sawyer's Marsh Division.

White-tailed deer

White-tailed deer hunting would continue to be permitted in designated areas of PMNWR. This includes 623 acres in the Gouldsboro Bay Division, 1,028 of the 1,150 acres within the Sawyer's Marsh Division, and 1,302 acres on Bois Bubert Island. These properties would be open in alignment with MDIFW season length and methods of take. In addition, 655 acres on the Petit Manan Point Division would remain open for a 1-week muzzleloader season for white-tailed deer. We do not have Refuge Complex-specific harvest levels for deer, but harvest rates for this entire WMD represent 2 percent of the statewide deer harvest of more than 27,000 deer (MDIFW 2018). In the three towns where our mainland divisions are located, a total of 165 deer were harvested in 2019. Although not specific to deer harvested on the Refuge Complex, this represents less than 1 percent of the Statewide harvest (MDIFW 2019). The harvest on the refuge would have a negligible impact on the Maine deer population. Disturbance to deer in the area would occur during the hunting season, but the disturbance is considered negligible, as hunting pressure is believed to be low, the deer population is thought to low, and deer are prone to move regularly over large areas.

Moose

When our Hunt Plan was released in 2007, moose hunting was not permitted by MDIFW in the region of the State where our mainland divisions are located. Moose hunting would remain closed on all lands within MCINWRC.

Black bear

Black bear hunting during the firearm season for white-tailed deer would continue to be allowed on the Gouldsboro Bay Division and 1,028 acres of the Sawyer's Marsh Division. Within WMD 27, 41 bears were harvested in 2019, representing less than 2 percent of the statewide harvest (2,370 bears). Specifically, 7 bears were harvested from the three towns where our mainland divisions are located (less than 1 percent of the State harvest) (MDIFW 2019)

Wild turkey

When our Hunt Plan was released in 2007, wild turkey hunting was not permitted by MDIFW in the region of the State where our mainland divisions are located. Wild turkey hunting would remain closed on all MCINWRC property.

Bobcat and raccoon

Bobcat and raccoon hunting would continue to be allowed on the Gouldsboro Bay Division and 1,028 acres of the Sawyer's Marsh Division. MCINWRC allows bobcat and raccoon hunting in alignment with MDIFW season, but does not allow the use of pursuit dogs. MDIFW requires the use of dogs when night hunting raccoon. Therefore, the Refuge Complex is not open to night hunting of raccoon. In 2018, 180 bobcats were harvested in Maine by both hunters and trappers.

Proposed Action Alternative

Construction of a new parking lot and hiking trail on Sawyer's Marsh Division in 2021 would provide increased opportunities for hunters to access this division. Given the current hunting pressure on the Refuge Complex's other mainland divisions and relatively low density of game species in this region of Maine, we do not anticipate a significant number of big game species would be harvested as a result of increasing public access.

White-tailed deer

Under this proposed action, white-tailed deer hunting opportunities on PMNWR would be expanded by 141.2 acres. This includes 122 acres of newly acquired land within Sawyer's Marsh Division and 19.2 acres on Little Bois Bubert Island. It is unlikely that opening these two parcels to deer hunting would result in any additional hunting pressure on the Refuge Complex. We do not anticipate significant hunting pressure for deer on the Refuge Complex mainland divisions, as there are many other regions of the State open to hunting that support much higher densities of deer. The existing and proposed increase in deer hunting opportunities on the Refuge Complex would have a negligible impact on the Maine deer population.

Moose

Moose hunting would remain closed on MCINWRC due to their small population size in this region of Maine.

Black bear

Black bear hunting during the firearm season for white-tailed deer on PMNWR would be expanded by 1,443.2 acres. This includes 122 acres of newly acquired land within Sawyer's Marsh Division, 1,302 acres on Bois Bubert Island and 19.2 acres on Little Bois Bubert Island. It is unlikely that opening these three parcels to bear hunting would result in any additional hunting

pressure on the Refuge Complex. The majority of bear harvested in Maine are taken over bait, and the Service prohibits the use of bait on refuges.

Wild turkey

Wild turkey hunting would remain closed on MCINWRC due to their small population size in this region of Maine.

Bobcat and raccoon

Bobcat and raccoon hunting opportunities on PMNWR would be expanded by 1,443.2 acres. This includes 122 acres of newly acquired land within Sawyer's Marsh Division, 1,302 acres on Bois Bubert Island and 19.2 acres on Little Bois Bubert Island. Night hunting of raccoon would not be permitted. It is unlikely that opening these three parcels to bobcat and raccoon hunting would result in any significant additional hunting pressure on the refuge.

Small Game (ruffed grouse, red squirrel, gray squirrel, coyote, porcupine, snowshoe hare, fox, skunk, and woodchuck)

Affected Resource Description

No surveys have been completed on MCINWRC to document the populations of these small game species. However, with the exception of woodchuck, all species or evidence of the species have been observed on the Refuge Complex. Table B-2 shows seasonal dates and limits for hunting small game.

Table B-2. Small Game Seasons and Daily Limits

Species	Season	Daily Limit	Possession
Ruffed Grouse	October 1 through December 31	4	8
Gray squirrel	October 1 through December 31	4	8
Skunk	October 21 through December 31	No Limit	
Snowshoe hare	October 1 through March 31	4	8
Fox	October 21 through February 28	No Limit	
Coyote	December 16 through August 31	No Limit	
Porcupine	No closed season	No Limit	
Red squirrel	No closed season	No Limit	
Woodchuck	No closed season	No Limit	

Within Maine, 1,137 coyote and 473 fox (red and gray) were taken in 2017 by a combination of hunting and trapping (MDIFW 2018).

Anticipated Impacts

No Action Alternative

Under this alternative, small game hunting would continue on the 623-acre Gouldsboro Bay Division and on 1,028 of the 1,150-acre Sawyer's Marsh Division. No new public use opportunities would be provided on Sawyer's Marsh Division.

MCINWRC would continue to limit red squirrel, porcupine, and woodchuck hunting to November 1 through March 31. Coyote hunting would continue to be limited to November 1

through March 31 and night hunting of coyote would be allowed. Pursuit dogs would not be authorized on MCINWRC. We do not anticipate that allowing the continuation of small game hunting on PMNWR would have any effect on the Statewide or regional populations of these species.

Proposed Action Alternative

Under this proposed action, hunting opportunities for small game species on PMNWR would be expanded by 1,443.2 acres. This includes 122 acres of newly acquired land within Sawyer's Marsh Division, 1,302 acres on Bois Bubert Island and 19.2 acres on Little Bois Bubert Island. Construction of a new parking lot and hiking trail on the Sawyer's Marsh Division in 2021 would provide increased opportunities for hunters to access this division. Night hunting would not be permitted for coyote. It is unlikely that opening these three parcels to small game hunting would result in any significant additional hunting pressure on the refuge.

Upland and Migratory Game Birds

Affected Resource Description

MDIFW works with the Service to establish hunting seasons and bag limits for migratory game bird hunting. The waterfowl season length varies based on the location in Maine, but for the coastal region, the following hunting seasons (Table B-3) apply:

Table B-3. Migratory Game Bird Seasons

Species	Season
Seaduck	November 11 through January 18
Duck	October 1 through October 12 and October 30 through December 25
Goose	September 2 through September 25, October 1 through October 12, and October 30 through December 25
Brant	October 1 through October 12 and October 30 through November 19
Woodcock	October 1 through November 21
Common snipe	September 2 through December 17
Crow	August 1 through September 25 and January 23 through March 31

In 2016, hunters in Maine harvested 27,000 ducks and 3,700 seaducks (MDIFW 2018).

Anticipated Impacts

No Action Alternative

Under this alternative, upland and migratory game bird hunting would continue on the 623-acre Gouldsboro Bay Division and on 1,028 acres of the 1,150-acre Sawyer's Marsh Division. In addition, waterfowl hunting would be permitted on 26 PMNWR islands and Pond Island and Franklin Island NWRs. All MCINWRC properties would remain closed to crow hunting in an effort to minimize conflicts with other priority public uses, nesting eagles, and migratory species.

Proposed Action Alternative

Hunting opportunities on PMNWR for upland and migratory game birds and waterfowl would be expanded by 122 acres of newly acquired land within Sawyer's Marsh Division. MCINWRC is proposing to construct a new parking lot and hiking trail on the Sawyer's Marsh Division in 2021, and this would provide increased opportunities for hunter access. Waterfowl hunting

opportunities on offshore islands would be expanded from 28 MCINWRC islands to 48 islands (668 acres). We do not believe that opening these additional 20 islands to waterfowl hunting would have any effect on the State or regional population of waterfowl or seaducks. In addition, 1,302 acres on Bois Bubert Island and 19.2 acres on Little Bois Bubert Island would be opened to upland and migratory game bird hunting. Bois Bubert and Little Bois Bubert provide significant roosting and feeding habitat for waterfowl and seaducks and would remain closed to all waterfowl and seaduck hunting. All MCINWRC properties would remain closed to crow hunting in an effort to minimize conflicts with other priority public uses, nesting eagles, and migratory species.

Federal Threatened and Endangered Species

Affected Resource Description

Federally threatened Northern long-eared bats have been documented on MCINWRC during the summer months when the bats are likely raising young. MCINWRC conducted acoustic surveys from 2010 to 2014 and Northern long-eared bats were detected on three of our mainland divisions (Petit Manan, Sawyer's Marsh, and Gouldsboro Bay). Bat activity on all properties significantly decreased by the end of September, prior to the proposed hunting season. Roseate terns breed, or have bred, on several of the MCINWRC seabird restoration islands. Migratory red knots and piping plovers have been observed on a number of MCINWRC islands, although the number of individuals observed is generally low (<5 individuals). While no longer protected under the Endangered Species Act, the Refuge Complex does support multiple pairs of nesting bald eagles that are sensitive to disturbance during the nesting period (March through July).

Several state-listed species nest or occur on the refuges including Atlantic puffins, razorbills, Arctic terns, great cormorants, harlequin ducks, little brown bat, Northern long-eared bat, and Eastern small-footed bat. Great cormorants breed on Seal Island and Brimstone Ledge from May through August, and wintering great cormorants can be observed along the coast of Maine. Harlequin ducks spend the winter months (November through March) along the coast of Maine, and are generally observed feeding on exposed, intertidal ledges along the coast (MDIFW 2011). Atlantic puffins, razorbills, and Arctic terns are present on MCINWRC islands from early May through August. All three species of bats are known to overwinter in Maine. The bats utilizes caves, also known as hibernacula, for the winter, but there are no known overwintering sites on MCINWRC.

Anticipated Impacts

No Action Alternative

We do not believe that current hunting opportunities on the Refuge Complex have any effect on federally threatened or endangered species. Waterfowl hunting would continue to be authorized on 28 MCINWRC islands. While federally endangered roseate terns and State-threatened Atlantic puffins, razorbills, and Arctic terns do nest on MCINWRC offshore islands, they are not present during the waterfowl hunting season. Migratory great cormorants are present in Maine during the seaduck hunting season, but MCINWRC does not have any information on their use of offshore islands during the winter months. Harlequin ducks predominantly winter in the mid-coast region and their tendency to feed in high-energy surf zones limits their co-occurrence with other seaducks. Migratory red knots and piping plovers have been observed on a number of MCINWRC islands, but would not be present during the waterfowl hunting season. In addition,

USFWS requires the use of non-toxic shot for waterfowl hunting so these species would not be exposed to lead in the intertidal environment. MCINWRC currently prohibits hunting activities during the summer months when the potential to disturb breeding bats would be the most likely to occur.

Proposed Action Alternative

Proposed Refuge Complex hunting opportunities are not expected to have any impacts on threatened or endangered species. MCINWRC does not allow year-round hunting on the Refuge Complex which would help avoid adverse impacts to federally and state-listed bats that utilized the mainland divisions. Waterfowl hunting on the 48 offshore islands would occur during the non-breeding season for Arctic terns, Atlantic puffins, and razorbills. Breeding great cormorants would not be effected, and although migratory great cormorants are utilizing the coast of Maine during the winter months, we anticipate that the level of seaduck hunting on our offshore islands will be minimal. The preferred feeding locations for wintering harlequin ducks are not the preferred locations for waterfowl hunting during the winter months. In addition, we do not allow waterfowl hunting on Bois Bubert and Petit Manan Point, which have both been designated by MDIFW as wintering areas for harlequin ducks. MCINWRC would expand hunting opportunities on 122 acres within the Sawyer's Marsh Division where federally and state-listed bats have been documented. However, our proposed Hunt Plan would prohibit hunting activities during the summer months when the potential to disturb breeding bats would be the most likely to occur.

Lead shot can be used on parts of PMNWR during hunting seasons as detailed in the Hunting Plan, in accordance with State and refuge-specific regulations. The amount of lead introduced to the environment as a result of hunting, however, is negligible. Lead shot is prohibited for small game, upland game, and migratory game bird hunting. Therefore, it can only be used for hunting big game species during the appropriate season (usually November to January). The above listed species could not be exposed to lead shot, as they are not present on the refuge during the hunting season. In addition, USFWS requires the use of non-toxic shot for waterfowl hunting so the listed seabirds and shorebirds would not be exposed to lead in the intertidal environment. Furthermore, many participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic ammunition and fishing tackle, and will educate hunters and anglers about lead. As a result, there are no anticipated adverse impacts to any of the above listed species.

Non-target Wildlife and Aquatic Species

Affected Resource Description

MCINWRC supports a diversity of wildlife species including game and non-game species, reptiles, amphibians, and invertebrates, which are important contributors to the overall biodiversity of the Refuge Complex. Over 300 species of birds have been documented on MCINWRC, including over 150 breeding species. MCINWRC also provide critical roosting, migratory, and wintering habitat for a variety of shorebirds and raptors. MCINWRC also protects over 1,400 acres of intertidal habitat along the entire 250-mile coastline of Maine. Invertebrates found in the intertidal habitat are consumed by shorebirds and waterfowl throughout the year. Harbor and gray seals utilize the offshore islands and ledges for pupping, nursing, and haul-out sights.

Anticipated Impacts

No Action Alternative

Under this alternative, the current hunt program would be maintained with a total of 4,115 acres in the Refuge Complex open to some form of hunting. This alternative currently results in some short-term, but negligible, negative impacts to small mammals, birds, and other wildlife due to disturbance in areas where human access for hunting activities occurs. MCINWRC prohibits hunting activities during the summer months when the potential to disturb nesting migratory birds would be the most likely to occur. The majority of shorebirds will have already migrated out of the region before the waterfowl hunting season begins in early October.

Proposed Action Alternative

Hunting can have direct and indirect impacts on both target and non-target species. These impacts include: direct mortality of individuals, changes in wildlife behavior, changes in wildlife population structure, dynamics, and distribution patterns, and disturbance from noise and hunters walking on- and off-trail (Cole and Knight 1990, Cole 1990, Bell and Austin 1985). The dense structure of the conifer forest on our mainland divisions generally limits hunting activity to existing trails and fields, which leaves large areas of refuge land undisturbed. Our offshore islands do not support resident populations of mammals, and very few non-game species of birds would be expected to be using those islands during the waterfowl hunting season. While resident and non-game wildlife in areas newly opened to hunting may be negatively impacted by disturbance, that impact is expected to be negligible. Hunting pressure on MCINWRC property is currently low, and we do not anticipate that opening these new properties to hunting would significantly change the level of hunting pressure.

Habitat and Vegetation

Affected Resource Description

MCINWRC natural communities are described in the MCINWRC CCP and HMP (USFWS 2005a, USFWS 2005b). The mainland divisions are predominately forested (40 percent mature conifer and 25 percent Northern hardwood-mixed forest) and support a diversity of native wildlife species (see Table B-4). While many of the smaller islands utilized by nesting seabirds are dominated by mixed grasses and shrubs, Bois Bubert and Cross Islands provide more than 2,200 acres of mature conifer forest.

It is important to note that according to the U.S. Forest Service, Maine is the most heavily forested state in the country, with over 90 percent of Maine forested (17.6 million acres). In contrast to many other states in this region, this provides abundant opportunities for hunters to access land open to hunting, including over 3 million acres managed by North Maine Woods in the northern section of the State.

Table B-4. Habitat Types and Descriptions

Habitat Type	Description
Conifer forest	This habitat is dominated by red spruce and balsam fir.
Northern hardwood-mixed forest	In this region of Maine, this habitat is typically dominated by sugar maple, beech, birch, and white pine.

Habitat Type	Description
Blueberry barren / open field	This habitat grouping consists of a mix of large open hay fields, blueberry barrens, moist meadows, weedy fields, or shrubs. The vegetation is a mix of grasses and broad-leaved forbs. The Refuge Complex maintains this early successional habitat through mowing and prescribed fire.
Early successional / forest edge habitat	On MCINWRC, early successional forest/edge habitat is dominated by speckled alder, mountain ash, sweet gale and other shrubs, approximately 2 to 10 feet tall. The Refuge Complex maintains the early successional habitat through mowing and prescribed fire
Freshwater wetland	<p><i>Freshwater marsh</i> is a wetland community occurring on flat-bottomed, shallow basins where the substrate consists of muck over mineral soil.</p> <p><i>Scrub-shrub wetlands</i> includes areas dominated by woody vegetation less than 6 meters (20 feet) tall. The vegetation includes true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.</p> <p><i>Freshwater ponds</i> arise naturally in floodplains as part of a river system or by an isolated depression (such as a kettle pond or vernal pool). It may contain shallow water with marsh and aquatic plants and animals.</p> <p><i>Vernal pools</i> are temporary pools often with overhanging vegetation and water depths less than 30 to 40 centimeters (12 to 15 inches) in deciduous or mixed forest. Vernal pools form in seasonally flooded basins that are too shallow to maintain water year-round. Vernal pools are important breeding areas for a number of amphibians because they do not support fish populations that would prey on eggs and larvae.</p>
Saltmarsh	Saltmarshes are coastal ecosystems in the upper intertidal zone between land and open saltwater or brackish water that is regularly flooded by the tides. It is dominated by dense stands of salt-tolerant plants such as bentgrass, freshwater cordgrass, sea lavender, wire rush, and saltmarsh bulrush. These plants are terrestrial in origin and are essential to the stability of the saltmarsh in trapping and binding sediments. Salt marshes play a large role in the aquatic food web and the delivery of nutrients to coastal waters.
Intertidal ledges/ mudflats	In Maine, 10 to 13 feet of tidal exchange provides extensive intertidal habitat. Substrate varies from sand/mud to rockweed covered granite ledges. This habitat is used extensively by shorebirds and waterfowl as foraging habitat.

Anticipated Impacts

No Action Alternative

Under this alternative, the current hunt program would be maintained, with a total of 4,115 acres are open to some form of hunting. We estimate that the current number of hunters comprises a

small fraction of the Refuge Complex's total visitation. No vegetation impacts due to hunting activities have been observed.

Proposed Action Alternative

This proposed action would open an additional 302 acres on MCINWRC to hunting. In addition, hunting opportunities for big and small game would be expanded on 2,953 acres. In total, 4,417 acres of MCINWRC would be open to hunting. We do not anticipate a significant increase in the number of hunters coming to MCINWRC to hunt, given the low game densities and harvest rates for this region in recent years (MDIFW 2018).

Hunting activities would predominantly occur during the fall and winter months, when plants are dormant and the ground is frozen and/or covered in snow. Hunters would have minimal impacts on plants during this period. Seaduck hunters generally hunt from boats or the intertidal region surrounding islands or the mainland, and therefore, would have little to no impact on upland vegetation. For these reasons, hunting is expected to have minimal adverse impacts on Refuge Complex vegetation.

In 2021, MCINWRC is proposing to construct a small parking lot and hiking trail on the Sawyer's Marsh Division. We anticipate the parking lot would support three to five cars, and construction would require removal of a small number of trees and shrubs. Some fill would be needed to level the parking area. Construction of the trail would also require limited cutting of trees and shrubs, but the footprint of the trail would be less than four feet wide. The Sawyer's Marsh Division encompasses 1,150 acres, and the limited size of the parking lot and trail would represent a very small percentage of that acreage. We do not anticipate any significant impact on the vegetation communities of this division due to our construction activities.

Wetlands

Affected Resource Description

The mainland divisions of MCINWRC support a variety of wetlands including forested wetlands, freshwater marsh, freshwater ponds, vernal pools, and tidal streams. These habitats are located throughout the Refuge Complex, and specific details are provided in the MCINWRC CCP and HMP (USFWS 2005a and USFWS 2005b).

Anticipated Impacts

No Action Alternative

Hunters are currently permitted to access all Refuge Complex areas that are open to hunting, including wetland habitats. Refuge Complex staff have not observed any adverse effects on wetland vegetation resulting from hunting activities, and do not anticipate any new impacts to develop as a result of continuing to allow hunting on MCINWRC. Migratory game bird hunters are required to remove all portable or temporary blinds from the Refuge Complex at the end of each hunting day. This regulation should help reduce potential soil compaction or trampling of vegetation, as this would minimize repeated visits to the same location.

Proposed Action Alternative

MCINWRC does not anticipate that opening an additional 122 acres within the Sawyer's Marsh Division to hunting, and providing new hunting opportunities on Bois Bubert and Little Bois

Bubert islands would result in a significant increase in hunting effort on the Refuge Complex. Due to the complexity of the forested areas on the mainland divisions of the Refuge Complex (dense stands of regenerating softwoods, blowdowns, and alder thickets) we anticipate that many hunters would utilize existing trails or open fields to move around the mainland divisions. The Refuge Complex trails were developed with a goal of minimizing adverse impacts to wetlands, so we do not anticipate that hunting activities would have any significant adverse impact on Refuge Complex wetlands. Waterfowl hunters on MCINWRC islands would likely focus their efforts on the perimeter of the islands, and would therefore have no impact on wetlands that may occur on the coastal islands.

In 2021, MCINWRC is also proposing to construct a new parking lot and trail on the Sawyer's Marsh Division. The Refuge Complex would avoid affecting all wetlands during the construction of the parking lot, and would minimize any potential effects of trail construction and recreational use on wetlands through trail placement and design, the use of bog bridging, and erosion control measures.

Visitor Use and Experience

Affected Resource Description

Petit Manan, Pond Island, and Franklin Island NWRs are open to five priority public uses (hunting, wildlife observation, photography, environmental education, and interpretation). Seabird nesting islands within the Refuge Complex are closed to public visitation during the seabird nesting season. The timing and duration of the closures vary with the species present on the islands. With the exception of Seal and Duck islands that have unexploded ordnance on them, Refuge Complex islands are open to public visitation outside of nesting season. There are no fishing opportunities on the Refuge Complex, but saltwater fishing is available in the waters adjacent to the entire 250-mile span of the Refuge Complex.

Anticipated Impacts

No Action Alternative

Currently Petit Manan, Pond Island, and Franklin Island NWRs are open to five priority public uses. MCINWRC has taken steps to minimize potential conflicts between non-consumptive Refuge Complex visitors and hunters. The majority of Refuge Complex visitation occurs on our two interpretive hiking trails on the Petit Manan Point Division, and we have limited the hunting opportunities on that division to a 1-week muzzleloader hunt for white-tailed deer in late November. On the Gouldsboro Bay and Sawyer's Marsh Divisions, we do not allow the use of pursuit dogs in an effort to minimize conflict with non-consumptive visitors hiking on our trail. Public access for both consumptive and non-consumptive users would remain limited on the Sawyer's Marsh Division due to the lack of parking facilities and trails.

Non-hunters may observe hunters entering and exiting the refuge on the same trails where hiking is allowed on the Refuge Complex. It is possible that non-hunting visitors may feel uncomfortable seeing hunters on the Refuge Complex trails. Information on the Refuge Complex hunt program is posted on kiosks, at headquarters, and on refuge websites to alert non-hunters of hunting activity, and to recommend wearing blaze orange while walking the trails during hunting season.

Proposed Action Alternative

The Refuge Complex would open 122 acres in the Sawyer's Marsh Division to big game, small game, and upland and migratory game birds and waterfowl hunting. Bois Bubert and Little Bois Bubert Islands would be opened to big and small game hunting. In addition, MCINWRC is proposing to construct a parking lot and new trail system on the Sawyer's Marsh Division in 2021 to enhance consumptive and non-consumptive public use opportunities. Our Refuge Complex-specific hunting regulations were developed in an effort to minimize potential conflict between user groups on the Refuge Complex. We do not anticipate any other Refuge Complex visitors would be utilizing the 48 offshore islands during the fall and winter months when waterfowl season is open. We do not anticipate a significant increase in the number of hunters coming to MCINWRC to hunt, given the low game densities and harvest rates for this region in recent years (MDIFW 2018). Therefore, we do not anticipate an increased level of conflict between hunters and non-consumptive users of the Refuge Complex.

Cultural Resources

Affected Resource Description:

MCINWRC has not completed an inventory of our cultural resources, but we have some information from the Maine Historic Preservation Commission on significant cultural resources located on MCINWRC property. Ten Refuge Complex islands have multiple shipwrecks in the waters adjacent to the islands. Shell middens, historic fishing camps, historic villages, or other artifacts have been documented on six Refuge Complex islands (Bois Bubert, Upper Flag, Bar, Metinic, Cross, and Smuttynose) and Petit Manan Point (Spiess, MHPC, pers. comm. 2018). In addition, six historical lighthouses are located on MCINWRC islands.

Anticipated Impacts

No Action Alternative

No adverse impacts would occur under this alternative. Four of the islands with archeological artifacts are not open to hunting, and Upper Flag Island is only open to waterfowl hunting. While Bois Bubert does have records of a historical village, the island is over 1,300 acres and it is unlikely that hunters would locate the remains of these structures. The section of Petit Manan Point with the remains of historical structures would remain closed to hunting. The Refuge Complex is actively working to preserve and maintain the six historic lighthouse structures.

Proposed Action Alternative

To our knowledge, there are no archeological artifacts on the 20 Refuge Complex islands we are proposing to open to waterfowl hunting, and no new adverse impacts are anticipated on Bois Bubert Island as the result of opening the island for additional big and small game hunting opportunities.

There are no known cultural resources sites on the Sawyer's Marsh Division. MCINWRC would not be excavating any material during the construction of the parking lot or the trail on this division, and therefore does not anticipate any adverse impacts to cultural resources.

Wilderness

In our 2005 CCP, MCINWRC proposed wilderness designation on 13 Refuge Complex islands (USFWS 2005a). Those islands include Cross, Mink, Scotch, Old Man, Inner and Outer Double

Head Shot, Halifax, Inner Sand, Bois Bubert, John's, Little Marshal, Outer Heron, and Outer White Islands.

Anticipated Impacts

No Action Alternative

Cross, Mink, Scotch, Old Man, Inner and Outer Double Head Shot Islands remain closed to all hunting. Halifax, Inner Sand, John's, Little Marshal, Outer Heron, and Outer White Islands are open to waterfowl hunting. Bois Bubert is only open for white-tailed deer hunting.

Proposed Action Alternative

Bois Bubert and Little Bois Bubert islands (19.4 acres) would be opened to big game, small game, and upland and migratory game bird hunting. Moose and wild turkey hunting would not be authorized on these islands due to the low population size of these species in this region of Maine. Waterfowl hunting would not be authorized on these parcels as the area serves as a waterfowl sanctuary. MCINWRC does not anticipate a significant interest in hunting on these properties, and therefore does not believe that wilderness characteristics would be adversely effected by this proposal.

Refuge Management and Operations

Affected Resource Description:

MCINWRC is headquartered in Rockland, Maine and that facility has a visitor center to help interpret Refuge Complex activities. A second office is located in Milbridge, Maine. Staff from the Milbridge office maintain the roads, parking lots, trails, and kiosks on the Refuge Complex's mainland divisions.

The five Refuge Complex NWRs are managed by staff located in the two refuge offices. There are no staff members for Cross, Pond, Franklin, or Seal Island NWRs.

Anticipated Impacts

No Action Alternative

Current levels of hunting are manageable within the Refuge Complex's infrastructure, staffing, and budget. The Refuge Manager coordinates the budget each year to ensure funds are available, and the estimated cost to run the current hunt program is \$8,500.

Proposed Action Alternative

The propose action would open additional refuge lands to hunting (302 acres). The majority of those parcels are located on 20 offshore islands (160 acres), and they would be opened to waterfowl hunting only. We do not anticipate a significant increase in hunting pressure associated with the Refuge Complex opening 122 acres on the Sawyer's Marsh Division and 19.4 acres on Little Bois Bubert Island to hunting. The estimated initial costs to implement the proposed hunt plan is \$15,902 and the annual cost is \$11,152. A detailed cost breakdown can be found in the MCINWRC Hunt Plan.

There would be some staff, equipment, and material costs associated with the construction of the new parking lot and trail on the Sawyer's Marsh Division. MCINWRC anticipates there would be sufficient funds in our FY2021 budget to undertake this effort.

Socioeconomics and Environmental Justice

Affected Resource Description:

From an economic perspective, MCINWRC provides a variety of environmental and natural resource goods and services used by people either directly or indirectly. Spending in the general area of the mainland divisions supports economic activity in the downeast region of Maine. We do not have any specific information on the number of hunters that engage in hunting activities on the Refuge Complex. Based on staff observations and the relative density of game species in this region, we anticipate that hunting activity on the Refuge Complex is very low.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all Federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

Anticipated Impacts

No Action Alternative

We do not anticipate that this action would have any significant effect on the socioeconomic resources in this region. In our 2005 CCP, we concluded that hunting on the Refuge Complex is not contributing significantly to the local economy (USFWS 2005a).

Proposed Action Alternative

We do not anticipate that implementing this proposed action would result in a significant increase in either consumptive or non-consumptive use of the Refuge Complex. Within the State of Maine, millions of acres are open for hunting, and often provide higher densities of game species than can be found on the Refuge Complex. Therefore, we do not foresee a significant impact on the local economy resulting from this action.

The Service has not identified any potential high and adverse environmental or human health impacts from our current or proposed hunting program. The Service has not identified any minority or low-income communities within the impact area. No minority or low-income communities would be disproportionately affected by any impacts from this proposed action or any of the alternatives.

Monitoring

Many game species populations are monitored by MDIFW through field surveys and game harvest reports, which provide a means for monitoring wildlife populations and harvest levels. MCINWRC does not collect any refuge-specific harvest data for any species hunted on the refuge, but instead relies on MDIFW to establish hunting seasons and harvest levels. The State has determined that populations of game species are at levels acceptable to support hunting and these assessments are reviewed and adjusted periodically. Refuge-specific hunting regulations may be altered to achieve species-specific harvest objectives in the future. MCINWRC would annually monitor the condition of the Sawyer's Marsh trail and implement any steps necessary to reduce soil compaction or erosion.

Summary of Analysis

An objective of this EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

No Action Alternative

There would be no additional costs to the Refuge Complex under this alternative. There would be no change to the current public use and wildlife management programs on the Refuge Complex. Public use of the Sawyer's Marsh Division would remain very low due to the lack of adequate parking and hiking trails. The Refuge Complex would not increase its impact on the economy and would not provide new hunting or access opportunities. This alternative has the least impact on physical and biological resources. In addition, this alternative would minimize our mandates under the NWRSA and Secretarial Order 3356.

Proposed Action Alternative

This alternative is the Service's proposed action because it offers the best opportunity for public hunting and increased public access, would result in a minimal impact on physical and biological resources, and meet the Service's mandates under the NWRSA and Secretarial Order 3356. The Service does not believe that hunting on the Refuge Complex would have a significant impact on local or regional wildlife populations because the percentage likely to be harvested on the Refuge Complex, though possibly additive to existing hunting, would be a tiny fraction of the Statewide harvest and estimated population levels. Additional hunting would not add to the impacts to wildlife from hunting at the local or regional levels, and is not expected to cause negative impacts to wildlife populations. Construction of a parking lot and new hiking trail on the Sawyer's Marsh Division in 2021 would increase opportunities for both consumptive and non-consumptive visitors on MCINWRC. We believe that these construction efforts can be conducted in an environmentally sensitive manner that limits or avoids adverse impacts to wetlands or vegetation communities.

List of Sources, Agencies and Persons Consulted

Maine Department of Inland Fisheries and Wildlife

James Connolly, Wildlife Director
Brad Allen, Bird Group Leader
Kelsey Sullivan, Game Bird Biologist
Steve Dunham, Regional Biologist, Region C

List of Preparers

Linda Welch, Wildlife Biologist
Eddy Edwards, Deputy Refuge Manager
Brian Benedict, Refuge Manager
Wilson Darbin, Visitor Services Assistant
Tom Bonetti, Regional Hunting and Fishing Coordinator

State Coordination

Refuge Complex and Regional Office staff consulted with MDIFW regarding the proposed MCINWRC hunt program throughout 2020.

Tribal Consultation

The refuge did not consult with any Tribes about this hunting plan.

Public Outreach

The Refuge Complex maintains a mailing list for news release purposes to local newspapers, radio, and websites. Special announcements and articles may be released in conjunction with hunting and fishing seasons. In addition, information about hunting will be available at Refuge Complex headquarters and on the Refuge Complex website.

This EA is part of the Maine Coastal Islands NWR Complex Hunting Plan, with accompanying Compatibility Determination (CD). The plan was coordinated with all interested and/or affected parties, including MDIFW staff. The public will be notified of the availability of the draft Hunting Plan, EA, and CD with no less than a 30-day review and comment period. We will inform the public through local venues, the refuge website, and social media.

Determination

This section will be filled out upon completion of any public comment period and at the time of finalization of the Environmental Assessment.

☒ The Service's action will not result in a significant impact on the quality of the human environment. See the attached "**Finding of No Significant Impact**".

☐ The Service's action **may significantly affect** the quality of the human environment and the Service will prepare an Environmental Impact Statement.

Preparer Signature:  Date: 8/11/2021

Name/Title/Organization: Thomas Bonetti, Hunting and Fishing Coordinator

References

- Bell, D.V. and L.W. Austin. 1985. The Game-fishing Season and Its Effects on Overwintering Wildfowl. *Biological Conservation*, 33(1985)65-80.
- Cole, D.N. 1990. Ecological impacts of wilderness recreation and their management. In J.C. Hendee, G.H. Stankey, and R.C. Lucas (Eds.), *Wilderness Management* (pp. 425-466). Golden, CO: North American Press.
- Cole, D.N. and Knight, R.L. 1990. Impacts of recreation on biodiversity in wilderness. *Natural Resources and Environmental Issues*, 0, 33-40.
- MDIFW. 2011. Harlequin Duck (*Histrionicus histrionicus*). Available online at: https://www.maine.gov/ifw/docs/HarlequinDuck_38_39_2011.pdf.
- MDIFW. 2019. Harvest Information. Available online at: <https://www.maine.gov/ifw/hunting-trapping/harvest-information.html>.
- MDIFW. 2019. Summary of Maine Hunting Laws: 2019-2020, Maine Department of Inland Fisheries and Wildlife, Augusta, ME, 41pp.
- MDIFW. 2018. Wildlife Research and Management Report, 2018, Maine Department of Inland Fisheries and Wildlife, Augusta, ME, 105pp.
- USFWS, 2005a, Maine Coastal Islands National Wildlife Refuge Final Comprehensive Conservation Plan, 388 pp
- USFWS 2005b. Maine Coastal Islands National Wildlife Refuge Habitat Management Plan, 141 pp.

OTHER APPLICABLE STATUTES, EXECUTIVE ORDERS AND REGULATIONS

Cultural Resources

- American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996 – 1996a; 43 CFR
- Antiquities Act of 1906, 16 U.S.C. 431-433; 43 CFR Part 3.
- Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa – 470mm; 18 CFR Part 1312; 32 CFR Part 229; 36 CFR Part 296; 43 CFR Part 7.
- National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470-470x-6; 36 CFR Parts 60, 63, 78, 79, 800, 801, and 810.
- Paleontological Resources Protection Act, 16 U.S.C. 470aaa – 470aaa-11.
- Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001-3013; 43 CFR Part 10.
- Executive Order 11593 – Protection and Enhancement of the Cultural Environment, 36 Fed. Reg. 8921 (1971).

Fish and Wildlife

- Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22.
- Endangered Species Act of 1973, as amended, 16 U.S.C. 1531-1544; 36 CFR Part 13; 50 CFR Parts 10, 17, 23, 81, 217, 222, 225, 402, and 450.
- Fish and Wildlife Act of 1956, 16 U.S.C. 742 a-m.
- Lacey Act, as amended, 16 U.S.C. 3371 et seq.; 15 CFR Parts 10, 11, 12, 14, 300, and 904.
- Migratory Bird Treaty Act, as amended, 16 U.S.C. 703-712; 50 CFR Parts 10, 12, 20, and 21.
- Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds, 66 Fed. Reg. 3853 (2001).

Natural Resources

- Clean Air Act, as amended, 42 U.S.C. 7401-7671q; 40 CFR Parts 23, 50, 51, 52, 58, 60, 61, 82, and 93; 48 CFR Part 23.
- Wilderness Act, 16 U.S.C. 1131 et seq.
- Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq.
- Executive Order 13112 – Invasive Species, 64 Fed. Reg. 6183 (1999).

Water Resources

- Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et seq.; 15 CFR Parts 923, 930, 933.
- Federal Water Pollution Control Act of 1972 (commonly referred to as Clean Water Act), 33 U.S.C. 1251 et seq.; 33 CFR Parts 320-330; 40 CFR Parts 110, 112, 116, 117, 230-232, 323, and 328.
- Rivers and Harbors Act of 1899, as amended, 33 U.S.C. 401 et seq.; 33 CFR Parts 114, 115, 116, 321, 322, and 333.
- Safe Drinking Water Act of 1974, 42 U.S.C. 300f et seq.; 40 CFR Parts 141-148.
- Executive Order 11988 – Floodplain Management, 42 Fed. Reg. 26951 (1977).
- Executive Order 11990 – Protection of Wetlands, 42 Fed. Reg. 26961 (1977).

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Mark McCollough
Telephone Number: (207) 866-3344 x115
Date:

I. Region: R5

II. Service Activity (Program): Ecological Services

III. Pertinent Species and Habitat:

A. Listed species and/or their critical habitat within the action area:

Roseate terns have historically nested on several islands within Maine Coastal Islands NWR (MCINWR). In 2020, only two pairs of roseate terns nested on MCINWR, and those birds were on Pond Island. In addition, seasonal staff on Pond Island frequently report observations of additional roseate terns staging on the island during early August. Non-breeding roseate terns (1-2 individuals) have also been observed on Petit Manan, Metinic, and Ship Islands in recent years.

Red knots and piping plovers have been observed in small numbers (<5 individuals) during fall migration on several of the MCINWR managed seabird colonies. Northern long-eared bats have been detected by our acoustic units using MCINWR islands and the Petit Manan Point, Sawyer's Marsh, and Gouldsboro Bay Divisions during the summer and early fall. The forested habitat found on our mainland divisions provides suitable habitat for a variety of bats.

B. Proposed species and/or proposed critical habitat within the action area:
none

C. Candidate species within the action area:
none

IV. Geographic area or station name and action:

MCINWR manages 72 islands spanning the entire 250-mile coastline of Maine and four mainland divisions. MCINWR is proposing to open 20 additional islands to waterfowl hunting, and 122 acres on Sawyer's Marsh Division to big game, small game, and migratory bird hunting as part of the update to the Hunting Plan.

V. Location (attach map): See attached MCINWR Hunting Plan

A. Ecoregion Number and Name:

212 Laurentian Mixed Forest Province (Bailey 1976)
USFWS Gulf of Maine Rivers Ecosystem

- B. **County and State:** Hunting will occur in Washington, Hancock, Knox, Lincoln, Sagadahoc, and Cumberland counties in Maine.
- C. **Section, township, and range (or latitude and longitude):** See MCINWR Hunting Plan for information on islands currently open, or proposed to be opened, to waterfowl hunting. Mainland properties in Milbridge, Steuben, and Gouldsboro will remain open or have expanded hunting opportunities. Hunting opportunities will also be expanded on Bois Bubert Island in Milbridge, Washington County, Maine.
- D. **Distance (miles) and direction to nearest town:** variable, see Hunting Plan
- E. **Species/habitat occurrence:**
Roseate terns only bred on one MCINWR island in recent years (Pond Island NWR), although non-breeding or migrating roseates have been observed on Petit Manan, Ship, and Metinic Islands. Pond Island NWR had two nesting pairs of roseates in 2020, and also supports a small number of migratory roseates annually during August.

MCINWR uses IPAC to identify threatened and endangered species, including for purposes of this Biological Evaluation. This is done because the IPAC database is the better of the Service's databases for Maine and may contain the best available information on species presence. Nevertheless, in order to ensure a thorough review, this Biological Evaluation considers all threatened and endangered species identified by both the IPAC and ECOS databases. Note, however, that these databases are updated regularly, approximately every 90 days, and, thus, it is possible that the specific threatened and endangered species identified as present on or near the refuge may change between the finalization of this Biological Evaluation and its publication and/or between finalization and your reading this document.

Staff present on the refuge and conducting this evaluation may have the best available information about presence of fish and wildlife species. Thus, where species are identified by either database, but the refuge has information that the species is not actually present within the “action area,” we have explained that as basis for our determination that any hunting activity will have no effect on the species.

- VI. **Description of proposed action (attach additional pages as needed):**
MCINWR originally opened the refuge to hunting in 2007. The 2021 Hunting Plan expands waterfowl hunting opportunities from 28 to 48 refuge islands. Big game, small game, and migratory bird hunting will be opened on 122 recently acquired acres within the Sawyer’s Marsh Division in Milbridge. Please see the attached MCINWR Hunting Plan for maps and additional information on our hunt program. Hunting opportunities on

Bois Bubert Island in Milbridge will be expanded to include big game, small game, and migratory birds. Waterfowl hunting will not be permitted on Bois Bubert Island.

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):

MCINWR does not anticipate any significant adverse effects on listed species resulting from our 2021 Hunting Plan. The refuge anticipates minimal hunting effort on the 20 offshore islands that are being opened to waterfowl hunting, and that effort would be focused on the winter seaduck hunting season (mid-November until mid-January). Roseate terns, piping plovers, red knots, and Northern long-eared bats will no longer be using refuge islands at that time of the year.

Acoustic surveys have detected Northern long-eared bats on three of our mainland divisions (i.e., Petit Manan Point, Sawyer's Marsh, and Gouldsboro Bay). The only proposed change to the mainland division hunt program will open 122 recently acquired acres on the Sawyer's Marsh Division to hunting.

MCINWR does not anticipate any effects on bats due to this change in current hunting opportunities. Hunting is not authorized on MCINWR from April 1 – September 30, and our acoustic surveys indicated bat activity substantially declined on the refuge by the end of September. They are also usually only active from dusk to dawn and are unlikely to be seen or impacted by hunters. Since the Northern long-eared bat would not be present for most of the hunting seasons, and they are nocturnal, it is highly unlikely hunters would encounter this species. Furthermore, there is no likelihood there would be disturbance to bats from hunting when bats are not active. Gun use near bats' roosting trees could flush the bats from the trees, but it is more likely that the bats would remain in the tree than be flushed and instances of flushing would not result in bat mortality. There is no hunting near any cave or mine where Northern long-eared bats could hibernate (i.e., hibernaculum), and hunting programs would not result in any tree cutting or other habitat alteration.

MCINWR requires the use of non-toxic shot for all migratory game bird hunting on the refuge. Roseate tern, piping plover, and red knot are seasonally present on our offshore islands, and the only hunting permitted these islands is waterfowl hunting. Therefore, we do not believe there will be any anticipated adverse impacts from lead to these three shorebird species.

Lead shot can be used on parts of the refuge for big game and small game hunting as detailed in the Hunting Plan, in accordance with State and refuge-specific regulations. With the exception of Bois Bubert and Little Bois Bubert Islands, big game and small game hunting are limited to our mainland divisions. The amount of lead introduced to the environment as a result of refuge hunting activities, however, is negligible given the low hunter participation levels on refuge lands and the relatively low density of big game species in this region of

Maine. The bioaccumulation of lead is a potential concern, but it does not present a significant issue for hunting on this refuge as bats would primarily forage on insects and fruit. The foraging ecology of the Northern long-eared bats (i.e., preying on flying insects) limits their potential exposure to lead ammunition in the environment.

Northern long-eared bats are also not present on the refuge during the hunting seasons, and the scarce amounts of lead that could be left behind after the hunting season is unlikely to be ingested by the species. Furthermore, many participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic alternatives, and will educate hunters and the public to the potential adverse impacts of lead. The Service anticipates no significant adverse effects to Northern long-eared bats from hunting activities, or effects are so extremely unlikely to occur such that they cannot be measured. Any effects would be insignificant in the size of the impact and would never reach the scale where “take” would occur.

- B. Explanation of actions to be implemented to reduce adverse effects:**
Maine Department of Inland Fisheries and Wildlife (MDIFW) encourages hunters to use non-toxic ammunition for all hunting. MDIFW also recently posted mitigation techniques for hunters who cannot find non-toxic ammunition.

We will continue to encourage use of non-toxic ammunition and fishing tackle alongside the state, and will educate hunters and anglers about lead and impacts. We have proposed opening 20 offshore islands to waterfowl hunting. We anticipate minimal interest from hunters due to the logistical challenges of reaching the islands, the time of year the hunt is offered (mid-November until mid-January), and the availability of hunting opportunities in more sheltered locations along the coast. The four federally listed species that have been documented on MCINWR islands will have all migrated out of the region by the time the waterfowl hunting season begins.

MCINWR does not allow any hunting on Sawyer’s Marsh or Gouldsboro Bay Divisions from April 1 to September 30. The Petit Manan Point Division is only open for a one-week muzzleloader hunt for white-tailed deer in late November. Given the seasonal occurrence of Northern long-eared bats on the refuge, and our prohibition of hunting during the time the bats are present, we do not believe that bats will be effected by our MCINWR hunt program.

VIII. Effect determination and response requested: [* optional]

A. Listed species/critical habitat:

Determination

Response requested

no effect

(species: Piping plover, roseate tern, red knot)

☒ *Concurrence

is not likely to adversely affect

(species: Northern long-eared bat)

☒ Concurrence

☐ Formal Consultation

is likely to adversely affect

(species: _____)

☐ Formal consultation

B. Proposed species/proposed critical habitat:

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 effect

(species: _____)

☐ *Concurrence

is likely to jeopardize

(species: _____)

☐ Conference

AMANDA CROSS Digitally signed by AMANDA
CROSS
Date: 2021.08.10 17:46:13 -04'00'

Amanda Cross
Project Leader
Maine Field Office

Date

IX. Reviewing ESO Evaluation:

A. Concurrence X Non-concurrence

B. Formal consultation required No

C. Conference required No

D. Remarks (attach additional pages as needed):

Reviewed by Mark A. McCollough, Endangered Species Specialist

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
for HUNTING
Maine Coastal Islands National Wildlife Refuge Complex

The U.S. Fish and Wildlife Service (Service) is proposing to open or expand hunting opportunities at Maine Coastal Islands National Wildlife Refuge Complex (MCINWRC, Refuge Complex) for big game (white-tailed deer, black bear, bobcat, and raccoon), small game (ruffed grouse, red squirrel, gray squirrel, coyote, porcupine, snowshoe hare, fox, skunk, and woodchuck) and upland and migratory game birds (excluding crow) in accordance with the Refuge Complex's 2021 Hunting Plan. We are proposing to open or expand hunting opportunities on Service-owned lands when found to be compatible and consistent with Federal, State, and refuge hunting regulations. In addition, we propose to construct a new parking lot and hiking trail to increase public access opportunities on the Sawyer's Marsh Division.

Selected Action

Proposed Action Alternative

The Refuge Complex is made up of Petit Manan, Cross Island, Seal Island, Pond Island, and Franklin Island National Wildlife Refuges (NWRs). The Hunting Plan, Compatibility Determination (CD), and Environmental Assessment (EA) set forth guidance on the expansion and continued implementation of hunt programs at Petit Manan, Pond Island, and Franklin Island NWRs. All three refuges have been open to hunting since 2007. Cross Island NWR and Seal Island NWR are not open to hunting, and is not proposed to open.

Under this alternative, hunting would be maintained or expanded on 4,417 of 6,760 acres currently owned or managed by MCINWRC. This would include opening 302 acres to hunting for the first time. Waterfowl hunting would be expanded from 26 islands to 46 islands within PMNWR. Waterfowl hunting would continue to be permitted on Pond Island and Franklin Island NWRs. To facilitate public use on the refuge, MCINWRC would construct a parking lot for 3 to 5 cars and develop a hiking trail to facilitate both consumptive and non-consumptive public use on the Sawyer's Marsh Division in 2021. Corea Heath Division and the Richards Unit would remain closed to all hunting.

Hunting seasons for big game, small game, upland and migratory game birds, and waterfowl would be in accordance with the State's seasons with the exception of those restrictions outlined in Table 4 and Table 5 of the Hunting Plan. The majority of the seasonal restrictions were implemented to minimize conflict with other priority public uses on our mainland divisions and adjacent landowners. The restrictions also aim to minimize disturbance to priority wildlife species like bald eagles nesting on the refuge and low population sizes of particular species (i.e. moose and wild turkey). Hunters must use and possess only non-toxic shot while hunting small game, upland and migratory game birds. Hunters will be strongly encouraged to use non-toxic shot for all other game species on the refuge.

Waterfowl hunting would be authorized on the 48 islands identified in Table 2 of the Hunting Plan. There are no additional hunting opportunities for big or small game hunting on these islands, and they would remain closed to all other hunting seasons.

Hunting must be conducted in accordance with State and Federal regulations, as supplemented by refuge-specific regulations (50 CFR 32.38). All persons hunting on the Refuge Complex will be required to obtain the necessary State licenses, permits and stamps. Migratory game bird hunters will be required to have a Federal Migratory Bird Hunting and Conservation Stamp (“Duck Stamp”). In addition, hunters intending to hunt migratory game birds or waterfowl must have indicated on their license their intent to harvest these species.

The refuge manager may, upon annual review of the hunting program, take the necessary steps to impose further restrictions, recommend that the refuge be closed to hunting, or further liberalize hunting regulations up to the limits of State. We would restrict hunting if it became incompatible with other priority refuge programs or endangered refuge resources or public safety.

Refuge staff have worked closely with stakeholders and State agency staff to develop this plan, and ensure safe and enjoyable recreational hunting opportunities. There are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, because the changes proposed by this action are not expected to have harmful impacts to the ecological, aesthetic, historic, cultural, economic, social, or health aspects of the refuge and surrounding communities. Additionally, the proposed action builds on an existing hunt program and the Refuge Complex’s Comprehensive Conservation Plan (CCP). Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310(b)).

This alternative was selected over other alternative because: (1) it helps fulfill the statement of objectives detailed in the Hunting Plan; (2) it would result in a minimal impact on physical and biological resources; and (3) it meets the Service’s mandates under the National Wildlife Refuge System Administration Act (NWRSA) of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, and Department of the Interior Secretarial Order 3356. The Service believes that expanding hunting opportunities on MCINWRC will not have a significant impact to wildlife, other uses, or refuge administration. This alternative will best meet the purpose and need, refuge objectives, and Service mandates.

Department of the Interior Secretarial Order 3347 – “Conservation Stewardship and Outdoor Recreation,” signed March 2, 2017, and Secretarial Order 3356 – “Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories,” signed September 15, 2017, includes direction to Department of the Interior agencies to “increase outdoor recreation opportunities for all Americans, including opportunities to hunt and fish; and improve the management of game species and their habitats for this generation and beyond.” The selected alternative will also promote one of the priority public uses of the Refuge System, and providing opportunities for visitors to hunt will promote stewardship of our natural resources and increase public appreciation and support for the refuges.

Other Alternatives Considered and Analyzed

No Action Alternative

New hunting opportunities would not be created under this alternative, including new access sites to refuge lands for other users. Under this alternative, hunting opportunities would not change on the Petit Manan Point or Gouldsboro Bay Divisions. Public use opportunities would remain limited on the Sawyer's Marsh Division due to the lack of a suitable parking location or any developed trails. While the Sawyer's Marsh Division is currently "open" to public use, visitors must cross private land to access the property. Hunting opportunities on Bois Bubert Island would be limited to white-tailed deer. Waterfowl hunting would continue to be authorized on 28 MCINWRC islands.

This alternative has the least short-term impacts to physical and biological resources; however, long-term impacts on habitat quality could be adverse with greater deer browsing. In addition, it would not fulfill the Service's mandate under the NWRSA and Secretarial Order 3356 as well as the proposed action.

Summary of Effects of Selected Action

An Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act of 1969, as amended (NEPA) to provide a decision-making framework that: (1) explored a reasonable range of alternatives to meet project objectives; (2) evaluated potential issues and impacts to the refuge, resources and values; and (3) identified mitigation measures to lessen the degree or extent of these impacts. The EA evaluated the effects associated with expansion of hunting opportunities at MCINWRC, as well as the effects of a no-action alternative. It is incorporated as part of this finding.

Implementation of the agency's decision would be expected to result in the following environmental, social, and economic impacts:

Affected Environment	Potential Impacts of the Selected Action
Big game (i.e., white-tailed deer, moose, black bear, bobcat, raccoon and wild turkey)	<p>Negligible, short-term adverse impacts to species. Construction of a new parking lot and hiking trail on Sawyer's Marsh Division would provide increased opportunities for hunters to access this division. Given the current hunting pressure on the Refuge Complex's other mainland divisions and relatively low density of game species in this region of Maine, we do not anticipate a significant number of big game species would be harvested as a result of increasing public access.</p> <p>White-tailed deer hunting opportunities on PMNWR would be expanded, but it is unlikely that opening two parcels to deer hunting would result in any additional hunting pressure on the Refuge Complex with many</p>

Affected Environment	Potential Impacts of the Selected Action
	<p>other regions of the State open to hunting that support much higher densities of deer.</p> <p>Moose hunting would remain closed on due to their small population size in this region of Maine.</p> <p>Black bear hunting during the firearm season for white-tailed deer on PMNWR would be expanded, but it is unlikely that opening three parcels to bear hunting would result in any additional hunting pressure on the Refuge Complex. The majority of bear harvested in Maine are taken over bait, and the Service prohibits the use of bait on refuges. Wild turkey hunting would remain closed on MCINWRC due to their small population size in this region of Maine.</p> <p>Bobcat and raccoon hunting opportunities on PMNWR would be expanded. Night hunting of raccoon would not be permitted. It is unlikely that opening three parcels to bobcat/raccoon hunting would result in any significant additional hunting pressure on the refuge.</p>
Small game (ruffed grouse, red squirrel, gray squirrel, coyote, porcupine, snowshoe hare, fox, skunk, and woodchuck)	<p>Negligible to minor, short-term adverse impacts. Hunting opportunities for small game species on PMNWR would be expanded by 1,443 acres. Construction of a new parking lot and hiking trail on the Sawyer's Marsh Division would provide increased opportunities for hunters to access this division. Night hunting would not be permitted for coyote. It is unlikely that opening three parcels to small game hunting would result in any significant additional hunting pressure on the refuge.</p> <p>Some disturbance to small game species would occur during the hunting season, although the disturbance is considered negligible as the number of anticipated hunters is thought to be very small. Potential impacts to target species include direct mortality or injury and indirect changes in behavior. We anticipate hunting pressure for small game species on refuge lands would be minimal. In addition, the refuge has limited the season length and methods of take for some small game species to minimize conflicts with other refuge users and species of conservation concern. To mitigate potential adverse impacts, MCINWRC prohibits the use</p>

Affected Environment	Potential Impacts of the Selected Action
	<p>of toxic ammunition for small game hunting. On MCINWRC, we prohibit the use of pursuit dogs for bear, coyote, snowshoe hare, fox, raccoon, and bobcat to minimize conflicts with adjacent landowners.</p>
Upland and migratory game birds	<p>Minor, short-term adverse impacts. Hunting opportunities on PMNWR for upland and migratory game birds and waterfowl would be expanded by 122 acres within Sawyer's Marsh Division, and construction of a parking lot and hiking trail would provide increased opportunities for hunter access. Waterfowl hunting opportunities on offshore islands would be expanded from 28 islands to 48 islands (668 acres). We anticipate the actual number of hunters traveling to offshore islands in the winter to hunt these species would be minimal. Potential impacts to target migratory game bird species include direct mortality or injury and indirect changes in behavior. In addition to direct mortality, hunting could result in some short-term redistribution due to disturbance. 1,302 acres on Bois Bubert Island and 19 acres on Little Bois Bubert Island would be opened to upland and migratory game bird hunting, but would remain closed to all waterfowl and seaduck hunting. All MCINWRC properties would remain closed to crow hunting in an effort to minimize conflicts with other priority public uses, nesting eagles, and migratory species.</p> <p>MCINWRC prohibits use of toxic ammunition for upland game bird hunting. The Service requires use of non-toxic shot when hunting migratory birds.</p>
Threatened and Endangered Species	<p>For more detail, see the completed Intra-Service Section 7 Evaluation (Appendix C). The refuge anticipates minimal hunting effort on the 20 offshore islands that are being opened to waterfowl hunting, and that effort would be focused on the winter seaduck hunting season (mid-November until mid-January). Roseate terns, piping plovers, red knots, and Northern long-eared bats will no longer be using refuge islands at that time of the year.</p> <p>The only proposed change to the mainland division hunt program will open 122 acres on Sawyer's Marsh Division to hunting. We do not anticipate any effects on</p>

Affected Environment	Potential Impacts of the Selected Action
	<p>bats due to this change, as hunting is not authorized on MCINWR from April 1 to September 30, and our acoustic surveys indicated bat activity substantially declined on the refuge by the end of September. Since the Northern long-eared bat would not be present for most of the hunting seasons, and they are nocturnal, it is highly unlikely hunters would encounter this species. Gun use near bats' roosting trees could flush bats from trees, but it is more likely that bats would remain in the tree than be flushed and instances of flushing would not result in bat mortality. There is no hunting near any cave or mine where Northern long-eared bats could hibernate (i.e., hibernaculum), and hunting programs would not result in any tree cutting or other habitat alteration.</p> <p>MCINWR requires the use of non-toxic shot for all migratory game bird hunting on the refuge. Roseate tern, piping plover, and red knot are seasonally present on our offshore islands, and the only hunting permitted these islands is waterfowl hunting. Therefore, we do not believe there will be any anticipated adverse impacts from lead to these three shorebird species.</p> <p>Lead shot can be used on parts of the refuge for big game and small game hunting as detailed in the Hunting Plan, in accordance with State and refuge-specific regulations. With the exception of Bois Bubert and Little Bois Bubert Islands, big game and small game hunting are limited to our mainland divisions. The amount of lead introduced to the environment as a result of refuge hunting activities, however, is negligible given low hunter participation levels on refuge lands and the relatively low density of big game species in this region of Maine. Bioaccumulation of lead is a potential concern, but it does not present a significant issue for hunting on this refuge as bats would primarily forage on insects and fruit. The foraging ecology of the Northern long-eared bats (i.e., preying on flying insects) limits their potential exposure to lead ammunition in the environment.</p> <p>Northern long-eared bats are also not present on the refuge during the hunting seasons, and the scarce amounts of lead that could be left behind after the</p>

Affected Environment	Potential Impacts of the Selected Action
	<p>hunting season is unlikely to be ingested by the species. Furthermore, many participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic alternatives, and will educate hunters and the public to the potential adverse impacts of lead. The Service anticipates no significant adverse effects to Northern long-eared bats from hunting activities, or effects are so extremely unlikely to occur such that they cannot be measured. Any effects would be insignificant in the size of the impact and would never reach the scale where “take” would occur.</p>
Other wildlife and aquatic species (non-target species)	<p>Minor, short-term adverse impacts (disturbance) of non-target wildlife species may occur. The dense structure of the conifer forest on our mainland divisions generally limits hunting activity to existing trails and fields, which leaves large areas of refuge land undisturbed. Our offshore islands do not support resident populations of mammals, and very few non-game species of birds would be expected to be using those islands during the waterfowl hunting season. While resident and non-game wildlife in areas newly opened to hunting may be negatively impacted by disturbance, that impact is expected to be negligible. Hunting pressure on MCINWRC property is currently low, and we do not anticipate that opening these new properties to hunting would significantly change the level of hunting pressure.</p>
Habitat and Vegetation	<p>Negligible to minor, short-term impacts to vegetation. We do not anticipate a significant increase in the number of hunters coming to MCINWRC to hunt, given the low game densities and harvest rates for this region in recent years. Hunting activities would predominantly occur during the fall and winter months, when plants are dormant and the ground is frozen and/or covered in snow. Hunters would have minimal impacts on plants during this period. Seaduck hunters generally hunt from boats or the intertidal region surrounding islands or the mainland, and therefore, would have little to no impact on upland vegetation. For these reasons, hunting is expected to have minimal adverse impacts on Refuge Complex vegetation.</p> <p>Construction of a small parking lot (3 to 5 cars) and</p>

Affected Environment	Potential Impacts of the Selected Action
	<p>hiking trail on the Sawyer's Marsh Division would require removal of a small number of trees and shrubs. Some fill would be needed to level the parking area. Construction of the trail would require limited cutting of trees and shrubs, but the footprint of the trail would be less than four feet wide. The Sawyer's Marsh Division encompasses 1,150 acres, and the limited size of the parking lot and trail would represent a very small percentage of that acreage. We do not anticipate any significant impact on the vegetation communities of this division due to our construction activities.</p> <p>The Refuge Complex would avoid affecting all wetlands during the construction of the parking lot, and would minimize any potential effects of trail construction and recreational use on wetlands through trail placement and design, the use of bog bridging, and erosion control measures.</p>
Visitor Use and Experience	<p>Minor, short-term adverse impacts to other public uses. Refuge-specific hunting regulations help minimize potential conflict between user groups on the refuge. With the addition of new hunt areas and species open to hunting, a slight increase in the number of conflicts among user groups may occur. However, the majority of public use occurs on the Petit Manan Point Division, and with the exception of the 1-week muzzleloader season for white-tailed deer, this division would remain closed to hunting. We anticipate that hunting pressure would continue to be low on the Gouldsboro Bay and Sawyer's Marsh Divisions, but non-hunters may elect to limit Refuge Complex visits to Sundays (when hunting is not authorized in Maine) or they may avoid the Refuge Complex altogether.</p> <p>We do not anticipate any other Refuge Complex visitors would be utilizing the 48 offshore islands during the fall and winter months when waterfowl season is open. Given the low game densities and harvest rates for this region in recent years, we do not anticipate an increased level of conflict between hunters and non-consumptive users of the Refuge Complex.</p>
Cultural Resources	No adverse impacts. We do not anticipate that the minor changes to the hunting program would result in

Affected Environment	Potential Impacts of the Selected Action
	<p>an increase in the number of hunters using refuge lands nor result in any impacts to any cultural resources that may be present on refuge lands. To our knowledge, there are no archeological artifacts on the 20 Refuge Complex islands we are proposing to open to waterfowl hunting and, no new adverse impacts are anticipated on Bois Bubert Island as the result of opening the island for additional big and small game hunting opportunities.</p> <p>There are no known cultural resources sites on the Sawyer's Marsh Division. MCINWRC would not be excavating any material during the construction of the parking lot or the trail on this division, and therefore does not anticipate any adverse impacts to cultural resources.</p>
Wilderness	<p>No adverse impacts. In our 2005 CCP, MCINWRC proposed wilderness designation on 13 Refuge Complex islands (USFWS 2005a). Those islands include Cross, Mink, Scotch, Old Man, Inner and Outer Double Head Shot, Halifax, Inner Sand, Bois Bubert, John's, Little Marshal, Outer Heron, and Outer White Islands.</p> <p>Six of the islands (Cross, Mink, Scotch, Old Man, Inner and Outer Double Head Shot Islands) remain closed to all hunting. Six islands (Halifax, Inner Sand, John's, Little Marshal, Outer Heron, and Outer White Islands) are only open to waterfowl hunting. Bois Bubert is only open for white-tailed deer hunting.</p> <p>Bois Bubert and Little Bois Bubert islands (19.4 acres) would be opened to big game, small game, and upland and migratory game bird hunting. Moose and wild turkey hunting would not be authorized on these islands due to the low population size of these species in this region of Maine. Waterfowl hunting would not be authorized on these parcels as the area serves as a waterfowl sanctuary. MCINWRC does not anticipate a significant interest in hunting on these properties, and therefore does not believe that wilderness characteristics would be adversely effected by this proposal.</p>

Affected Environment	Potential Impacts of the Selected Action
Refuge Management and Operations	<p>Negligible, short-term and long-term impacts to refuge management and operations. MCINWRC is headquartered in Rockland, Maine and that facility has a visitor center to help interpret Refuge Complex activities. A second office is located in Milbridge, Maine. Staff from the Milbridge office maintain the roads, parking lots, trails, and kiosks on the Refuge Complex's mainland divisions.</p> <p>Since the proposed changes to the hunting program are minor adjustments, we do not anticipate an increased number of hunters using the refuge. These changes would not result in any significant increases in the annual costs to administer the program.</p> <p>There would be some staff, equipment, and material costs associated with the construction of the new parking lot and trail on the Sawyer's Marsh Division. MCINWRC anticipates there would be sufficient funds in our budget to undertake this effort.</p>
Socioeconomics and Environmental Justice	<p>Negligible, short-term and long-term benefits. While hunting visitation may increase due to increased opportunities, hunting accounts for a fraction of expenditures related to the refuge. The Service identified no minority or low-income communities within the impact area. Minority or low-income communities would not be disproportionately affected by any impacts from this proposed action.</p>

While refuges, by their nature, are unique areas protected for conservation of fish, wildlife and habitat, the selected action will not have a significant impact on refuge resources and uses for several reasons:

1. In the context of local and State hunting programs, the selected action will only result in a tiny fraction of the estimated populations and harvest. The Service works closely with the States to ensure that additional species harvested on a refuge are within the limits set by each state to ensure healthy populations of the species for present and future generations of Americans.
2. The Refuge System uses an adaptive management approach to all wildlife management on refuges, monitoring and re-evaluating hunting opportunities on the refuge on an annual basis to ensure that the program continues to contribute to the biodiversity and ecosystem health of the refuge, and that the impacts from these opportunities do not add up to significant impacts

in combination with the environmental trends and planned actions on and near the refuge.

3. The adverse effects of the selected action on air, water, soil, habitat, wildlife, aesthetic/visual resources, and wilderness values are expected to be non-existent, minor and/or short-term. The benefits to long-term ecosystem health from the selected action, in conjunction with other existing refuge programs, will far outweigh any of the short-term adverse impacts discussed in the EA and document. The action will result in beneficial impacts to the human environment, including the biodiversity and ecological integrity of the refuge, as well as the wildlife-dependent recreational opportunities and socioeconomics of the local economy, with only negligible adverse impacts to the human environment as discussed above.
4. The refuge-specific regulations detailed in 50 CFR are measures that will reduce or avoid impacts. Hunting regulations will be enforced by Federal and State law enforcement officers. Providing information through various forums will ensure the public is aware of applicable laws and policies.
5. The selected action, along with the proposed mitigation measures, will ensure that there is low danger to the health and safety of refuge staff, visitors, and hunters themselves.
6. The action is not in an ecologically sensitive area.
7. The action is not likely to adversely affect any threatened or endangered species; and will have no effect to federally designated critical habitat.
8. The action will not impact any cultural or historical resources.
9. The action will not impact any wilderness areas.
10. There is no scientific controversy over the impacts of this action, and the impacts of the proposed action are relatively certain.
11. The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 because hunters must use established access points that will not be located near sensitive habitats.

Additionally, the following stipulations are necessary to ensure compatibility:

- We allow hunters to enter the refuge one hour prior to legal sunrise and remain on the refuge until one hour after legal sunset.
- No pursuit hounds may be used to hunt animals such as raccoon, fox, hare, bobcat, coyote and bear.
- Only temporary or portable blinds or ladders are authorized for use on MCINWRC. Migratory game bird hunters are required to remove all portable or temporary blinds and decoys from the refuge following each day's hunt.

- All tree stands must have the name and address of the owner clearly printed on any stand that is left overnight. Hunters must obtain verbal or written permission from the refuges to erect or use a portable or permanent ladder or observation platform. Big game hunters must remove all tree stands, blinds, and ladders from the refuge on the last day of muzzleloader deer season.
- Deer hunting on Petit Manan Point during the muzzleloader season is only authorized in the designated hunt zone. Hunters may enter the non-hunt zone area to recover legally harvest deer, but may not carry a bow or firearm with them.
- Red squirrel, porcupine and woodchuck may not be hunted from April 1 to October 31. Coyote may not be hunted April 1 to October 31. Black bear may only be hunted during the deer firearms season. No night hunting or raccoon or coyote.
- MCINWRC prohibits the use of toxic ammunition for small game and upland game bird hunting.

These measures to mitigate and/or minimize adverse impacts have been incorporated into the proposal. The proposal is compatible with the purpose of the refuge and the mission of the Refuge System (see the Compatibility Determination, Appendix A, in the Hunting Plan). Furthermore, the action is consistent with applicable laws and policies regarding the establishment of hunting on national wildlife refuges.

Public Review

The plan has been thoroughly coordinated with all interested and/or affected parties. Refuge staff coordinated with State agency staff in preparation of the Hunting Plan, Compatibility Determination, and EA, and incorporated their comments into the documents. Public notification and review of this CD included a 90-day comment period, from April 7 to July 6, 2021. We informed the public through local venues, the refuge website and social media. No comment letters were received. No significant modifications were incorporated into the final plan and decision documents.

Determination

Based upon a review and evaluation of the information contained in the EA, as well as other documents and actions of record affiliated with this proposal, the Service has determined that the proposal to expand hunting opportunities at Maine Coastal Islands NWR Complex does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of NEPA. As such, an environmental impact statement is not required. An EA has been prepared in support of this finding (Appendix B) and is available upon request to the refuge.

The Service has decided to select the proposed action as described in the EA, and implement the Hunting Plan for MCINWRC upon publication of the final 2021-2022 Station-Specific Hunting and Sport Fishing Regulations. This action is compatible with the purpose of the refuge and the mission of the Refuge System, and consistent with applicable laws and policies. See attached

Compatibility Determination (Appendix A).

Regional Chief
National Wildlife Refuge System

Date