Rhode Island National Wildlife Refuge Complex

Hunting and Fishing Plan

March 2020

Appendix A – Hunting Compatibility Determination
Appendix B – Fishing Compatibility Determination
Appendix C – Environmental Assessment
Appendix D – Intra-Service Section 7 Evaluation
Rhode Island National Wildlife Refuge Complex
Hunting and Fishing Plan

March 2020

U.S. Fish and Wildlife Service

Block Island National Wildlife Refuge,
on Block Island, Town of New Shoreham

John H. Chafee National Wildlife Refuge,
in the Towns of South Kingstown and Narragansett

Ninigret National Wildlife Refuge,
in the Town of Charlestown

Sachuest Point National Wildlife Refuge,
in the Town of Middletown

Trustom Pond National Wildlife Refuge,
in the Town of South Kingstown

Submitted By:
Refuge Manager

Signature Date

Concurrence:
Refuge Supervisor

Signature Date

Approved:
Regional Chief
National Wildlife Refuge System

Signature Date
Hunting and Fishing Table of Contents

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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, and certain laws and international treaties. The Rhode Island National Wildlife Refuge Complex (NWRC, Complex) is made up of five refuges (Figure 1). Each national wildlife refuge (NWR, 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 each refuge in the Complex are given below in Table 1. Additionally, the Service has specific priorities to provide wildlife-dependent recreational opportunities when those opportunities are compatible with the purposes for which each refuge was established and the mission of the Refuge System. This document serves as a management plan for hunting and fishing activities on the Rhode Island NWRC.

Table 1. Refuge Purposes and Establishing Authorities

<table>
<thead>
<tr>
<th>Refuge</th>
<th>Establishing Authorities</th>
<th>Refuge Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>John H. Chafee NWR</td>
<td>Amendment to the Emergency Wetlands Resources Act (102 Stat. 3177, Public Law 100-610) and the Refuge System Administrative Act of 1966, as amended (16 U.S.C. 668dd - 668ee). Established November 5, 1988, originally as Pettaquamscutt Cove NWR.</td>
<td>“(1) To protect and enhance the populations of black ducks and other waterfowl, geese, shorebirds, terns, wading birds, and other wildlife using the refuge; (2) To provide for the conservation and management of fish and wildlife within the refuge; (3) To fulfill international treaty obligations of the U.S. respecting fish and wildlife; (4) To provide opportunities for scientific research, environmental education, and fish and wildlife-oriented recreation.”</td>
</tr>
</tbody>
</table>

for “use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”

<table>
<thead>
<tr>
<th>Refuge</th>
<th>Act</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sachuest Point NWR</td>
<td>Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j). Established November 3, 1970.</td>
<td>“… for the development, management, advancement, conservation, and protection of fish and wildlife resources.” “… (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”</td>
</tr>
<tr>
<td></td>
<td>Migratory Bird Conservation Act of 1929 (16 U.S.C. 715-715d, 715e, 715f-715r). Established August 15, 1974.</td>
<td>for “use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” “… (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”</td>
</tr>
</tbody>
</table>

The five refuges of the Complex are managed as part of the Refuge System, whose mission 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” (Refuge System Improvement Act of 1997).

The act further 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.

Block Island NWR is located approximately 12 miles off the mainland on Block Island, Town of New Shoreham (Figure 3). The refuge includes 133 acres in either fee title or conservation easement. Approximately 30 percent of Block Island is currently in conservation status, including lands owned or administered by the Service, The Nature Conservancy, Block Island Land Trust, Block Island Conservancy, Town of New Shoreham, Audubon Society of Rhode Island, and individual private landowners.

John H. Chafee NWR at Pettaquamscutt Cove is divided between the towns of South Kingstown and Narragansett, 30 miles south of Providence (see Figures 4 and 5). In 1988, Senator John H. Chafee proposed legislation designating 600 acres of Pettaquamscutt Cove and its associated uplands for the protection of black ducks, shorebirds, and other waterfowl. In 1999, Congress recognized Senator John H. Chafee’s significant contributions to natural resource protection by renaming Pettaquamscutt Cove Refuge the “John H. Chafee National Wildlife Refuge.” The refuge currently owns 550 acres within a 1,342-acre refuge acquisition boundary.

Ninigret NWR is located in Charlestown, 30 miles south of Providence (Figure 6). Transfers of land from the U.S. Navy to the Service primarily established and expanded the refuge, including: 27.5 acres of the Ninigret Pond barrier beach in 1970, 316.4 acres of the Naval Landing Field in 1979, and an additional 60 acres 1982. With acquisition of two large tracts of mature deciduous forest north of U.S. Route 1, the refuge now owns 868 acres. The refuge provides visitors with over 4 miles of hiking trails, as well as the Kettle Pond Visitor Center, referred to as the headquarters unit.

Sachuest Point NWR is located in the Town of Middletown, Newport County, about 23 miles southeast of Providence and 5 miles east of Newport (Figure 7). To the north and east, the Sakonnet River bounds the refuge; to the south, the Atlantic Ocean; and to the west, Sachuest Bay. Located immediately northwest are a Town of Middletown campground, the Norman Bird
Sanctuary, Gardiner Pond (supplying water to Newport), and Second and Third Beaches, owned and maintained by the Town of Middletown. The refuge currently owns 242 acres.

**Trustom Pond NWR** is located in South Kingstown, Washington County, about 15 miles south of Narragansett (Figure 8). The main body of the refuge is bordered by private land and the community of Green Hill to the west; by Matunuck Schoolhouse Road to the north; and by private land to the northeast and east. In 1974, Mrs. Ann Kenyon Morse donated the first 365 acres to the refuge. The refuge currently includes 777 acres in either fee title or conservation easement.

The refuges of the Complex total 2,570 acres, and receive up to 600,000 total refuge visits each year. Of the total annual visits, we estimate that fishing accounts for approximately 60,000 visits and hunting accounts for less than 370 visits. In developing each refuge’s Comprehensive Conservation Plan (CCP), hunting surfaced as a key issue. At that time, those in support were primarily interested in deer hunting on all refuges, waterfowl hunting on John H. Chafee NWR and Ninigret NWR, and pheasant hunting on Block Island NWR. The Rhode Island Department of Environmental Management (RIDEM) encouraged any new opportunities for hunting because rapid residential development in Rhode Island has confined public hunting opportunities to fewer and fewer areas. Four of the five refuges in the Complex fall within the RIDEM hunting zone 1, while Block Island NWR is located in hunting zone 4 (Figure 2).

The Service views managed or administrative hunts in areas where there are overabundant deer herds as an effective tool for population regulation. The overabundance of deer is a concern in Rhode Island, reflected in higher vehicle-deer collisions, increased complaints about deer browsing on commercial and residential landscape plantings, visible impacts on native vegetation, and greater public health concerns over the spread of Lyme disease.

The Complex’s Draft CCP and Environmental Assessment (December 2000) discussed and evaluated alternatives for varying levels of hunting opportunities, from no hunting at all, to opening refuges during State-regulated seasons for deer, waterfowl, and pheasant. The CCP acknowledged the need to identify how best to manage deer on the refuge given concerns regarding deleterious effects from high deer densities. The CCP also established (amongst others) “Goal 4: Provide opportunities for high quality, compatible, wildlife-dependent public use with particular emphasis on environmental education and interpretation.” Additionally, CCP objectives were developed to maintain, provide, or enhance hunting and fishing opportunities on the refuges. With the adoption of this hunt and fish plan, opening or expanding hunting and fishing opportunities will be added to existing public use opportunities on the Complex.

**II. Statement of Objectives**

The objectives of the hunting program for big game, small game, and migratory game birds, as well as the sport fishing program, on Rhode Island NWR Complex are to:

1. Provide the public with a high-quality recreational experience on complex lands and increase opportunities and access for hunters and anglers;
2. Design a hunting and fishing program that is administratively efficient and manageable with existing staffing levels and that aligns with RIDEM regulations when possible;

3. Implement a hunting and fishing program that is safe for all complex users;

4. Provide hunting and fishing opportunities for youth and those that need assistance; and

5. Design a hunting and fishing program that is in alignment with complex habitat management objectives.

To help meet these objectives, we will expand opportunities for white-tailed deer hunting to assist in maintaining deer densities between 12 to 15 deer per square mile. We will expand the hunting of waterfowl, especially youth hunting, in an effort to maintain a historic, wildlife-dependent public use and provide accessible hunting opportunities in cooperation with local accessibility experts and organizations. We will coordinate all hunting opportunities with the RIDEM. We will enhance public understanding of refuge hunting and fishing opportunities by providing quality maps, signage, outreach materials, and refuge websites.

The Refuge System Administration Act of 1966, as amended by the Refuge System Improvement Act of 1997, and the Refuge Recreation Act of 1962 authorize public hunting and fishing on refuges when compatible with the purposes for which the refuge was established. As part of this document, compatibility determinations were prepared and, assuming management decisions are based on sound biological principles, and that user time and space restrictions are utilized to minimize wildlife disturbance, hunting and fishing are deemed compatible and worthwhile recreational opportunities to provide for the public.

III. Description of Hunting and Fishing Program

A. Areas to be Opened to Hunting/Fishing

Block Island NWR
All of the refuge’s 133 acres would be opened for white-tailed deer hunting (see Figure 3). These hunting units are identified as Beane Point, Grove Point, Sandy Point, Wash Pond, and Skippers Island. Approximately 9 acres of Wash Pond Unit would be opened for migratory waterfowl hunting (ducks, mergansers, and coot). Refuge lands are primarily upland, with some beach habitat and sandy areas. Saltwater fishing will continue to be allowed from refuge shorelines.

John H. Chafee NWR
Approximately 461 acres of the refuge’s 563 acres would be opened for white-tailed deer, wild turkey, fox, and coyote hunting, with some season and weapon restrictions (see Figures 4 and 5). Hunting units are identified as Foddering Farms, Stedman, Star Drive, Mumford, Middlebridge, and Congdon Cove. The Foddering Farms Unit would be open to the spring firearm turkey season (130 acres). Approximately 116 acres would be opened for migratory
waterfowl hunting. Saltwater fishing would be conducted from the shoreline of the refuge, within 20 feet of the mean high tide line, extending 985 linear feet from the kayak ramp (see Figure 9).

The hunt area is comprised of upland forest, wetlands, and maritime shrublands. In order to achieve refuge objectives and to provide opportunities for all priority public uses, some areas of John H. Chafee NWR will remain closed to hunting and fishing. These strategic closures will reduce conflicts with other recreational, biological, or administrative uses. Hunting and fishing areas will be assessed annually for deteriorated habitat. Based on this annual assessment, these areas will be designated either open or temporarily closed.

**Ninigret NWR**

Nearly all of the refuge’s 883 acres would be opened for white-tailed deer, wild turkey, coyote and fox hunting, with some season and weapon restrictions (see Figure 6). These hunting units are identified as Kettle Pond, Lewis Tract, Salt Pond, and Barrier Beach. A mosaic of diverse vegetation types cover the refuge, composed of approximately 91 percent upland and nine percent wetland.

Wetland types include salt marsh, man-made ponds, forested and scrub-shrub wetlands, and emergent wetlands with varying amounts of open water. Most natural freshwater wetlands on the refuge are glacial kettle holes. The refuge contains at least 13 permanent ponds. Some tidal ponds on its mainland portion have restricted tidal flow due to siltation, and have become increasingly fresh. Most of the salt marsh acreage exists on the Barrier Beach parcel.

The open water of Ninigret Pond is not technically part of the refuge; however, the refuge does include approximately 3 miles of its shoreline, and another mile of shoreline along Foster’s Cove. The presence of Ninigret Pond is a significant attraction to wildlife and refuge visitors and thus, has a direct influence on use and management of refuge land. The refuge provides visitors with over 4 miles of hiking trails, as well as the Kettle Pond Visitor Center, co-located with the Complex headquarters building on the Kettle Pond unit.

**Sachuest Point NWR**

Sachuest Point NWR has the highest visitation of the five refuges of the Complex, with approximately 325,000 visitors per year. Due to the potentially high conflict with other visitors (and a limited deer population), we will not open the refuge to the general public for hunting. The refuge may be conducive to a limited, targeted group (i.e., veterans, youth hunters, hunters with disabilities) deer, coyote, fox hunt, where the refuge would close to all other activities (see Figure 7). We do not anticipate hunting activities to occur on an annual basis. Additionally, waterfowl hunting is available by boat offshore - thus, there is no need or demand for opening refuge property. We do allow saltwater fishing from the refuge shoreline in accordance with State regulations and refuge-specific regulations.

**Trustom Pond NWR**

Shrublands and forest compose almost 40 percent of the 777-acre refuge, mostly on its
western portion. Shrublands are dominated by shadbush, northern arrowwood, and bayberry, whereas forests are dominated mainly by red maple and black oak. Trustom Pond is a 160-acre brackish coastal pond that serves as the centerpiece of the refuge, and has the distinction of being the only coastal pond in Rhode Island without houses on its shoreline, and its waters are fully managed by the Service. The pond varies between 1 to 6 feet in depth. Freshwater wetlands of various types account for about 70 acres of the refuge, and there are five freshwater ponds totaling about 8 acres.

We propose to open lands on the western portion of the refuge (358 acres) to archery hunting for white-tailed deer, wild turkey, coyote, and fox (see Figure 8). The 22-acre tract identified as Field 1 is currently open to Canada geese and mourning dove hunting in coordination with the State as part of the South Shore Management Area. We propose to open Field 1 Unit to duck, mergansers, and coot during the State season. The eastern portion of Trustom Pond has a deed restriction preventing hunting activities, therefore that area would remain closed.

Hunting activities on the Trustom Pond NWR outside of Field 1 would not occur until calendar year 2021.

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

Table 2. Species to be Taken

<table>
<thead>
<tr>
<th>Refuge</th>
<th>Migratory Game Bird</th>
<th>Upland Game</th>
<th>Big Game</th>
<th>Sport Fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Island</td>
<td>Ducks; Mergansers; Coot</td>
<td></td>
<td>Deer</td>
<td>Saltwater Fish</td>
</tr>
<tr>
<td>John H. Chafee</td>
<td>Ducks; Geese; Mergansers; Coot</td>
<td>Coyote; Fox</td>
<td>Deer; Turkey</td>
<td>Saltwater Fish</td>
</tr>
<tr>
<td>Ninigret</td>
<td>Coyote; Fox</td>
<td></td>
<td>Deer; Turkey</td>
<td>Saltwater Fish</td>
</tr>
<tr>
<td>Sachuest Point</td>
<td>Coyote; Fox</td>
<td></td>
<td>Deer</td>
<td>Saltwater Fish</td>
</tr>
<tr>
<td>Trustom Pond</td>
<td>Ducks; Geese; Mergansers; Coot; Mourning Dove</td>
<td>Coyote; Fox</td>
<td>Deer; Turkey</td>
<td>Saltwater Fish</td>
</tr>
</tbody>
</table>

Table 3. Approximate Hunting and Fishing Periods

<table>
<thead>
<tr>
<th>Refuge</th>
<th>Hunting</th>
<th>Sport Fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Island</td>
<td>Deer: Hunting dates for white-tailed deer are currently set in accordance with the Town, with no weekend hunting allowed. Dates below are approximate, please see the Rhode Island Hunting and Trapping Abstract for actual dates. Archery (includes crossbow) – October through February Muzzleloader – November through February Shotgun – November–February</td>
<td>Saltwater Fish from refuge shorelines</td>
</tr>
<tr>
<td>Location</td>
<td>Season</td>
<td>Species</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>John H. Chafee</td>
<td>Deer</td>
<td>Archery (includes crossbow)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muzzleloader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shotgun</td>
</tr>
<tr>
<td>Ducks, Mergansers, Coot</td>
<td>October; November; December through January</td>
<td></td>
</tr>
<tr>
<td>Geese</td>
<td>September (early season); November through January (regular season)</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>Fall archery (includes crossbow) – October</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring gobbler (shotgun) – April and May</td>
<td></td>
</tr>
<tr>
<td>Coyote</td>
<td>same as deer.</td>
<td></td>
</tr>
<tr>
<td>Gray and Red Fox</td>
<td>same as deer.</td>
<td></td>
</tr>
<tr>
<td>Ninigret</td>
<td>Deer</td>
<td>Archery (includes crossbow)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muzzleloader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shotgun</td>
</tr>
<tr>
<td>Turkey</td>
<td>Fall archery (includes crossbow) – October</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spring gobbler (shotgun) – April and May</td>
<td></td>
</tr>
<tr>
<td>Coyote</td>
<td>same as deer.</td>
<td></td>
</tr>
<tr>
<td>Gray and Red Fox</td>
<td>same as deer.</td>
<td></td>
</tr>
<tr>
<td>Sachuest Point</td>
<td>Supervised limited youth/veteran deer hunt, plus coyote and fox.</td>
<td></td>
</tr>
<tr>
<td>Trustom Pond</td>
<td>Deer</td>
<td>Archery (includes crossbow)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muzzleloader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shotgun</td>
</tr>
<tr>
<td>Mourning Dove</td>
<td>September through December.</td>
<td></td>
</tr>
<tr>
<td>Geese</td>
<td>September (early season); November through January (regular season)</td>
<td></td>
</tr>
<tr>
<td>Ducks, Mergansers, Coot</td>
<td>October through January</td>
<td></td>
</tr>
</tbody>
</table>
Turkey:
*Fall archery (includes crossbow) – October*

Coyote – same as deer (archery only).

Gray and Red Fox – same as deer (archery only).

Most refuge units would run concurrently with State white-tailed deer and wild turkey seasons for public lands, with the addition of refuge-specific regulations, and season and/or weapon restrictions. Specific details on which species will be hunted in the different refuge units can be found in the refuge hunting maps (Figures 3 to 9). Typically, archery season would run from mid-September to the end of January; muzzleloader season would run from the first week of November to the beginning of December; and shotgun season would run from the first week of December to the third week of December. Private land antlerless only seasons and early September muzzleloader seasons would not be open on refuge lands. Waterfowl hunting would follow State waterfowl season dates and Federal regulations. The Complex is reintroducing New England cottontail and, therefore, will not allow any rabbit hunting on any refuge lands for the foreseeable future.

The refuge will work cooperatively with RIDEM to advertise hunting opportunities through the yearly hunting abstract. This helps reduce confusion when hunters participate in hunting activities on Service lands. No night hunting allowed on refuge lands.

For saltwater fishing, we will maintain seasonal closures for shoreline saltwater fishing at Sachuest Point NWR and Trustom Pond NWR. Anglers may saltwater fish from shorelines from September 16 to March 31 (i.e., closed from April 1 to September 15 to protect nesting shorebirds). Nighttime fishing will continue at Sachuest Point NWR by refuge permit.

**Hunting Access**

The Service will make a reasonable effort to allow hunters access to all portions of the hunt areas, and provide safe, quality hunting opportunities that consider the welfare of the refuge wildlife resources. Hunters must clearly label any tree stand or blind left on the refuge overnight with their Rhode Island hunting license number. Hunters must remove their tree stand(s), and/or blind(s) from the refuge on the last day of the refuge deer hunting season. Some units may require hunters to park on public roadways and pull-off locations.

**Block Island NWR**

The Wash Pond, Grove Point, and Skippers Island Units would be archery only during deer season, as a safe firearm safety setback cannot be met. Waterfowl hunting would be allowed in Wash Pond. Other designated lands on the refuge would align with State regulations.

**John H. Chafee NWR**

The Mettatuxet unit would remain closed for deer hunting. The Foddering Farms unit would be the only unit open to turkey hunting for the spring gobbler shotgun season. Other designated areas on the refuge would allow hunting for waterfowl, deer, and wild turkey. Refuge deer hunters will also be allowed to take fox and coyote during the deer season. One gravel parking area (0.1-acre) is proposed to be constructed by means that require no
excavation to prevent archeological artifacts from being disturbed. There will be no loss to wetlands.

**Ninigret NWR**
The Kettle Pond unit would be archery only. Salt Pond unit would be closed to the general public for all activities during the special hunts for the muzzleloader and shotgun season. Lewis Tract and Barrier Beach units would align with State regulations for deer and wild turkey hunting. Fall wild turkey hunting would be allowed on designated hunting units. Permitted refuge deer hunters will also be allowed to take fox and coyote during the deer season.

**Sachuest Point NWR**
Supervised, limited deer, coyote, and fox hunting for targeted groups including: youth, veterans, hunters with disabilities, and women. The refuge would be closed to all other activities during these special hunting opportunities.

**Trustom Pond NWR**
Field 1 would continue to allow hunting with firearms for geese and mourning dove in coordination with RIDEM as part of the South Shore Management Area. Ducks, mergansers, and coot would be added to the species allowed to be taken in Field 1. Other designated lands on the refuge would allow fall archery hunting for deer and wild turkey. Refuge deer hunters will also be allowed to take fox and coyote during the deer season.

**Special Hunts**
Some refuge units would be open to special hunts. The goal of the special hunt is to provide quality recreational hunting experience that may be limited or not available for underserved hunting populations within the structure of general public hunting. The populations targeted for these special hunts are youth hunters, hunters with disabilities, women hunters, veterans, and senior hunters. All special hunts require refuge-specific authorization and will be coordinated with RIDEM.

**C. Hunter/Angler Permit Requirements**

General hunting provisions including seasons, licenses, safety courses, species, and bag limits are established within the regulations of the Rhode Island Hunting and Trapping Abstract. However, refuge hunts can be more restrictive to assure compatibility with refuge purposes. Harvest objectives shall be determined through the collaborative efforts of the RIDEM and refuge officials using various survey data stated previously.

All hunters will be required to possess and carry a personally signed refuge hunting brochure for the current refuge season. In addition, a “Hunt Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2439) will be required for hunting on Trustom Pond NWR only. No more than $20 permit fee for each type of hunt (deer and wild turkey) would be established to defray the costs of operation. At each refuge, numbers of hunters may be limited by access options and may need to be capped.
to provide for a quality hunt. Knowing in advance of a hunting opportunity allows hunters to prepare, plan, and scout, which ultimately improves the quality of their hunting experiences.

For Trustom Pond NWR, permit applications would most likely be administered by a contracted company that will feature online, mail, and telephone services to collect hunter information, required fees, and issue permits. These services would provide hunters with the ability to apply, pay for, and receive hunting permits in advance of the hunting dates. All fees must be paid prior to the issuance of a permit. Refuge staff would work with the contractor to provide the highest level of customer support.

Hunters on the refuge will be required to provide the Complex staff with documentation that clearly indicates the number of days hunted and the sex and number of animals harvested or wounded. This information would be collected on FWS form 3-2359 (Big Game Harvest Report) and FWS Form 3-2361 (Migratory Bird Hunt Report). The information we receive allows us to determine the demand for hunting on the refuge and provides an opportunity for communication with hunters. The hunting program will be reviewed on an annual basis, and necessary changes will be incorporated accordingly.

Saltwater fishing provisions including seasons, licenses, species, minimum size, and possession limits are established within the regulations of the Rhode Island Recreational Saltwater Fishing Abstract. Fishing at refuges can be more restrictive to assure compatibility with refuge purposes. Fishing has been limited on some areas to protect habitat and wildlife. No refuge permit is required for daytime fishing on all of the Complex. A “Fishing/Shrimping/Crabbing Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2358) is required for nighttime fishing at Sachuest Point NWR.

D. Consultation and Coordination with the State

Rhode Island NWR Complex hunt opportunities are designed to align as closely as possible with State regulations, thus increasing coordination and cooperation in management of game populations. RIDEM was consulted in development of this plan, and has willingly shared harvest, permit sales, and other data as necessary to support development of this document.

E. Law Enforcement

Enforcement of refuge violations normally associated with management of a national wildlife refuge is the responsibility of commissioned Federal Wildlife Officers (FWO). Other Federal officers, special agents, State game wardens, and the local police departments often assist the Rhode Island NWR Complex law enforcement program. The following methods are used to control and enforce hunting and fishing regulations:

- FWOs will randomly check hunters and people fishing for compliance with Federal and State Laws, as well as refuge-specific regulations pertinent to hunting and fishing, including compatibility stipulations;
• FWOs will coordinate with RIDEM Environmental Police Officers other law enforcement agencies; and

The Rhode Island NWR Complex staff have met with local law enforcement agencies in the counties that contain the refuge units to develop good working relationships and coordinate appropriate strategies.

F. Funding and Staffing Requirements

Current annual hunting and fishing administration costs for the Complex, including salary, equipment, law enforcement, brochures, collection of data and analysis of biological information, etc. totals approximately $4,000. Funding specifically for hunts or fishing has not been allocated, although funds are available through station appropriation and permit fees. If our required administrative involvement increases, the costs will have to be re-evaluated to ensure a hunt compatible with refuge objectives and purposes can be conducted. It is anticipated that funding would continue to be sufficient to continue the hunting program at the Rhode Island NWR Complex in the future.

Construction of one parking lot to support the hunt program would be onetime cost of $1,000, with an estimated annual maintenance cost of $300. Maintenance of existing parking lots and trails would cost approximately $700 annually. It will cost about $6,950 annually to administer the new hunting program on the Complex, and about $3,550 to administer the fishing program, for a total annual cost of $10,500 (Table 4).

Table 4. Funding and Staffing Requirements

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff (Maintenance Workers, Biologist, and Refuge Managers) Hunt Program</td>
<td>$4,000</td>
</tr>
<tr>
<td>Staff (Maintenance Workers, Biologist, and Refuge Managers) Fishing</td>
<td>$1,000</td>
</tr>
<tr>
<td>Maintain roads, parking lots, trails*</td>
<td>$1,000</td>
</tr>
<tr>
<td>News releases, fact sheets, reports for Hunt Program</td>
<td>$500</td>
</tr>
<tr>
<td>Maintain hunting/fishing signs</td>
<td>$1,000</td>
</tr>
<tr>
<td>Enforcement (hunting and fishing)**</td>
<td>$3,000</td>
</tr>
<tr>
<td><strong>Total Annual Cost</strong></td>
<td>$10,500</td>
</tr>
</tbody>
</table>

*Refuge trails and roads are maintained for a variety of activities. Costs shown are a percentage of total costs for trail/road maintenance on the refuge and are reflective of the percentage of trail/road use for hunting and fishing. Volunteers account for some maintenance hours and help to reduce overall cost of the program.

**Detailed Federal Wildlife Officers since the Complex does not have a Law Enforcement Officer.

IV. Conduct of the Hunting/Fishing Program

To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting and fishing is conducted in accordance with State and Federal regulations, and supplemented by refuge-specific regulations. However, the refuge manager may, upon annual review of the
hunting and fishing program, impose further restrictions on hunting or fishing, recommend the refuge be closed to hunting or fishing, or further liberalize hunting and fishing regulations up to the limit of State regulations. The refuge will restrict activity if it becomes inconsistent with other priority refuge programs or endangers refuge resources or public safety.

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

All hunters will be required to possess and carry a personally signed refuge hunting brochure for the current refuge season. In addition, a “Hunt Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2439) will be required for hunting on Trustom Pond NWR only. No more than $20 permit fee for each type of hunt (deer and wild turkey) would be established to defray the costs of operation. The signed brochure/permit would also serve as written permission as required by State regulations.

For Trustom Pond NWR, the requirement for permits would be on a temporary basis for the first few hunting seasons in order to collect information regarding hunter participation and demand, level of harvest and other information beneficial to monitoring of the hunt. When the requirement for permits is lifted, hunters would only be required to carry a personally signed copy of the refuge hunting brochure. This same approach was implemented on the Block Island NWR, where permits were required for the first few hunting seasons to collect information on the hunt, and then were no longer required based on review of the permit information that suggested permits were no longer necessary (i.e. lower than anticipated demand, no major issues).

Permit applications would most likely be administered by a contracted company that will feature online, mail, and telephone services to collect hunter information, required fees, and issue permits. These services would provide hunters with the ability to apply, pay for, and receive hunting permits in advance of the hunting dates. All fees must be paid prior to the issuance of a permit. Refuge staff would work with the contractor to provide the highest level of customer support.

Hunters on the complex will be required to provide the staff with documentation that clearly indicates the number of days hunted and the sex and number of animals harvested or wounded. This information would be collected on FWS Form 3-2359 for deer harvest, and FWS Form 3-2361 for waterfowl. The hunting program will be reviewed on an annual basis and necessary changes will be incorporated accordingly.

It is anticipated that the staff may need to cap the number of permit sales at Trustom Pond NWR on an annual basis in order to protect complex resources and to provide a quality hunt. Over time, the refuge may lift the cap on permits as long as there are no detrimental impacts to natural resources and the quality of the hunt remains high. Parking availability will potentially limit the number of hunters at each hunting unit.

Saltwater fishing on designated refuges is in accordance with the Rhode Island Recreational
Saltwater Fishing Abstract. Fishing had been limited on some areas to protect habitat and wildlife. No refuge permit is required for daytime fishing at any of the refuges. A “Fishing/Shrimping/Crabbing Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2358) is required for nighttime fishing at Sachuest Point NWR because this activity occurs after refuge hours. Nighttime fishing permit fee is $20 annually.

B. Refuge-Specific Hunting Regulations

To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting and sport fishing must be conducted in accordance with State and Federal regulations, as supplemented by refuge-specific regulations (50 CFR Chapter 1, Subchapter C), and information sheets/brochures. Refuge-specific stipulations are also detailed in the Hunting Compatibility Determination (Appendix A) and Fishing Compatibility Determination (Appendix B). Listed below are general procedures that pertain to hunting on Rhode Island NWR Complex. These may be modified as conditions change or if refuge expansion occurs:

- We require hunters to carry a signed refuge hunting brochure for the current hunting season.

- At Trustom Pond NWR, we require hunters to complete a “Hunt Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2439) to be selected to hunt.

- We only allow portable tree stands and blinds for deer hunting. You must clearly label any tree stand or blind left on the refuge overnight with your Rhode Island hunting license number. You must remove your tree stand(s), and/or blind(s) from the refuge on the last day of the deer hunting season.

- Temporary goose or duck blinds and decoys must be removed at the end of each day’s hunt, no permanent blinds allowed.

- We allow the use of dogs consistent with State regulations when hunting migratory game birds. Dogs must be under direct control at all times.

Hunter orientation of Rhode Island Complex refuges will be achieved by providing a hunting brochure and map of the refuge at the Complex headquarters and the refuge websites. The map has refuge trails, public use areas, closed areas, and local roads clearly defined. Hunters can also obtain the refuge-specific regulations each year at the Complex headquarters and the website. Hunters can address questions to refuge staff by calling, writing, emailing, or visiting the Complex headquarters in Charlestown. Signs alerting the visiting public to educate themselves of the timing of hunting seasons will be posted at the refuge office and at access points and kiosks. The refuge would designate a minimum of 1 week that would provide hunters an opportunity to scout the refuge units in order to become familiar with the unit, habitats, refuge boundaries and facilities.
C. Refuge-Specific Fishing Regulations

Block Island NWR, Ninigret NWR, John H. Chafee NWR:

- We allow saltwater fishing on designated areas from refuge shorelines.

Sachuest Point NWR:

- We allow saltwater fishing on designated areas of the refuge subject to the following conditions:
  (i) Anglers may only saltwater fish at Sachuest Beach shoreline from September 16 through March 31.
  (ii) Anglers may night-fish after legal sunset with a refuge permit (FWS Form 3-2358).

Trustom Pond NWR:

- We allow saltwater fishing on designated areas of the refuge subject to the following condition: Anglers may saltwater fish from September 16 through March 31.

D. Relevant State Regulations

Hunters and anglers are responsible for knowing and complying with all applicable Rhode Island regulations.

E. Other Refuge Rules and Regulations for Hunting/Fishing

- **Equipment.** The refuge will permit the use of legal sporting arms, including archery, muzzleloaders, and shotguns in accordance with State regulations. We encourage voluntary use of non-toxic ammunition for all hunting on the Rhode Island NWRs, and will collaborate with the State on development of education materials and strategies on the benefits of using non-toxic shot. The use of non-toxic shot will be required for waterfowl and dove hunting as per Federal regulations.

- **License and Permits.** Hunters will be required to sign and carry an official refuge regulation brochure. Trustom Pond NWR hunters will be required to obtain an official permit along with a refuge regulation brochure.

- **Reporting Harvest.** Hunters will be required to fill out harvest information.

  **Hunter Safety Training.** Eligible hunters may be required to attend a mandatory refuge orientation briefing at the refuge visitor center for any refuge-sponsored hunt.

- **Retrieving Dogs.** Dogs are not allowed on refuge lands except on leash at designated
trails on Ninigret NWR, Kettle Pond Unit. Trained retrieving dogs are allowed on refuge lands with permitted hunters as stated above in the refuge-specific regulations. Using refuge lands to train dogs is prohibited.

V. Public Engagement

A. Outreach for Announcing and Publicizing the Hunting/ Fishing Program

The Complex maintains a mailing list, for news release purposes, to local newspapers, radio stations, hunt clubs and partners’ websites. Special announcements and articles may be released in conjunction with hunting seasons. In addition, information about hunting and fishing will be available at Rhode Island NWRC headquarters and Complex websites.

B. Anticipated Public Reaction to the Hunting/Fishing Program

Based on comments received during the 2001 CCP process, some negative public reaction can be expected. Although there is a long tradition of hunting and fishing on former refuge lands, neighboring properties, and State lands, it is anticipated that there will be some adverse public reaction to the hunting and fishing program from areas surrounding John H. Chafee NWR, Sachuest Point NWR, and Trustom Pond NWR as these would be new hunting opportunities. Neighbors to John H. Chafee NWR will hear more gunshots than in previous years. Visitors to Trustom Pond NWR will see hunters walking on the public trails, and see harvested game species, and temporary refuge closures at Sachuest Point NWR will be an inconvenience to non-hunting refuge visitors. However, the Narrow River and Block Island are popular hunting destinations on open water for waterfowl hunting and properties adjacent to all refuges currently have forms of waterfowl or deer hunting, so gunshots are common already on adjacent properties to Block Island NWR, John H. Chafee NWR, Ninigret NWR and Trustom Pond NWR. Sea ducks are hunted off the coast of Sachuest Point NWR, therefore, neighbors do hear gunshots from time to time. We do expect additional concerns to be raised at John H. Chafee NWR, Trustom Pond NWR, and Sachuest Point NWR as hunting will be a new activity to those refuges. We do not anticipate any adverse public reaction to the proposed fishing program as the addition of the lands at John H. Chafee NWR are already being fished by some visitors.

C. How Hunters/Anglers Will be Informed of Relevant Rules and Regulations

General information regarding hunting, fishing, and other wildlife-dependent public uses can be obtained at Rhode Island NWRC Complex headquarters, 50 Bend Road, Charlestown, Rhode Island 02813, or by calling 401-364-9124. Hunting brochures, dates, forms, hunting unit descriptions, maps, will be available on the station websites at:

- www.fws.gov/refuge/block_island/
- www.fws.gov/refuge/ninigret/
- www.fws.gov/refuge/john_h_chafee/
- www.fws.gov/refuge/trustom_pond/
VI. Compatibility Determination

Hunting, fishing, and all associated program activities proposed in this plan are expected to be found compatible with purposes of the refuge (See Appendices A and B).
Figure 1. Map of Rhode Island National Wildlife Refuge Complex
Figure 2. Rhode Island Deer Management Zones, RIDEM
Figure 3. Block Island NWR Hunting Units
Figure 4. John H. Chafee NWR Northern Hunting Units

John H. Chafee NWR Proposed Hunting

- Deer/Fall Turkey/Waterfowl - Match State Regulations
- Waterfowl Only
- Closed

Coyote/Fox hunting allowed while deer hunting.
Figure 5. John H. Chafee NWR Southern Hunting Units
Figure 6. Ninigret NWR Proposed Hunting Units
Sachuest Point NWR Proposed Hunting Units

Special Deer Hunts Only
Closed

Coyote/Fox hunting allowed while deer hunting. Waterfowl, turkey and small game remain closed.
Figure 8. Trustom Pond NWR Proposed Hunting Units
Figure 9. John H. Chafee NWR Proposed Fishing Area
Compatibility Determination

**USE:** Hunting

**REFUGE NAME:** Rhode Island National Wildlife Refuge Complex, hereafter referred to as the Complex. The Complex is made up of five refuges in the State of Rhode Island:

- Block Island National Wildlife Refuge (NWR, refuge) on Block Island, Town of New Shoreham.
- John H. Chafee NWR at Pettaquamscutt Cove between the towns of South Kingstown and Narragansett.
- Ninigret NWR in Charlestown.
- Sachuest Point NWR in the Town of Middletown.
- Trustom Pond NWR in South Kingstown.

**DATE ESTABLISHED:**

- Block Island NWR – November 2, 1973
- John H. Chafee NWR – November 5, 1988
- Ninigret NWR – August 12, 1970
- Sachuest Point NWR – November 3, 1970
- Trustom Pond NWR – August 15, 1974

**ESTABLISHING AND ACQUISITION AUTHORITY(IES):**

*Block Island NWR*

*John H. Chafee NWR*
*Amendment to the Emergency Wetlands Resources Act* (102 Stat. 3177, Public Law 100-610) and *the National Wildlife Refuge Administrative Act of 1966, as amended* (16 U.S.C. 668dd - 668ee). Established originally as Pettaquamscutt Cove NWR.
Ninigret NWR

Sachuest Point NWR

Trustom Pond NWR

REFUGE PURPOSE(S):

Block Island NWR
“… particular value in carrying out the national migratory bird management program.”

John H. Chafee NWR
“(1) To protect and enhance the populations of black ducks and other waterfowl, geese, shorebirds, terns, wading birds, and other wildlife using the refuge; (2) To provide for the conservation and management of fish and wildlife within the refuge; (3) To fulfill international treaty obligations of the U.S. respecting fish and wildlife; (4) To provide opportunities for scientific research, environmental education, and fish and wildlife-oriented recreation.”

Ninigret NWR
“… particular value in carrying out the national migratory bird management program.”
“use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”

Sachuest Point NWR
“... for the development, management, advancement, conservation, and protection of fish and wildlife resources.”
“… (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”

Trustom Pond NWR
“use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”
“… (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”

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 resource and their habitats within the United States for the benefit of present and future generations of Americans” (Refuge System Improvement Act of
DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?
The use is the public hunting of big game (white-tailed deer and turkey), small game (coyote and fox), and migratory game bird (duck, goose, merganser, coot, mourning dove) on the Complex.

Hunting was identified as one of six priority public uses by Executive Order 12996 (March 25, 1996), and legislatively mandated by the Refuge System Administration Act 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).

(b) Where would the use be conducted?
The use will be conducted on approximately 2,071 acres of the Complex’s 2,570 total acres (Figures 3 to 9 of the Hunting and Fishing Plan).

Block Island NWR
All of the refuge’s 133 acres would be opened for white-tailed deer hunting. These hunting units are identified as Beane Point, Grove Point, Sandy Point, Wash Pond, and Skippers Island. Approximately 9 acres of Wash Pond Unit would be opened for migratory waterfowl hunting (ducks, mergansers, and coot).

John H. Chafee NWR
Approximately 461 acres of the refuge’s 563 acres would be opened for white-tailed deer, wild turkey, fox, and coyote hunting, with some season and weapon restrictions. Hunting units are identified as Foddering Farms, Stedman, Starr Drive, Mumford, Middlebridge, Sedge Island, and Congdon Cove. The Foddering Farms Unit would be open to the spring firearm turkey season (130 acres). Approximately 116 acres would be opened for migratory waterfowl hunting.

Ninigret NWR
Approximately 848 of the refuge’s 883 acres would be opened for big game (white-tailed deer and wild turkey) and small game (fox and coyote) hunting, with some season and weapon restrictions. These hunting units are identified as Kettle Pond, Lewis Tract, Salt Pond, and Barrier Beach.

Sachuest Point NWR
Sachuest Point NWR has the highest visitation of the five refuges of the Complex, with approximately 325,000 visitors per year. Due to the potentially high conflict with other visitors (and a limited deer population), we will not open the refuge to the general public for hunting. The refuge may be conducive to a limited, targeted group (i.e., veterans, youth hunters, hunters with disabilities) deer, coyote, and fox hunt, where the refuge would close to all other activities.

Trustom Pond NWR
Trustom Pond is a 160-acre brackish coastal pond that serves as the centerpiece of the refuge,
and has the distinction of being the only coastal pond in Rhode Island without houses on its shoreline, and its waters are fully managed by the Service. We propose to open 358 acres of the refuge to archery hunting for big game (deer and turkey) and small game (fox and coyote). One 22-acre tract currently identified as Field 1 Unit is now open to Canada goose and mourning dove hunting. We propose to open Field 1 Unit to duck, mergansers, and coot during the State season. The eastern portion of Trustom Pond has a deed restriction preventing hunting activities, therefore that area would remain closed.

(c) When would the use be conducted?
The use would be conducted in designated areas of the refuge in accordance with Federal and State regulations. Hunting would take place within the open hunting seasons established by the Rhode Island Department of Environmental Management (RIDEM) and published in the Rhode Island Hunting and Trapping Abstract.

Table A-1. Hunting Seasons and Species to be Taken

<table>
<thead>
<tr>
<th>Refuge</th>
<th>Hunting</th>
</tr>
</thead>
</table>
| Block Island | Deer: Hunting dates for white-tailed deer are currently set in accordance with the Town, with no weekend hunting allowed. Dates below are approximate, please see the Rhode Island Hunting and Trapping Abstract for actual dates.  
Archery (includes crossbow) – October through February  
Muzzleloader – November through February  
Shotgun – November February  
Ducks, Mergansers, Coot: October; November; December through January |
| John H. Chafee | Deer: Archery (includes crossbow) – September though January  
Muzzleloader – November  
Shotgun – December  
Ducks, Mergansers, Coot: October through January  
Geese: September (early season); November through January (regular season)  
Turkey: Fall archery (includes crossbow) – October  
Spring gobbler (shotgun) April and May  
Coyote – same as deer.  
Gray and Red Fox – same as deer. |
| Ninigret | Deer: Archery (includes crossbow) – September though January  
Muzzleloader – November  
Shotgun – December |
Turkey:
- **Fall archery (includes crossbow)** – October
- **Spring gobbler (shotgun)** April and May

Coyote – same as deer.

Gray and Red Fox – same as deer.

<table>
<thead>
<tr>
<th>Supervised limited youth/veteran deer hunt, plus coyote and fox.</th>
</tr>
</thead>
</table>

Sachuest Point

Trustom Pond

<table>
<thead>
<tr>
<th>Deer:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Archery (includes crossbow)</strong> – September through January</td>
</tr>
</tbody>
</table>

| **Mourning Dove (Field 1 only):** |
| September through December. |

| **Geese (Field 1 only):** |
| September (early season); November through January (regular season) |

| **Ducks, Mergansers, Coot (Field 1 only):** |
| October through January |

<table>
<thead>
<tr>
<th>Turkey:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall archery (includes crossbow)</strong> – October</td>
</tr>
</tbody>
</table>

Coyote – same as deer (archery only).

Gray and Red Fox – same as deer (archery only).

Most refuge units would run concurrently with State white-tailed deer seasons for public lands. Typically, archery season would run from mid-September to the end of January; muzzleloader season would run from the first week of November to the beginning of December; and shotgun season would run from the first week of December to the third week of December. Private land antlerless only seasons, and the early September muzzleloader seasons would not be open on refuge lands. Waterfowl hunting would follow State waterfowl season dates and Federal regulations. The refuge will work cooperatively with RIDEM to advertise hunting opportunities through the yearly hunting abstract.

**(d) How would the use be conducted?**

Hunting will be conducted during the State of Rhode Island’s hunting seasons, in accordance with Federal and State regulations. Federal regulations in 50 CFR pertaining to the Refuge System, as well as existing, refuge-specific regulations and season restrictions will apply. However, the Refuge Manager may, upon annual review of the hunting program and in coordination with the RIDEM, impose further restrictions on hunting, recommend that all or portions of the refuge be closed to hunting, or further liberalize hunting regulations within the limits of State seasons and regulations. We may amend the hunt plan if conflicts arise with other priority refuge programs or endangers refuge resources or public safety.

General information will be available in the hunting brochures and maps of each refuge located at the Complex headquarters and the refuge websites. The map has refuge trails, public use areas, closed areas, and local roads clearly defined. Hunters can also obtain the refuge-specific regulations each year at the Complex headquarters and the websites. Hunters can address questions to refuge staff by calling, writing, e-mailing, or visiting the Complex headquarters in Charlestown. Signs alerting the visiting public to educate themselves of the timing of hunting
seasons will be posted at the refuge office and at access points and kiosks. Knowing in advance of a hunting opportunity allows hunters to prepare, plan, and scout, which ultimately improves the quality of their hunting experiences. Whenever possible, the refuge would designate a minimum of one week that would provide hunters an opportunity to scout the refuge units in order to become familiar with the unit, habitats, refuge boundaries and facilities.

Only portable tree stands and blinds will be allowed. Hunters must mark portable deer tree stands/blinds with Rhode Island hunting license number. Deer stands/blinds must be removed at the end of the deer hunting season, waterfowl blinds and decoys must be removed at the end of the hunt each day. No permanent hunting stands/blinds may be constructed on refuge lands. All access points will be delineated on refuge hunt maps and will be included in the annual hunting brochure.

Hunters on the refuge will be required to provide the Complex staff with documentation that clearly indicates the number of days hunted and the sex and number of animals harvested or wounded. This information would be collected on FWS form 3-2359 (Big Game Harvest Report) and FWS Form 3-2361 (Migratory Bird Hunt Report). The information we receive allows us to determine the demand for hunting on the refuge and provides an opportunity for communication with hunters. The hunting program will be reviewed on an annual basis, and necessary changes will be incorporated accordingly.

Hunters will be required to possess and carry a personally signed refuge hunting brochure for the current refuge season at Ninigret, John H. Chafee, and Block Island Refuges. The signed brochure would serve as written permission as required by State regulations.

A “Hunt Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2439) will be required for hunting white-tailed deer and wild turkey on Trustom Pond NWR. No more than a $20 permit fee for each type of hunt (deer and wild turkey) would be established to defray the costs of operation. The permit process would provide hunters with the ability to apply, pay for, and receive hunting permits in advance of hunting season. All fees must be paid prior to the issuance of a permit. A maximum of 35 deer permits and 35 wild turkey permits will be issued annually. After five years, Complex staff will re-evaluate the need for hunting permits at Trustom Pond NWR. Migratory bird hunting in Field 1 at Trustom Pond will be coordinated by RIDEM as part of the South Shore Management Area.

Sachuest Point NWR will be opened to specialized hunts on a controlled basis, with a focus on engaging hunters in the following groups: youth, veterans, hunters with disabilities, women, and seniors. Complex staff will work with partners and RIDEM to select appropriate hunters for the limited hunting opportunities. Hunts may not occur on an annual basis. Firearm and archery hunting will be allowed on hunting dates specified by the refuge. Sachuest Point NWR will be closed to all other activities during the hunts.

Special Hunts
Some refuge units would be open to special hunts. The goal of the special hunt is to provide quality recreational hunting experiences that may be limited or not available for underserved
hunting populations within the structure of general public hunting. Populations targeted for these special hunts are youth hunters, veterans, hunters with disabilities, women hunters, and senior hunters. Hunters may be required to attend an in-person refuge orientation for refuge special hunts. All special hunts will require refuge-specific authorization and will be coordinated with RIDEM.

(e) Why is this use being proposed?
Hunting is one of the priority public uses defined by Executive Order 12996 (March 25, 1996) and the Refuge System Administration Act of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57). Department of the Interior Secretarial Order 3356 (September 15, 2017) emphasized identifying opportunities to increase outdoor recreation opportunities for all Americans, including opportunities to hunt and fish. This legitimate and appropriate use of a national wildlife refuge is generally considered compatible, as long as it does not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes of the refuge.

In Rhode Island, the RIDEM establishes hunting seasons and bag limits to meet population objectives and to offer people the opportunity to experience a traditional outdoor recreational activity. Game species population objectives are a function of factors such as habitat limitations and landowner tolerances, and each year the seasons and bag limits are designed to remove the harvestable surplus without long-term negative impacts to the population as a whole. The ability to effectively manage game species populations depends in large part on the ability of hunters to access land with quality habitat. Providing hunting opportunities on the refuge will aid the State in meeting its management objectives and preserve a wildlife-dependent priority public use long associated with this land.

The Complex’s Draft CCP and Environmental Assessment (December 2000) discussed and evaluated alternatives for varying levels of hunting opportunities, from no hunting at all, to opening refuges during State-regulated seasons for deer, waterfowl, and pheasant. The CCP acknowledged the need to identify how best to manage deer on the refuge given concerns regarding deleterious effects from high deer densities. The CCP also established (amongst others) “Goal 4: Provide opportunities for high quality, compatible, wildlife-dependent public use with particular emphasis on environmental education and interpretation.” Additionally, CCP objectives were developed to maintain, provide, or enhance hunting and fishing opportunities on the refuges. With the adoption of this hunt and fish plan, opening or expanding hunting and fishing opportunities will be added to existing public use opportunities on the Complex.

AVAILABILITY OF RESOURCES:

Annual hunt administration costs for the Complex, including salary, equipment, law enforcement, brochures, collection of hunt data and analysis of biological information, etc. totals approximately $6,950. Funding specifically for hunts has not been allocated, although funds are available through station funds and permit fees. If our required administrative involvement increases, the costs will have to be re-evaluated to ensure a hunt compatible with refuge objectives and purposes can be conducted. It is anticipated that funding would continue to be
sufficient to continue the hunting program at the Complex in the future.

**ANTICIPATED IMPACTS OF THE USE:**

Hunting can result in positive or negative impacts to the wildlife resource. A positive effect of increasing access to the refuge will be the provision of additional wildlife-dependent recreational opportunities and a better appreciation and more complete understanding of the wildlife and habitats associated with Rhode Island ecosystems. This can translate into more widespread and stronger support for the refuges of the Complex, the Refuge System, and the Service.

**Vegetation**
The current number of hunters comprises a small fraction of total visitation. Hunting could negatively impact vegetation by trampling or creating foot paths. With the opening of new hunt areas that trampling of vegetation may increase slightly, but the physical effects on refuge vegetation is expected to be minimal based on anticipated levels of use. Hunting could create a positive, indirect effect on vegetation through controlling the white-tailed deer population.

Most hunting activities occur during the fall, but impacts will 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 minima adverse short-term, long-term, or cumulative impacts on vegetation.

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

**Water Resources**
Hydrology impacts from hunting would be minimal and only result from the use of roads and trails. However, hunting is expected to have minimal adverse short-term, long-term, or cumulative effects as hunters are generally dispersed, which reduces repeated erosive actions on soils.

**Wetlands**
It is anticipated that hunting on the refuge will have minor impacts to wetlands. Hunters use the State waters and adjacent lands for hunting, and occasionally walk across refuge salt marsh to retrieve downed waterfowl. Hunters set up temporary blinds at the edge of the salt marsh, below mean high tide with negligible impacts to the wetlands. Under the proposed action alternative additional lands would be open to hunting, but impacts to wetlands from increased levels of use are anticipated to be negligible and short-term.

**Other Wildlife**
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). However, under the anticipated levels of use these impacts are expected to be minimal. Hunters tend not to disperse very far from parking areas and roads, which leaves large areas of refuge land undisturbed.

**Big Game**

*White-Tailed Deer*

Recreational deer hunting conducted in accordance with State regulations would not compromise the deer population on or around refuge lands. Regulated hunting ensures that deer populations will be maintained within the habitat’s carrying capacity. The average deer density for refuge lands are much above the desired range of 12 to 15 deer per square mile (Ferreir 2019). High deer densities have been shown to negatively affect plant and animal communities. Therefore, a hunting program would help to facilitate ecological diversity by mitigating the effects of high deer densities. Deer densities, if maintained through regulated hunting, will sustain the native vegetation and forest regeneration associated with the natural communities in those regions. Regulated deer hunting will also maintain a deer herd in good physical condition that staves off malnutrition and disease.

*Wild Turkey*

RIDEM estimated that the wild turkey population was nearly 3,000 individuals in 2015. The addition of turkey hunting on refuge lands may result in a small influx of new users, but regulated hunting is not anticipated to have any long-term adverse impacts on local or regional turkey populations.

**Small Game**

Hunting small game on the Complex would be limited to red fox, gray fox, and coyote during the refuge deer hunting seasons, in accordance to Federal, State and refuge-specific regulations. The Complex is reintroducing New England cottontail and, therefore, will not allow any rabbit hunting on any refuge lands for the near future. Small game hunting is expected to have minimal adverse short-term, long-term, or cumulative effects as small game hunting may only be conducted by permitted deer hunters.

**Migratory Birds**

Migratory birds are managed on a flyway basis and hunting regulations are established in each state based on flyway data. Federal and State regulations would apply in the refuge waterfowl hunt. Hunting waterfowl on the refuge would reduce the total numbers of birds in the flyway, but harvest would be within allowable limits as determined by the Service annually. Hunting would not have a significant impact on local, regional, or Atlantic Flyway waterfowl populations because the percentage taken on the Complex, though possibly additive to existing hunting take, would measure a fraction of a percent of the estimated migratory game birds populations. In addition to direct mortality, hunting could result in some short-term redistribution due to disturbance but impacts are expected to be minimal.
Other Visitors and Users
The refuge is open to all six of the Refuge System’s priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education and environmental interpretation). With the addition of new hunt areas, a slight increase in the number of conflicts among user groups can be expected. Public outreach, zoning, and species/weapon restrictions in some locations have been proposed to reduce conflicts among the different user groups. If conflicts arise among user groups, mitigation efforts can be implemented to ensure that the proposed action will not have significant impacts to other user groups.

We can expect to see a slight increase in the number of conflicts among user groups, especially at refuges that do not currently allow hunting. Public outreach, timing of the hunting seasons, as well as species and weapon restrictions in some locations have been proposed to reduce conflicts among the different user groups. If conflicts arise among user groups, mitigation efforts can be implemented to ensure the proposed action will not have significant impacts to other user groups.

Cumulative Impacts
The proposed hunt plan has been designed to be sustainable through time given relatively stable conditions. If visitation levels expand in the unforeseen future, unanticipated conflicts between user groups may occur. Service experience has proven that time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users) and limiting visitations are effective tools in eliminating conflicts between user groups.

Refuges, including those of the Complex, conduct hunting programs within the framework of State and Federal regulations. Hunting at the refuge is at least as restrictive as the State of Rhode Island and in some cases more restrictive. Additionally, the refuge coordinates with the State as needed to maintain regulations and programs that are consistent with the State’s management programs. Thus, we anticipate no direct or indirect cumulative effects on resident wildlife, migratory birds, or non-hunted wildlife by hunting on Rhode Island NWR Complex.

PUBLIC REVIEW AND COMMENT:
This Compatibility Determination (CD) is part of the Rhode Island NWR Complex Hunting and Fishing Plan and the accompanying Environmental Assessment (EA). The plan was coordinated with all interested and/or affected parties, including RIDEM staff. The public will be notified of the availability of the Hunting and Fishing Plan, EA, and accompanying CDs with a 30-day review and comment period. We will inform the public through local venues, the refuge website, and social media.

DETERMINATION (CHECK ONE BELOW):

___ Use is Not Compatible

_X_ Use is Compatible with the Following Stipulations
STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

The Complex will manage the hunt program in accordance with Federal and State regulations and review it annually to ensure wildlife and habitat goals are achieved and that the program is providing a safe, high quality hunting experience for participants. To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting will occur on the Complex under the refuge-specific regulations highlighted in this document and following stipulations:

- To prevent adverse impacts to the salt marsh, we will only allow portable or temporary blinds and decoys that must be removed from the refuge following each day’s hunt, and no permanent blinds will be allowed.
- A refuge permit is required at Trustom Pond NWR for hunting white-tailed deer, wild turkey, fox, and coyote.
- Sachuest Point NWR will be closed to hunting except for limited, controlled hunts administered by the refuge.

JUSTIFICATION:

Hunting is a priority public use in the Refuge System through which the public can develop an appreciation for fish and wildlife, and reinforced as a priority use by Secretarial Order 3356 (September 15, 2017). The Service’s policy is to provide expanded opportunities for wildlife-dependent public uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management.

Hunting seasons and bag limits are established by the State and generally adopted by the refuges. These regulations ensure the continued well-being of populations of game animals. Hunting does result in the taking of many individuals within the population, but restrictions are designed to safeguard an adequate breeding population from year to year. Specific refuge regulations address equity and quality of opportunity for hunters, and help safeguard refuge habitat. Disturbance to other fish and wildlife does occur, but this disturbance is generally short-term and adequate habitat occurs in adjacent areas. Impacts to vegetation from boat or foot traffic is minor or temporary, since hunting occurs mainly after the growing season.

Allowing this use furthers the mission of the Refuge System by providing a wildlife dependent recreational use for the benefit of the American public while conserving fish, wildlife, and plant resources. This activity will not materially interfere with or detract from the mission of the Refuge System or the purposes for which the refuges were established.
SIGNATURE:
Refuge Manager _________________________ _________________________
(Signature) (Date)

CONCURRENCE:
Regional Chief _________________________ _________________________
(Signature) (Date)

MANDATORY 15 YEAR RE-EVALUATION DATE: _________________________
(Date)

LITERATURE REVIEW:
Bell, D.V. and Austin, L.W. 1985. The game-fishing season and its effects on overwintering

Hendee, G.H. Stankey, and R.C. Lucas (Eds.), Wilderness Management (pp. 425-466).

Resources and Environmental Issues, 0, 33-40.

Tilghman, N.G. 1989. Impacts of white-tailed deer on forest regeneration in northwestern
of Environmental Management. 2015. Wild Turkey Status Report and Spring Turkey

Rhode Island Department of Environmental Management. 2015. Wild Turkey Status Report and
Spring Turkey Hunter Survey. RIDEM, West Kingston, RI. 17 pp

Rhode Island Department of Environmental Management. 2019. Summary of Deer Hunter and
Deer Harvest Data. RIDEM, West Kingston, RI. 23 pp.

Ferreir, D. 2019. Personal Communications. Rhode Island Department of Environmental
Management, Division of Fish and Wildlife. Charlestown, RI.

68pp.

Department of Interior, Washington, DC. 72 pp.
Compatibility Determination

USE: Recreational Fishing

REFUGE NAME: Rhode Island National Wildlife Refuge Complex, hereafter referred to as the Complex. The Complex is made up of five refuges in the State of Rhode Island:

- Block Island National Wildlife Refuge (NWR, refuge) on Block Island, Town of New Shoreham
- John H. Chafee NWR at Pettaquamscutt Cove between the towns of South Kingstown and Narragansett
- Ninigret NWR in Charlestown
- Sachuest Point NWR in the Town of Middletown
- Trustom Pond NWR in South Kingstown

DATE ESTABLISHED:

- Block Island NWR – November 2, 1973
- John H. Chafee NWR – November 5, 1988
- Ninigret NWR – August 12, 1970
- Sachuest Point NWR – November 3, 1970
- Trustom Pond NWR – August 15, 1974

ESTABLISHING AND ACQUISITION AUTHORITY(IES):

Block Island NWR

John H. Chafee NWR
*Amendment to the Emergency Wetlands Resources Act* (102 Stat. 3177, Public Law 100-610) and *the National Wildlife Refuge Administrative Act of 1966, as amended* (16 U.S.C. 668dd - 668ee). Established originally as Pettaquamscutt Cove NWR.

Ninigret NWR
Sachuest Point NWR  

Trustom Pond NWR  

**REFUGE PURPOSE(S):**

Block Island NWR  
“… particular value in carrying out the national migratory bird management program.”

John H. Chafee NWR  
“(1) To protect and enhance the populations of black ducks and other waterfowl, geese, shorebirds, terns, wading birds, and other wildlife using the refuge; (2) To provide for the conservation and management of fish and wildlife within the refuge; (3) To fulfill international treaty obligations of the U.S. respecting fish and wildlife; (4) To provide opportunities for scientific research, environmental education, and fish and wildlife-oriented recreation.”

Ninigret NWR  
“… particular value in carrying out the national migratory bird management program.”  
“use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”

Sachuest Point NWR  
“... for the development, management, advancement, conservation, and protection of fish and wildlife resources.”  
“... (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”

Trustom Pond NWR  
“use as an inviolate sanctuary, or for any other management purpose, for migratory birds.”  
“... (1) incidental fish and wildlife-oriented recreational development; (2) protection of natural resources, and; (3) conservation of endangered or threatened species.”

**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 resource 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 - 16 U.S.C. 668dd-668ee, Refuge System Administration Act of 1966).
DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?
The use is recreational fishing. Fishing is a priority public use of the Refuge System under the
Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the Refuge
System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?
New recreational fishing would occur in the designated area at John H. Chafee NWR,
approximately 985 feet along the refuge shoreline (see Figure 9 in the Hunting and Fishing Plan.
Recreational fishing opportunities are currently available at the other four refuges in the Rhode
Island National Wildlife Refuge Complex.

Block Island NWR, Ninigret NWR, John H. Chafee NWR:
Saltwater fishing is allowed on designated areas from refuge shorelines.

Sachuest Point NWR
Anglers may only saltwater fish at Sachuest Beach shoreline. Additional permitting is required
for night fishing on the refuge.

Trustom Pond NWR
Saltwater fishing is allowed on designated areas subject to refuge special conditions.

(c) When would the use be conducted?
At Block Island NWR and John H. Chafee NWR, anglers may saltwater fish year round on
designated areas in accordance to State regulations. Anglers may saltwater fish on designated
shorelines from September 16 to March 31 at Trustom Pond NWR and Sachuest Point NWR.
These refuges maintain seasonal closures for shoreline saltwater fishing from April 1 to
September 15 to protect nesting birds.

(d) How would the use be conducted?
Recreational fishing will be conducted according to Rhode Island Department of Environmental
Management (RIDEM) regulations, with some additional refuge-specific conditions to protect
fish, wildlife, and habitat, and reduce potential conflicts among other public uses. A valid Rhode
Island fishing license will be required to fish on refuge waters. Additional permitting may be
required on individual refuges for special uses such as night fishing. No refuge permit will be
required for daytime fishing.

(e) Why is this use being proposed?
Fishing is one of the priority public uses defined by Executive Order 12996 (March 25, 1996)
and the Refuge System Administration Act of 1966, as amended by the Refuge System
Improvement Act of 1997 (Public Law 105-57). Department of the Interior Secretarial Order
3356 (September 15, 2017) emphasized identifying opportunities to increase outdoor recreation
opportunities for all Americans, including opportunities to hunt and fish. This legitimate and
appropriate use of a national wildlife refuge is generally considered compatible, as long as it
does not materially interfere with or detract from the fulfillment of the Refuge System mission or
the purposes of the refuge.

**AVAILABILITY OF RESOURCES:**

Annual costs to administer the fishing program for the Complex, including salary, equipment,
law enforcement, brochures, etc. totals approximately $3,550. We anticipate funding would
continue to be sufficient to maintain the fishing program at the Complex in the future.

**ANTICIPATED IMPACTS OF THE USE:**

To ensure compatibility with refuge purposes and mission of the Refuge System, fishing is
conducted in accordance with State and Federal regulations, and supplemented by refuge-
specific regulations. However, the Refuge Manager may, upon annual review of the fishing
program, impose further restrictions on fishing, recommend the refuge be closed to fishing, or
further liberalize fishing regulations up to the limit of State regulations. The refuge would
restrict activity if it becomes inconsistent with other, higher priority refuge programs or
endangers refuge resources or public safety.

**Vegetation**
The current number of anglers comprises a small fraction of the refuge’s total visitation.
Negative impacts of recreational fishing include the temporary trampling of vegetation and light
soil erosion. The physical effects on refuge vegetation from fishing is expected to be minimal
based on anticipated levels of use.

**Soils**
It is anticipated that fishing on the refuge will have minor impacts to soils. The fishing program
has the potential to cause some compaction and/or erosion because off-trail foot travel does
occur. At the anticipated levels of use, fishing is expected to have minimal adverse short-term,
long-term, or cumulative impacts on soils.

**Water Resources**
Paths used by anglers can affect the hydrology of an area by altering drainage patterns. Some
anglers may walk off-trail to access a fishing area, thereby creating new trails and affecting
drainage. At the anticipated levels of use, fishing is expected to have minimal adverse short-
term, long-term, or cumulative impacts on water resources.

**Wetlands**
Anglers are permitted to saltwater fish from refuge shorelines at designated areas at all Rhode
Island refuges, except John H. Chafee NWR. Most of the shorelines are beach and rock habitat,
so there are no anticipated impacts on refuge wetlands.

**Fish Species**
Recreational fishing could potentially cause negative impacts to fish populations if it occurs at
unsustainably high levels or is not managed properly. Potential impacts to fish populations from fishing include direct mortality from harvest, injury to fish caught and released, changes in age and size class distribution, changes in reproductive capacity and success, loss of genetic diversity, altered behavior, and changes in ecosystems and food webs (Lewin et al. 2006, Kline1993). While fishing does remove individuals from the population, we do not anticipate increased fishing opportunities will affect the fish population as a whole. Anglers must abide by the State’s seasons, catch limits, and regulations, which were designed to protect the State’s fish populations. The refuge’s fishing pressure is projected to be minimal and sustainable.

Other Wildlife
Fishing has the potential to increase disturbance to other wildlife that use fishable waters, including waterfowl and wading birds. Human activity, including walking trails and boat use, has the potential to affect the behavior, distribution, and abundance of water birds due to disturbance. Several studies have examined the effects of recreation on birds using habitats adjacent to trails and roads through wildlife refuges and coastal habitats in the eastern United States. Overall, the existing research demonstrates that disturbance from recreational activities has at least temporary effects on the behavior and movement of birds and other animals within a habitat or localized area.

Other Visitors and Users
The Complex is open to all six of the System’s priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education and environmental interpretation). All fishing on the Complex occurs in designated areas and is not expected to cause significant conflicts with other user groups. Expanded fishing opportunities would positively contribute to appreciation and protection of fish and wildlife, both on and off the refuge. The beneficial impacts of providing this wildlife-dependent activity, with some modest increases, include helping meet the existing and future demands for outdoor recreation and education. Only negligible, short-term impacts to user groups have occurred and are anticipated to occur in the future. If conflicts arise among user groups, mitigation efforts can be implemented to ensure that the proposed action will not have significant impacts to other user groups.

Cumulative Impacts
Refuges, including those of the Complex, conduct fishing programs within the framework of State and Federal regulations. Fishing at the refuge is at least as restrictive as the State of Rhode Island and in some cases more restrictive. Additionally, the refuge coordinates with the State as needed to maintain regulations and programs that are consistent with the State’s management programs. Thus, we anticipate no direct or indirect cumulative effects on any resource at the Rhode Island NWR Complex.

PUBLIC REVIEW AND COMMENT:
This Compatibility Determination (CD) is part of the Rhode Island NWR Complex Hunting and Fishing Plan and the accompanying Environmental Assessment (EA). The plan was coordinated with all interested and/or affected parties, including RIDEM staff. The public will be notified of the availability of the Hunting and Fishing Plan, EA, and accompanying CDs with a 30-day
review and comment period. We will inform the public through local venues, the refuge website, and social media.

**DETERMINATION (CHECK ONE BELOW):**

___ Use is Not Compatible

**X** Use is Compatible with the Following Stipulations

**STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:**

The Complex will manage the fishing program in accordance with Federal and State regulations and review it annually to ensure wildlife and habitat goals are achieved and that the program is providing a safe, high quality fishing experience for participants. To ensure compatibility with refuge purposes and the mission of the Refuge System, fishing will occur on the Complex under the refuge-specific regulations highlighted in this document and following stipulations:

- To prevent adverse impacts to salt marsh habitat, seasonal restrictions and limits may be enforced at John H. Chafee NWR. Seasonal restrictions to protect shorebird nesting at Trustom Pond and Sachuest Point NWR’s will continue to be applied. These refuges maintain seasonal closures for shoreline saltwater fishing from April 1 to September 15 to protect nesting birds. Fishing within the lower Maidford River will be prohibited to protect and conserve saltmarsh habitats.

**JUSTIFICATION:**

Fishing is a priority public use in the Refuge System through which the public can develop an appreciation for fish and wildlife, and reinforced as a priority use by Secretarial Order 3356 (September 15, 2017). The Service’s policy is to provide expanded opportunities for wildlife-dependent public uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management.

Stipulations above will ensure control and provide management flexibility should detrimental impacts develop. Allowing this use furthers the mission of the Refuge System by providing a wildlife dependent recreational use for benefit of the American public while conserving fish, wildlife, and plant resources. This activity will not materially interfere with or detract from the mission of the Refuge System or the purposes for which the refuges were established.
LITERATURE REVIEW:


Environmental Assessment for
Hunting and Fishing on
Rhode Island 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 (Service) (550 FW 3) regulations and policies. NEPA requires examination of the effects of proposed actions on the natural and human environment.

Proposed Action

The Service is proposing to open or expand recreational hunting and fishing opportunities in Rhode Island on the Rhode Island National Wildlife Refuge Complex (NWRC, Complex, refuge) in accordance with the refuge’s Hunting and Fishing Plan. The Complex will open opportunities for saltwater fishing, big game (white-tailed deer and wild turkey) hunting, small game (fox and coyote) hunting, and migratory bird hunting. The Complex is proposing to open or expand hunting and fishing opportunities on refuge-owned lands when found to be compatible, and consistent with Federal, State, and refuge hunting and fishing regulations.

This proposed action is often iterative and evolves over time during the process as the agency 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 Refuge System Administration Act 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 and Service Manual.

The Rhode Island NWRC is made up of five refuges (Figure 1, Hunting and Fishing Plan). Each national wildlife 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 each refuge in the Complex are given below.
<table>
<thead>
<tr>
<th>Refuge</th>
<th>Establishing Authorities</th>
<th>Refuge Purposes</th>
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<tbody>
<tr>
<td>John H. Chafee NWR</td>
<td>Amendment to the Emergency Wetlands Resources Act (102 Stat. 3177, Public Law 100-610) and the National Wildlife Refuge Administrative Act of 1966, as amended (16 U.S.C. 668dd - 668ee). Established November 5, 1988, originally as Pettaquamscutt Cove NWR.</td>
<td>“(1) To protect and enhance the populations of black ducks and other waterfowl, geese, shorebirds, terns, wading birds, and other wildlife using the refuge; (2) To provide for the conservation and management of fish and wildlife within the refuge; (3) To fulfill international treaty obligations of the U.S. respecting fish and wildlife; (4) To provide opportunities for scientific research, environmental education, and fish and wildlife-oriented recreation.”</td>
</tr>
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</table>
The mission of the Refuge System is to:

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

The act 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 as 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 wildlife-dependent recreation opportunities, including hunting and fishing, when those opportunities are compatible with the purposes for which the refuge was established and support the mission of the Refuge System.

The Complex has managed fishing on some refuge lands for over a decade through pre-acquisition Compatibility Determinations (CD) that were completed when the lands were acquired. Hunting has been managed on Block Island NWR, Ninigret NWR, and Trustom Pond NWR since 2012 after the completion of an EA and hunt plan. The Complex receives approximately 600,000 visits each year, with estimates of 370 hunting and 60,000 fishing visits each year. The Complex requires a refuge-specific permit for nighttime saltwater fishing at Sachuest Point NWR. Administration costs for hunting/fishing programs are low due to the small acreages and rural nature of most units. Primary costs to administer the program include maintenance costs to provide access to refuge lands and staffing costs for law enforcement, maintaining boundary signs, and to provide information on the refuge’s website and kiosks. These costs are covered with station-appropriated funds, and fees collected from the permits.

Regulated hunting and fishing have been important management tools and recreational activities at Rhode Island NWRC for nearly a decade. Hunting and fishing pressure can be described as light with a limited number of hunters participating in the deer and goose seasons. Based on the mixture of habitat types, permit sales, and staff observations, the most popular hunting for white-tailed deer is at Ninigret NWR, however, goose hunting at Trustom Pond NWR is popular in the early and regular seasons. In conjunction with the Federal laws and regulations governing national wildlife refuges, the Complex adopted State hunting and fishing regulations with additional refuge-specific regulations to minimize conflicts with other refuge objectives and visitor activities. The hunting and fishing program will be reviewed annually to monitor conflicts with other users and refuge objectives, and the plan will be adjusted as needed.

Purpose and Need for the Proposed Action

Hunting and fishing are traditional recreational uses of renewable natural resources deeply rooted in America’s heritage, and they can be important wildlife management tools. The Refuge System Administration Act of 1966, the Refuge System Improvement Act of 1997, other laws, and the Service’s policies permit fishing and hunting on a national wildlife refuge when it is compatible with the purposes for which the refuge was established and acquired.

In developing each refuge’s Comprehensive Conservation Plan (CCP), hunting surfaced as a key issue. At that time, those in support were primarily interested in deer hunting on all refuges, waterfowl hunting on John H. Chafee NWR and Ninigret NWR, and pheasant hunting on Block Island. The Rhode Island Department of Environmental Management (RIDEM) encouraged any
new opportunities for hunting because rapid residential development in Rhode Island has confined public hunting opportunities to fewer and fewer areas. The Service views managed or administrative hunts in areas where there are overabundant deer populations as an effective tool for regulating their numbers. The overabundance of deer is a concern in Rhode Island, reflected in increased numbers of vehicle-deer collisions, increased complaints about deer browsing on commercial and residential landscape plantings, visible impacts on native vegetation, and greater public health concerns over the spread of Lyme disease.

The Complex’s Draft CCP and EA (December 2000) discussed and evaluated alternatives for varying levels of hunting opportunities, from no hunting at all, to opening refuges during State-regulated seasons for deer, waterfowl, and pheasant. The CCP acknowledged the need to identify how best to manage deer on the refuge given concerns regarding deleterious effects from high deer densities. The CCP also established (amongst others) “Goal 4: Provide opportunities for high quality, compatible, wildlife-dependent public use with particular emphasis on environmental education and interpretation.” Additionally, CCP objectives were developed to maintain, provide, or enhance hunting and fishing opportunities on the refuges. With the adoption of this hunt and fish plan, opening or expanding hunting and fishing opportunities will be added to existing public use opportunities on the Complex.

The Hunting and Fishing Plan further define and enhance these objectives. The objectives of the hunting program for big game, small game, and migratory game birds, as well as the sport fishing program, on Rhode Island NWR Complex are to:

1. Provide the public with a high-quality recreational experience on refuge lands and increase opportunities and access for hunters and anglers;
2. Design a hunting and fishing program that is administratively efficient and manageable with existing staffing levels and that aligns with RIDEM regulations when possible;
3. Implement a hunting and fishing program that is safe for all refuge users;
4. Provide hunting and fishing opportunities for youth and those that need assistance; and
5. Design a hunting and fishing program that is in alignment 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 national wildlife refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. The proposed action will also promote two of the priority public uses of the Refuge System, and will promote stewardship of our natural resources, as well as increase public appreciation and support for the refuge by providing opportunities for visitors to hunt and fish. To address the needs stated above, the purpose of the proposed action will bring the refuge into compliance with 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 providing hunting and fishing opportunities on the refuge.

**Alternatives Considered**

**No Action Alternative- Maintain Current Hunting and Fishing Opportunities**
The No Action Alternative would continue the refuge’s current hunting and fishing program, which allows specific refuge lands on Block Island NWR, Ninigret NWR, and Trustom Pond to be hunted under the guidance that includes the 2012 Rhode Island NWR Complex EA and Hunt Plans. Hunting and fishing regulations for these refuge lands are consistent with State hunting regulations. Additional refuge-specific regulations also apply.

Refuge staff have worked closely with RIDEM staff to develop the current proposed hunt/fish plan. The proposed action builds on an existing hunting and fishing program, and includes areas developed during the completion of the Complex’s CCP, which involved an extensive public review process; therefore, the Service does not need to consider additional alternatives (43 CFR 46.310).

**Proposed Action Alternative- Expand Hunting and Fishing Opportunities**
The Complex has prepared a Hunting and Fishing Plan, presented in this document as the Proposed Action Alternative. Under the Proposed Action Alternative, the Service is proposing to expand its hunting and fishing opportunities to refuge lands where these uses are found to be compatible. All refuge lands opened to hunting and fishing under this proposed action will follow Federal and State regulations and subject to additional refuge-specific regulations.

**Big Game (Deer and wild turkey)**
Deer and wild turkey will be taken according to State regulations on designated refuge lands at the following refuges: Block Island, John H. Chafee, Ninigret, and Trustom Pond with the exception of refuge-specific regulations listed below. In addition, Sachuest Point NWR will offer limited opportunities for targeted groups such as youth and veterans, for big game hunting following Federal and State regulations. Access to refuge lands may occur from public roads, adjoining public lands, and via water access routes.

**Migratory Birds**
Migratory bird species taken during the migratory waterfowl hunting season that are known to occur in and around the Complex include Canada goose as well as duck species such as mallard, wood duck, and black duck. Mourning dove and Canada goose will be taken from Trustom Pond NWR. Ducks, mergansers, and coot will be taken from Block Island, John H. Chafee, and Trustom Pond NWRs. Canada goose will also be taken from John H. Chafee NWR. Access to refuge lands may occur from public roads, adjoining public lands, and via water access routes. We allow the use of dogs when hunting migratory game birds. Refuge staff will work with partners to identify areas that will provide access for hunting and fishing. All refuge lands open to migratory bird hunting will be in accordance with Federal, State, and refuge regulations.
**Small Game (Coyote, fox)**
Fox and coyote will be taken according to State regulations during the refuge deer hunting seasons on all refuges except Block Island NWR. Access to refuge lands may occur from public roads, adjoining public lands, and via water access routes.

**Fishing**
Fishing will occur year round on designated lands according to applicable State fishing regulations at Block Island NWR, John H. Chafee NWR, and Ninigret NWR. Seasonally, anglers will be allowed to fish on designated lands between September 16 and March 31 at Sachuest Point NWR and Trustom Pond NWR. Access to refuge lands may occur from public roads, adjoining public lands, and via water access routes. Nighttime fishing at Sachuest Point NWR will continue by refuge permit. Seasonal restrictions on designated lands will be established to protect nesting shorebirds.

**Special Refuge-Specific Regulations**

- We require hunters to carry a signed refuge hunting brochure for the current hunting season.

- At Trustom Pond NWR, we require hunters to complete a “Hunt Application/Permit” (Office of Management and Business (OMB) Control No. 1018-0140; FWS Form 3-2439) to be selected to hunt.

- We only allow portable tree stands and blinds for deer hunting. You must clearly label any tree stand or blind left on the refuge overnight with your Rhode Island hunting license number. You must remove your tree stand(s), and/or blind(s) from the refuge on the last day of the deer hunting season.

- Temporary goose or duck blinds and decoys must be removed at the end of each day’s hunt, no permanent blinds allowed.

- We allow the use of dogs consistent with State regulations when hunting migratory game birds. Dogs must be under direct control at all times.

**Mitigation Measures to Avoid Conflicts**

- Safety zones will be marked on maps in areas of high visitation such as around buildings to reduce the interaction between hunters and other user groups.

- Current hunting and fishing information will be available at the refuge’s headquarters and posted on the refuge’s website and at on-site kiosks.

- Hunting and fishing will take place during daylight hours only to avoid nighttime disturbance to wildlife, with the exception of the nighttime fishing program at Sachuest...
Point NWR (permits required).

- Refuge units may be closed to other public activities during special group hunts to increase overall safety and quality of the hunt.

**Affected Environment**

The Rhode Island NWR Complex is comprised of five national wildlife refuges (see Figure 1 within Hunting and Fishing Plan). The Complex is made up of a wide range of habitat types depending on the refuge (Table C-2).

**Table C-2. Habitat Types and Descriptions**

<table>
<thead>
<tr>
<th>Habitat Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| Dune Grassland, Sandy Beach, and Rocky Shore | Vegetation composition and structure within these communities is influenced greatly by ocean spray, strong onshore winds, overwash by storm waves, and shifting sand.  

*Maritime Herbaceous Dune* is a dynamic community located slightly inland from the beach along the primary sand dune. Vegetation cover is sparse to dense, consisting primarily of beach grass, switchgrass, seaside goldenrod, beach pea, and poison ivy. *Distribution: Ninigret NWR, Trustom Pond NWR, Sachuest Point NWR, Block Island NWR.*  

*Maritime Grassland* is a sparsely vegetation community of grasses and forbs occurring along the coast with areas exposed to periodic wind and salt spray. As a result of land use alterations, this community type in Rhode Island is now restricted to Block Island, where it occurs on small areas (less than 1-acre) on the exposed upper slopes tops of morainal hills (Enser 2006). Rare species found in this community include busy rockrose and northern blazing star. *Distribution: Block Island NWR.*  

*Maritime Beach Strand* is a community occurring on sand or cobble beaches between mean high tide and the foredune. Vegetation is typically sparse, consisting of salt-tolerant species such as sea-rocket, orache, beach pea, and seaside goldenrod. *Distribution: Ninigret NWR, Trustom Pond NWR, Sachuest Point NWR, Block Island NWR.*  

*Rocky Shores* are composed of bedrock and subject to both daily inundation by salt water and high-energy waves. These areas serve as important winter foraging habitat for purple sandpiper,
| **Salt Marsh** | harlequin ducks, common eiders, and scoters. *Distribution:* Sachuest Point NWR.  

*Mudflats* are flat, sparsely vegetated areas comprised of unconsolidated sand and mud that is exposed at low tide and submerged at high tide. This community provides important stopover foraging habitat for a variety of shorebird species during spring and fall migration. *Distribution:* Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR.  

*Sandy Flats* are found in embayed areas protected by rocky or sandy barriers. They support abundant invertebrate populations and are important foraging habitat for piping plovers and migratory shorebirds. *Distribution:* Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR. |

**Salt Marsh** is a vegetated intertidal wetland community occurring on the bayside of barrier beaches and on the outer portions of tidal rivers where salinity is not diluted by freshwater input. Salt marshes consist of several broad vegetation types or zones that are determined by marsh surface elevation, the frequency and duration of tidal flooding, and the tolerance to salinity of individual plant species. *Distribution:* Ninigret NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR.  

*Brackish Marsh* is an estuarine wetland community that occurs along the upper edges of tidal rivers, in tidally fed salt ponds, and along coastal ponds that receive salt spray and occasional overwash. Vegetation consists of both freshwater and brackish species including narrow-leaved cattail, prairie cordgrass, bulrushes, and spike-rushes. *Distribution:* Ninigret NWR, John H. Chafee NWR.  

*Coastal Plain Peatland (Sea Level Fen)* is rare, peat-based community that develops at the upper edge of salt marshes where fresh groundwater seeps to the surface. *Distribution:* John H. Chafee NWR.  

*Tidal Creek* is an aquatic community of a continuously flooded creek that drains and feeds the tidal waters of a salt marsh. Water levels fluctuate with the tides; the creek bottom is permanently flooded, but the banks are exposed at low tide. *Distribution:* Ninigret NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR. |
| Coastal Shrubland | **Maritime Shrub Dune** is located along the backside of barrier beach sand dunes or on coastal bluffs. Plant diversity is generally low consisting of medium-sized shrubs including bayberry, beach plum, and poison ivy. **Distribution:** Ninigret NWR, Trustom NWR, Sachuest Point NWR, Block Island NWR.  
**Maritime Shrubland** is a community of medium growing shrubs and scattered low growing trees found along dry seaside bluffs, headlands, coasts and islands. Exposure to ocean winds and salt spray maintains this community in an early successional state. **Distribution:** Ninigret NWR, Trustom NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR.  
**Shrub Swamp** is an open wetland community found on mineral soils and dominated by shrubs up to 5 meters in height. These areas often occur as a transitional community between marsh and upland, or are associated with lakes, ponds, and streams. Species composition varies greatly depending on local conditions and hydrology. **Distribution:** Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Block Island NWR. |
| Coasatal Forest | **Maritime Woodland** is a community found near the coast on exposed bluffs, or on the inland side of barrier beaches or coastal salt ponds. Vegetation consists of tall shrubs including shadbush, arrowwood, and bayberry. Trees are generally stunted, growing up to 6 meters tall with contorted branches. **Distribution:** Trustom Pond NWR, Ninigret NWR, Block Island NWR.  
**Oak Forest** is the most widely distributed habitat type in Rhode Island, with two basic oak forest variations found on the refuges, each characterized by one or more dominant oak species. **Distribution:** Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR.  
**Mixed Oak/Pitch Pine Forest** is a mixed deciduous/coniferous forest that occurs on well-drained, sandy soils of glacial outwash plans and moraines. **Distribution:** Ninigret NWR. |
| Coastal Salt Pond | **Coastal Salt Ponds** are brackish ponds occurring along the coast and are partially closed off from the ocean by barrier beaches. Salt ponds contain both intertidal and subtidal habitats, including tidal marshes and flats, seagrasses, oyster reefs, and soft sediment. Ocean water enters the pond either by the formation of a tidal inlet (also referred to as a breachway) from storm waves washing over the barrier beach, or from the pressure of |
Fresh water swelling the pond from the landward side. Many of the salt ponds along the coast of Rhode Island have been altered by the construction of permanent breach ways. Trustom Pond is unique as it is one of the only undeveloped salt ponds along the coast of Rhode Island. Trustom Pond is an important winter foraging area for a number of waterfowl species. *Distribution: Trustom Pond NWR.*

| Grassland and Old Field | *Ruderal Grassland/Shrubland* is a community commonly referred to as “old field successional grassland.” This community develops in areas originally converted from forest to agriculture once agricultural practices are ended. *Distribution: Ninigret NWR, Trustom Pond NWR, Sachuest Point NWR, Block Island NWR.*  
*Hayfields/Pastures* are an anthropogenic community maintained by mowing at least once during the growing season. Vegetation consists of non-native cool season grasses and legumes. *Distribution:  Trustom Pond NWR.* |

| Red Maple Swamp | *Red Maple Swamps* are wet forests occurring in basins with permanently flooded or saturated soil. Red maple is the dominant species, with other hardwood species making up less than 25 percent cover. *Distribution: Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Block Island NWR.* |

| Freshwater Wetland | Freshwater wetlands are comprised of several different wetland types across the Complex:  
*Emergent Marsh* is a wetland community occurring on flat-bottomed, shallow basins where the substrate consists of muck over mineral soil. *Phragmites australis* frequently invades emergent marsh communities. *Distribution: Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Sachuest Point NWR, Block Island NWR.*  
*Wet Meadow* is a graminoid and forb-dominated community occurring on soils temporarily saturated for part of the year. *Distribution: Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR, Block Island NWR.*  
*Seeps, Springs, and Vernal Pools* are small freshwater wetland communities occurring within forests. 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. Distribution: Ninigret NWR, Trustom Pond NWR, John H. Chafee NWR.

Coastal Plain Ponds are semi-permanent flooded ponds that maintain relatively constant water levels and more permanent emergent plant communities develop along shorelines. These ponds typically have sandy/gravelly bottoms and shores and are found in morainal kettle holes and depressions of glacial outwash plains. Distribution: Ninigret NWR, Trustom Pond NWR, Sachuest Point NWR, Block Island NWR.

For more information regarding descriptions of all refuge resources, please see each refuge’s CCP, (https://www.fws.gov/refuge/Ninigret/what_we_do/finalccp.html).

Environmental Consequences of the Action

This section analyzes the environmental consequences of the action on each affected resource, including direct and indirect effects. This EA focuses primarily on analyses of the environmental consequences on a resource when the impacts on that resource could be more than negligible and therefore considered an “affected resource.” Resources that will not be more than negligibly impacted by the action have been dismissed from further analyses.

Tables C-3 through C-7 provide: (1) a brief description of the affected resources in the proposed action area; and (2) anticipated impacts of the proposed action and any alternatives on those resources, including direct and indirect effects. Table C-8 provides a brief description of the cumulative impacts of the proposed action and any alternatives.

Impact Types

Direct effects are those which are caused by the action and occur at the same time and place. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historical, cultural, economic, social, or medical.

Indirect effects are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historical, cultural, economic, social, or medical.

Negligible impacts result from management actions that cannot be reasonably expected to affect identified refuge resources or recreational opportunities at the identified scale.
## Table C-3. Anticipated Impacts to Natural Resources

<table>
<thead>
<tr>
<th>AFFECTED RESOURCE</th>
<th>ANTICIPATED DIRECT AND INDIRECT IMPACTS</th>
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</table>
| **Big Game** *(White-tailed Deer, Wild Turkey)* | **No Action:** White-tailed deer are currently hunted on designated refuge lands on Block Island NWR and Ninigret NWR (2012 Hunt Plans). Current or lower levels of these species harvested would be expected under this action as no new opportunities would be provided, and likely, public interest in big game hunting would remain the same. There would continue to be limited mortality to hunted deer. These impacts are considered negligible due to the relatively small number of hunters.  

*White-Tailed Deer* – Deer densities vary across the State based on land ownership, land use, hunting access, and habitat quality. The average deer density for refuge lands are much above the desired range of 12 to 15 deer/square mile. RIDEM annually evaluates hunter harvest data and biological data collected at check stations to inform management decisions. Currently, hunting pressure is low on the Complex, and it is estimated that less than 10 to 20 deer are harvested annually.  

During the 2018-2019 hunting season, 2,125 deer were legally harvested and reported in Rhode Island. Very small numbers of hunters utilize refuge lands resulting in 9 deer harvested during the 2018-2019 season. In the Town of New Shoreham, 222 deer were reported taken and, of those, only 4 were reported taken from refuge lands (Block Island NWR).  

*Wild Turkey* – Under this alternative, no wild turkey hunting would be permitted on refuge lands. Wild turkeys would continue to be taken from private and State property. RIDEM estimated the wild turkey population was nearly 3,000 individuals in 2015. 122 turkeys were reported harvested in 2016 in Rhode Island, with all taken during the spring firearm season. The fall archery season was expanded in the State for the entire month of October beginning in 2019 for additional hunting opportunities.

Populations of these species have generally remained steady in Rhode Island. The State will adjust seasons, and limits to maintain healthy populations.  

No wild turkey are currently found on Block Island. |
**Proposed Action:** Additional refuge lands will be opened to hunting under the Proposed Action. An increase in the size of the hunting area would increase the number of deer harvested on the refuge. Although hard to predict the increase in hunters’ interest, we estimate that 15 to 30 deer could be harvested annually on lands open to hunting. This would have a negligible impact on the overall deer population in the state.

<table>
<thead>
<tr>
<th><strong>Small Game</strong> (<em>coyote, fox</em>)</th>
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<tr>
<td>The State will adjust seasons, and limits to maintain healthy populations. Currently, the daily bag limit for these species is unlimited.</td>
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<thead>
<tr>
<th><strong>No Action:</strong></th>
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<tr>
<td>Small game hunting in Rhode Island on refuge lands is currently closed.</td>
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<th><strong>Proposed Action:</strong></th>
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<tr>
<td>This alternative would open new lands to small game (coyote and fox) hunting on four of the refuges. There are currently no appreciable numbers of small game on Block Island, therefore, no meaningful opportunities exist for hunting small game on Block Island NWR. Hunting small game on the refuges would be limited to red fox, gray fox, and coyote during the refuge deer hunting seasons, in accordance to Federal, State and refuge-specific regulations. The Complex is reintroducing New England cottontail and, therefore, will not allow any rabbit hunting on any refuge lands for the near future. These lands are currently open for other wildlife-dependent recreation, and addition of small game hunting is predicted to have a small disturbance impact to other wildlife. This opportunity will only be open to permitted deer hunters on refuge lands; thus, we do not anticipate a large number of small game to be harvested at the Complex.</td>
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<tr>
<th><strong>Migratory Birds</strong></th>
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<tbody>
<tr>
<td>Waterfowl, mourning dove, merganser, coot, and Canada goose seasons and bag limits are set by states within a framework set by the Service and based on surveys, harvest data, and habitat data. Populations of these species have remained relatively stable.</td>
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</tbody>
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<thead>
<tr>
<th><strong>No Action:</strong></th>
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<tbody>
<tr>
<td>Migratory birds are currently not hunted on refuge lands, except for Canada goose and mourning dove at Trustom Pond NWR. Migratory birds are hunted in adjacent private and State lands and waters. At Trustom Pond, less than 100 geese and mourning dove are harvested per year.</td>
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<tr>
<th><strong>Proposed Action:</strong></th>
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<tr>
<td>The Rhode Island migratory bird season is currently open from September through January. Hunting would not have a significant impact on local, regional, or Atlantic Flyway waterfowl populations because the percentage taken on the Complex, though possibly additive to existing hunting take, would measure a fraction of a percent of the estimated migratory game birds populations.</td>
</tr>
</tbody>
</table>
With increased hunting opportunity, it is estimated that less than 200 birds would be taken in refuge lands. In addition to direct mortality, hunting could result in some short-term redistribution due to disturbance.

Rhode Island sets season length and harvest limits for all species we propose to open to hunting at the Refuge Units. They have determined that populations are at levels acceptable to support a public hunt while maintaining healthy population levels that are commensurate with the carrying capacity of the habitat.

| Other Wildlife | No Action: The current hunting and fishing taking place on refuge lands may cause a short-term disturbance to wildlife. There are less than fifty hunters that hunt on the Complex, and they tend not to disperse very far from parking areas and roads, which leaves large areas of refuge land undisturbed. Hunters discharging firearms or walking through occupied habitat might temporarily flush individual animals. This impact will not be significant or long-term. Restrictions are in place to limit disturbance to shorebirds from fishing during the nesting season. Shorebirds primarily migrate through the area prior to the fall hunting season and will not be impacted. Disturbance to other non-hunted migratory birds is minimal because hunting seasons do not coincide with the nesting season. Some foot trails could develop along the edges of open water from repetitive walking of anglers negatively impacting the salt marsh habitat.

Proposed Action: Impacts would be similar to those described in the No Action Alternative, but increasing the number of acres open to hunting and fishing may result in additional short-term disturbance to wildlife over a larger area. The refuge can expect approximately 50 new hunters and 50 new anglers under the proposed action. With new hunters using additional units/refuges, the impacts from hunting and fishing would be more widespread.

| Threatened and Endangered Species (T&E) and Other Special Status Species | No Action: The hunting and fishing currently occurring on the refuge have not affected the federally listed species found on the Complex. The number of visitors currently participating in hunting on the refuge is low and not expected to have an adverse impact on T&E species. The current fishing program restricts visitors from critical |

<table>
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<tr>
<th>Threatened and Endangered Species (T&amp;E) and Other Special Status Species</th>
<th>Threatened and Endangered Species (T&amp;E) and Other Special Status Species</th>
</tr>
</thead>
</table>
| Federally endangered species found on the Complex include American burying beetle | }
(Nicrophorus americanus), Roseate tern (Sterna dougallii), and sandplain gerardia (Agalinis acuta). Federally threatened species include piping plover (Charadrius melodus), northern long-eared bat (Myotis septentrionalis), and red knot (Calidris canutus). Although not listed federally, Saltmarsh sparrow (Ammodramus caudacutus) is an at-risk species and listed as endangered by the IUCN as a salt marsh obligate species experiencing a rapid decline in population. Additional at-risk species include New England cottontails which were recently re-introduced to Ninigret NWR, and spotted turtles are found at various locations on the Complex.

Vegetation (including vegetation of special management concern)
Vegetation varies widely.

Nesting and staging beach habitat for the piping plover, roseate tern, and red knot, reducing any adverse impacts to these species.

Proposed Action: Hunting and fishing at John H. Chafee NWR may have a small negative indirect impact on saltmarsh sparrow if the habitat becomes trampled and rendered unsuitable for nesting and rearing young. The number of hunters and anglers is expected to increase slightly above current levels and unlikely to cause any noticeable decrease in habitat quality.

American burying beetle is only found on Block Island and the areas of refuge lands used by the beetles is small. Current hunting and fishing on that refuge have not negatively impacted the beetles. Hunting is allowed on private and State lands on the Island, without impacting the beetle population.

Sandplain gerardia is only found at Trustom Pond NWR in the deed-restricted area, therefore, no hunters or anglers would be allowed in that area resulting in no expected negative impacts.

Northern long-eared bats have been documented in Rhode Island, but not on refuge lands at this time, although suitable habitat exists. Areas open to hunting or fishing are not expected to impact northern long-eared bats since hunters are not permitted on the refuge after sunset, which is when bats are most active. The exception is at Sachuest Point NWR where nighttime fishing is allowed by refuge permit, however, northern long-eared bats have not been documented there and no suitable habitat is present. The proposed actions are not expected to have negative impacts on threatened or endangered species. However, if there is a potential for hunting and fishing to have a negative impact on such species, we will close the area or implement necessary restrictions. For more detail on impacts to threatened and endangered species, refer to the Intra-Service Section 7 Evaluation below (Appendix D).

Vegetation (including vegetation of special management concern)
Vegetation varies widely.

No Action: Some refuge lands are currently open to hunting and fishing under State regulations and seasons, subject to refuge-specific regulations. Hunters and anglers could negatively affect vegetation by trampling and creating
encompassing beach habitat to shrubby and herbaceous communities, as well as forested communities with a wide array of canopy types.

footpaths. Current levels of use have negligible impacts to vegetation (i.e., low number of users, low frequency of use, and dispersed use patterns). Hunting may have a slight, positive impact to vegetation and to refuge habitats by reducing the number of deer (i.e., reduced deer browsing).

**Proposed Action:** Additional lands would be open to hunting and fishing under the proposed action. Trampling of vegetation on newly opened lands could increase slightly because of the increased number of users and an increase in the frequency of use. However, the number of visitors participating in hunting and fishing on the refuge lands is expected to remain small compared to other types of visitation and adverse impacts to vegetation is not expected. The refuge can expect approximately 50 new hunters and 50 new anglers under the proposed action. An increase in hunting opportunities on the refuge may have a slight, positive impact to vegetation and to habitats by reducing the number of deer (i.e., reduced deer browsing), especially in areas with high deer populations that are adversely affecting the vegetative community.

**Water Resources and Aquatic Species**
Saltwater fishing would be open for the season and species as regulated by State of Rhode Island. Access will be closed in some locations during the shorebird nesting season. Target species include striped bass, bluefish, scup, winter flounder, summer flounder, black sea bass, and tautog.

**No Action:** Hunting and fishing would continue to occur on refuge lands currently open to these activities and where the uses were found to be compatible. Current levels of fishing and hunting on the refuge have not adversely affected water resources.

**Proposed Action:** Sport fishing potentially could cause negative impacts to fish populations if it occurs at unsustainably high levels or is not managed properly. Potential impacts to water resources from include direct mortality from harvest and catch and release; injury to fish caught and released, changes in age and size class distribution, changes in reproductive capacity and success, loss of genetic diversity, altered behavior, and changes in ecosystems and food webs (Lewin et al. 2006, Cline et al. 2007). Recreational fishing may also lead to the introduction of non-native fish that may negatively affect native fish, wildlife, or vegetation.

In general, anglers tend to target older and larger fish, which tend to have greater reproductive capacity. Their selective removal may reduce the populations overall reproductive success. Catch and release fishing can also have impacts on
individual fish, including injury and immediate or delayed mortality. The likelihood of mortality depends on the type of fishing gear used, where the fish was hooked, how the fish is handled, angler experience, and environmental conditions. Fish caught and released with non-lethal injuries could also be exposed to parasites, or bacterial or fungal infections. Handling fish is stressful for the animals, which may lead to changes in physiology and behavior (Lewin et al. 2006).

Since fishing generally removes individuals from a population, high harvest levels can lead to reduced population sizes and the loss of genetic diversity. The loss of genetic diversity can ultimately reduce a population’s fitness, resilience, and ability to adapt to environmental changes and stressors. The higher the fishing mortality, the greater these types of impacts will be (Lewin et al. 2006).

While fishing does remove individuals from the population, we do not anticipate the increased fishing opportunity will affect the refuge’s fish population as a whole. The refuge expects approximately 50 new anglers under the proposed action. Anglers must abide by the State’s seasons, catch limits, and regulations, which were designed to protect the State’s fish populations. The refuge’s fishing pressure is projected to be minimal and sustainable.

**Wetlands**

**No Action:** Anglers are permitted to saltwater fish from refuge shorelines at designated areas at all Rhode Island refuges, except John H. Chafee NWR. Most of the shorelines are beach and rock habitat, therefore, this will not impacting wetlands. At John H. Chafee NWR, migratory bird hunters use the State waters and adjacent lands for hunting, and occasionally walk across refuge salt mash to retrieve downed waterfowl. Hunters set up temporary blinds at the edge of the salt marsh, below mean high tide with negligible impacts to the wetlands.

**Proposed Action:** Additional lands would be open to hunting and fishing under the proposed action, but impacts to wetlands from increased foot traffic is expected to be negligible and short-term. Migratory bird hunters will be permitted to set up temporary blinds on the refuge, but must remove them at the end of each day’s hunt, minimizing impacts to vegetation. As bird hunting occurs in the fall and
early winter after the growing season, impacts to vegetation are minor and short-term. Occasionally, minor impacts caused by hunters and anglers to any wetland habitats have been observed by refuge staff. If detrimental impacts are observed, those areas of refuge lands would be closed to hunting and fishing.

<table>
<thead>
<tr>
<th>VISITOR USE AND EXPERIENCE</th>
<th>ANTICIPATED DIRECT AND INDIRECT IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected Resource</td>
<td>No Action: Currently, refuge lands that are open to hunting and fishing generally follow State seasons and regulations, with the addition of refuge-specific regulations and season restrictions. There have been very few conflicts among user groups that have involved hunting or fishing. Non-hunting refuge visitors have been concerned with personal safety in the past, so refuge staff ensure all safety zones are communicated to hunters though maps, identified in brochures, and outreach was increased to all users to include seasonal news releases, hunting information posted on kiosks and at headquarters, websites updated with refuge hunting seasons, and direct mailings to select neighbors. Proposed Action: We expect slightly more users due to the increased opportunities for hunting and fishing on the refuge. The refuge expects approximately 50 new hunters and 50 new anglers under the proposed action. With increased use, we do expect to see a slight increase in the number of conflicts among user groups, especially at refuges that do not currently allow hunting.</td>
</tr>
<tr>
<td>The refuge is open to priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education, and environmental interpretation). About 600,000 people visit the Rhode Island refuges each year: 370 hunter visits; and 60,000 angler visits, among other users. A total of 9,205 hunting licenses were issued in Rhode Island during the 2018-2019 season (RIDEM 2019).</td>
<td></td>
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</table>
expect some non-hunting users to be uncomfortable seeing hunters on the trails. Information will be posted at the contact station and kiosk to alert non-hunters of hunting activity, and recommend wearing blaze orange while walking the trails during hunting season. Hunting is offered on areas surrounding Trustom Pond NWR, and we anticipate many users will be familiar to the hunting seasons. The refuge will most likely cap the number of hunters on each refuge, to provide for a high quality hunt, and reduce the negative impacts to different user groups.

We expect to see a slight increase in user conflict at Sachuest Point NWR, as the entire refuge would be closed to all other uses during a special hunt. We anticipate special hunts would only last up to one week at a time, therefore, limiting the negative impacts on other user groups. Increased outreach will give users sufficient time to alter their plans prior to Sachuest Point NWR being closed for a special hunt.

Currently, there is a local firearm ordinance in the town of Narragansett. Some of the proposed hunting units of the John H. Chafee NWR lie within the border of Narragansett. We anticipate moderate conflict with non-hunters on these refuge units as firearms hunting would be allowed during the State season for muzzleloader and shotgun deer season, spring turkey firearm season, and waterfowl hunting. Short-term impacts to other visitors engaged in wildlife dependent recreational activities could occur from hearing firearms and seeing harvested game species. Waterfowl hunting with firearms already occurs in the Narrow River and Pettaquamscutt Cove on State waters adjacent to the refuge units, therefore some users will be used to hearing shots. The disturbance from hearing firearms or observing harvested deer would be sporadic and short lived.

Timing of the hunting seasons, as well as species and weapon restrictions in some locations have been proposed to reduce conflicts among the different user groups. If conflicts arise among user groups, mitigation efforts can be implemented to ensure the proposed action will not have significant impacts to other user groups.
# Table C-5. Affected Cultural Resources and Anticipated Impacts

<table>
<thead>
<tr>
<th>Affected Resource</th>
<th>ANTICIPATED DIRECT AND INDIRECT IMPACTS</th>
</tr>
</thead>
</table>
| While most units are considered sensitive for both prehistoric and historic archeological resources, formal surveys have been limited in scope and area. At Ninigret NWR, there are two significant areas linked to the Narragansett Indian Tribe. | **No Action:** No adverse impacts would occur under this alternative.  
**Proposed Action:** Section 106 of the National Historic Preservation Act of 1966, as amended, requires the Service to evaluate the effects of any of its actions on cultural resources (historic, architectural and archeological properties) that are listed or eligible for listing in the National Register of Historic Places (NRHP). It is believed the proposed action would not likely affect any cultural resources found on the Complex. We expect that the ethical behavior of users and Service regulations would deter those individuals utilizing refuge land during the hunting season to remove or disturb any cultural resources. Therefore, there will be no adverse impacts.  
The proposed parking area to be created at John H. Chafee NWR would include removal of up to 10 small trees and placing processed gravel over the existing ground, thereby not disturbing the native soils. No adverse impacts are expected. |

# Table C-6. Anticipated Impacts to Refuge Management and Operations

<table>
<thead>
<tr>
<th>Affected Resource</th>
<th>ANTICIPATED DIRECT AND INDIRECT IMPACTS</th>
</tr>
</thead>
</table>
| **Land Use**  
The refuge currently owns roads, occupied buildings, trails, and infrastructure. Areas with occupied buildings and public roads are protected by | **No Action:** Hunters and anglers currently use refuge infrastructure, such as parking areas and trails, to gain access to refuge lands. The impacts to refuge infrastructure are short-term and negligible.  
**Proposed Action:** The proposed action would open new |
State regulations. Refuge lands are also adjacent to, and crisscrossed with, well-traveled roads owned by local municipalities and counties. Hunters using upland areas of the refuge often park along public road shoulders to access hunt sites.

areas of the refuge to hunting and fishing and these users would mostly use existing infrastructure to access the refuge. The number of hunters and anglers using these areas is expected to be low, and we do not expect any conflicts among user groups, crowding, or over-use of the refuge’s infrastructure. While increased hunters are possible throughout the refuge, impacts to local public roads are expected to be negligible. The creation of an eight-vehicle parking area at John H. Chafee NWR on the Steadmen Unit will initially be used by refuge hunters. The refuge intends to open trails in that section of the refuge in the future, therefore the parking area may be used by hunters and hikers.

### Administration

There are currently seven permanent full-time employee positions that oversee the Complex, along with three full-time term positions. Biological, visitor services, and maintenance staff work together to ensure the refuge’s hunt/fish program is safe, successful, and biologically sound.

<table>
<thead>
<tr>
<th>SO SocioECONOMICS</th>
<th>ANTICIPATED DIRECT AND INDIRECT IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affected Environment</strong></td>
<td><strong>No Action:</strong> The current program has a minor, long-term beneficial impact to the local economy.</td>
</tr>
<tr>
<td><strong>Local and regional economies</strong></td>
<td><strong>Proposed Action:</strong> While hunting visitation may increase due to increased opportunities, hunting only accounts for a fraction of expenditures related to the refuge. Therefore, additional economic impact is expected to be negligible under this action.</td>
</tr>
</tbody>
</table>
lands are in rural towns with populations near 1,000. Some of the refuges have a high visitation of local and destination-based visits, with many visitors spending money in the local area.

ENVIRONMENTAL JUSTICE

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.

The Service has not identified any potential high and adverse environmental or human health impacts from this proposed action or any of the alternatives. The Service has identified no minority or low-income communities within the impact area. Minority or low-income communities will not be disproportionately affected by any impacts from this proposed action or any of the alternatives.

Cumulative Impact Analysis

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 CFR 1508.7).

For more information on the national cumulative impacts of the Service’s hunting and fishing program on the Refuge System, see “U.S. Fish and Wildlife Service, Cumulative Impacts Report 2020-2021 National Wildlife Refuge and National Fish Hatchery Proposed Hunting and Sport Fishing Openings (2020)”.
### Table C-8. Anticipated Cumulative Impacts of the Proposed Action and Any Alternatives

<table>
<thead>
<tr>
<th>Other Past, Present, and Reasonably Foreseeable Activity Impacting Affected Environment</th>
<th>Descriptions of Anticipated Cumulative Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting/Fishing</td>
<td><strong>White-tailed deer</strong> – The Service considers hunting to be an important tool for wildlife management. Hunting gives resource managers an effective means to control populations of some species that might otherwise exceed the carrying capacity of their habitat and threaten the well-being of habitats (composition, structure, and function) and other wildlife species, and in some instances, threaten human health and safety. A lack of hunting on the refuge lands diminishes the refuge’s ability to manage wildlife populations, and by extension, RIDEM’s ability to manage populations. Likewise, an increase in deer densities may negatively affect forest regeneration and plant diversity, resulting in degradation of habitat for New England cottontail, woodcock, nesting songbirds, and a wide array of other migratory birds that use early successional forests. Overabundant deer populations on refuge lands may have significant detrimental impacts to forest conditions on adjacent lands as well. Heavy browsing by refuge deer could influence forest regeneration and plant diversity on neighboring properties. The statewide deer population is currently estimated between 13,000 and 15,000 individuals. For the 2018-2019 season, 2,125 deer were harvested and reported in Rhode Island. The proposed expansion to the refuge hunting plan would result in an estimated increase of 15-30 deer harvested per year. It is unlikely that the proposed white-tailed deer hunting on the refuge would have any significant cumulative impacts to the viability of local or regional populations.</td>
</tr>
</tbody>
</table>

**Migratory Birds** – Waterfowl populations throughout the United States are managed through an administrative process known as flyways. The Complex is located in the Atlantic Flyway. In North America, the process for establishing waterfowl hunting regulations is conducted annually. In addition, public hearings are held and the proposed regulations are published in the Federal Register to allow public comment.
The refuge estimates that less than 200 birds would be harvested on the Complex each year. In 2018, Rhode Island’s 1,200 active duck hunters constituted only 0.6 percent of duck hunter’s within the Atlantic Flyway, and accounted for 0.5 percent of the 1,609,600 ducks harvested in the flyway (Raftovich et al. 2019). Mallards, black duck, and eiders were the most commonly harvested duck species, followed by scoters, wood duck and widgeon. On average, the annual duck harvest (including mergansers) per hunter in Rhode Island was 5.5. The 1,200 active goose hunters reported in Rhode Island during the 2018 season, comprised only 1 percent of the hunters within the Atlantic flyway. Hunters harvested 7,514 Canada geese and 516 brant in Rhode Island during the 2018 season, accounting for 1.8 percent of geese harvested in the flyway.

Annual waterfowl assessments are based upon the distribution, abundance, and flight corridors of migratory birds. An Annual Waterfowl Population Status Report is produced each year and includes the most current breeding population and production information available for waterfowl in North America (USFWS 2017a). An Annual Adaptive Harvest Management Report (AHM) provides the most current data, analyses, and decision-making protocols (USFWS 2017b). These reports are intended to aid the development of waterfowl harvest regulations in the United States for each hunting season.

Hunting on the Complex will not add significantly to cumulative impacts of migratory waterfowl management on local, regional, or Atlantic Flyway waterfowl populations, as the percentage likely to be taken on the refuge, though additive to existing hunting takes, would be a fraction of the estimated populations. In addition, overall populations will continue to be monitored and future harvests will be adjusted as needed under the existing processes.

Several points support this conclusion: (1) the proportion of the national waterfowl harvest that occurs on national wildlife refuges is only 6 percent (US DOI 2009); (2) there are no waterfowl populations that exist wholly and exclusively on national wildlife refuges; (3) annual hunting regulations within the United States are established at levels consistent with the current population status; (4) refuges cannot permit more liberal seasons than provided for in
Federal frameworks; and (5) refuges purchased with funds derived from the Federal Duck Stamp must limit hunting to 40 percent of the available area.

*Resident Wildlife* – Refuges, including those of the Complex, conduct hunting programs in coordination with the State regulations. Hunting frameworks and take limits are set by the State. The proposed refuge hunting program will follow hunting regulations set by the State with some modifications as needed, and we will coordinate with RIDEM about the hunting and fishing programs.

Wildlife management of populations is important to ensure the health of the ecosystem, and the refuge’s hunting/fishing program provides minor, additional beneficial impacts to the cumulative impacts of wildlife management in the State.

<table>
<thead>
<tr>
<th>Development and Population Increase</th>
</tr>
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<tbody>
<tr>
<td>Population growth will continue to stress the ecosystems of the Rhode Island coast, both through direct loss of remaining habitats, and indirectly through fragmentation and degradation of the coast’s remaining parcels of wildlife habitat. Refuges and other tracts of habitats will become even more important as repositories of biodiversity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Lead Ammunition/Tackle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead ammunition is permitted in Rhode Island, and on Block Island NWR, Ninigret NWR, and John H. Chafee NWR for all hunts, except migratory birds. Only non-toxic shot is permitted at Sachuest Point NWR (archery only) and Trustom Pond NWR (archery or waterfowl/dove only).</td>
</tr>
</tbody>
</table>

The refuge uses an adaptive management approach for its hunting and fishing program, reviewing the program annually and revising annually (if necessary). This allows the Service’s hunting program to be adjusted to ensure that it does not contribute further to the cumulative impacts of population growth and development on non-game and game species.

The refuge receives less than 370 hunting visits each year for all seasons. Use of the refuge could increase about 50 percent, which would increase addition of lead shot to the local landscape due to big game and small game hunting. This could result in localized accumulations of lead in some portions of the refuge, including small wooded wetlands. This accumulation of lead could incur negative impacts if it is consumed by wildlife, but the likelihood of that resulting in poisoning is low.

Across Rhode Island, during the 2018-2019 hunting season, of the 2,125 deer harvested, 64 percent (1,362) were taken with muzzleloader or shotgun. The Complex expects deer harvest to increase by 15 to 30 deer, and predict an
additional 50 hunters on refuge lands. The refuge hunters would make up 1 to 2 percent of all hunters in Rhode Island, and therefore would not significantly contribute to additional lead in the environment. Not all units on the refuge are open to firearms hunting which further decreases the likelihood of additional lead in the environment.

The refuge will encourage voluntary use of non-lead ammunition and tackle when hunting and/or fishing on the refuge. The refuge will collaborate with the State on development of education materials and strategies on the benefits of using non-toxic shot. The use of non-toxic shot will be required for waterfowl hunting as per Federal regulations.

**Climate Change**

Warming, whether it results from anthropogenic or natural sources, is expected to affect a variety of natural processes and associated resources. However, the complexity of ecological systems means that there is a tremendous amount of uncertainty about the full impact climate change will have.

While the effects of climate change on ecological systems is not fully understood, deer and turkey abundances are predicted to increase because of greater survival and reproductive rates associated with warmer winters. However, there is also evidence that some infectious viral diseases and parasite (e.g., ticks) infestations could also increase in frequency and severity. Consequently, the full effects of climate change on deer and turkeys is not fully understood (Hushaw et al. 2016). Waterfowl populations appear to closely track periods of precipitation (Butler 2005). Climate variability and changes to precipitation patterns will likely result in increased fluctuation of waterfowl populations in the future. Changes to migration patterns are also expected due to climate change. Warmer winters could provide more water free from ice, reducing the distance waterfowl need to migrate to find food (Brown et al. 2007). Degradation and the loss of coastal marshes from sea level rise, could also have important consequences on waterfowl distribution and abundance by displacing waterfowl inland away from the coast.

Under the proposed alternative, the refuge would use an adaptive management approach for its hunt program, reviewing the hunt program annually and revising annually (if necessary), the Service’s hunt program can be adjusted to ensure that it does not contribute further to the cumulative impacts of climate change on resident wildlife (both hunted and non-hunted species) and migratory birds.
**Monitoring**
The refuge will be adaptive in the harvest management under the hunt program. Refuge-specific hunting regulations may be altered to achieve species-specific harvest objectives in the future. Many game species populations are monitored by RIDEM through field surveys and game harvest reports, which will provide an additional means for monitoring populations. Refuge hunters will be required to submit a harvest report at the end of the hunting season. The State has determined that populations of game species are at levels acceptable to support hunting and these assessments are reviewed and adjusted periodically. In addition to State-wide monitoring, the refuge actively monitors game and nongame species, habitats, and environmental conditions. The refuge is currently working towards developing and Inventory and Monitoring Plan.

**Summary of Analysis**
This EA provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

**No Action:** There would be no additional costs to the refuge under this alternative. There would be no change to the current public use and wildlife management programs on the refuge. There would not be an increase in economic impacts to local economies. New hunting and fishing opportunities would not be created under this alternative, including new access sites to refuge lands for other users. This alternative has the least short-term impacts to physical and biological resources; however, long-term impacts on habitat quality could be more adverse. In addition, this alternative would reduce our actions as mandated under the Refuge System Administration Act and Secretarial Order 3356.

**Proposed Action:** This alternative is the Service’s proposed action because it offers the best opportunity for public hunting and fishing that would result in a minimal impact on physical and biological resources, while meeting the Service’s mandates under the Refuge System Administration Act and Secretarial Order 3356. The Service believes that hunting and fishing on the refuge will not have a significant impact on local or regional wildlife populations because the percentage likely to be harvested on the refuge, though possibly additive to existing hunting takes, would be a tiny fraction of the estimated populations. Additional hunting would not add more than slightly to the cumulative impacts to wildlife from hunting at the local or regional levels, and would only result in minor, negative impacts to wildlife populations.

**List of Preparers**
U.S. Fish and Wildlife Service, Rhode Island National Wildlife Refuge Complex Staff
Charles Vandemoer – Refuge Manager
Karrie Schwaab – Deputy Refuge Manager
Nick Ernst – Wildlife Biologist
Janis Nepshinsky – Visitor Services Manager

U.S. Fish and Wildlife Service, DOI North Atlantic-Appalachian Region Office Staff
Thomas Bonetti – Senior Planner, Hunting and Fishing Coordinator
Graham Taylor – Refuge Supervisor, North Zone
Noah Kahn – Hunting and Fishing Chief
State Coordination
Extensive coordination and consultation occurred in advance of the development of the hunting and fishing program as a part of the CCP process, which was completed in 2002, and again during the establishment of the current hunting programs at Block Island NWR and Ninigret NWR in 2012. The refuge has been coordinating with the State staff since 2015 to propose hunting and fishing at John H. Chafee NWR. Prior to completion of the CCP, hunting and fishing were allowed where they had traditionally occurred before coming under the stewardship by the Service as a part of a national wildlife refuge. During this public process, there was considerable interest and support for these public use opportunities, especially by the State. Regional Office staff met with the RIDEM State Director and her staff in April 2019 to discuss hunting and fishing on refuges within Rhode Island.

Tribal Consultation
Federally recognized tribes that we will be coordinating with include the Narragansett Indian Tribe. We will be reaching out to this Tribe prior to the release of the draft documents.

Public Outreach
The public will be notified of the availability of the Rhode Island National Wildlife Refuge Complex Hunting and Fishing Plan, CDs, and EA in April 2020 for a 30-day review and public comment period. We will inform the public through local venues, the refuge website, and social media. The refuge will host at least one public meeting during the 30-day public review and comment period.

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: ________
Name/Title/Organization: ____________________________________________________________
________________________________________________________________________

Reviewer Signature: ___________________________ Date: ________
Name/Title: ______________________________________________________________
REFERENCES


Tefft, B. 2014b. Personal Communications. Rhode Island Department of Environmental Management, Division of Fish and Wildlife. Charlestown, RI.

Tefft, B. 2016. 2015-16 Rhode Island white-tailed deer status report. Rhode Island Department of Environmental Management, Division of Fish and Wildlife.


OTHER APPLICABLE STATUTES, EXECUTIVE ORDERS AND REGULATIONS

Cultural Resources


*Fish and Wildlife*


• 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.


*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.


*Water Resources*


INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Karrie Schwaab
Deputy Refuge Manager
Rhode Island NWR Complex

Telephone Number: (401) 364-9124 ext. 4402

Date: INSERT

I. Region: North Atlantic-Appalachian, Region 1

II. Service Activity (Program): NWRS, Rhode Island NWR Complex

III. Pertinent Species and Habitat:

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

Northern long-eared bats (NLEB) (*Myotis septentrionalis*), piping plovers (*Charadrius melodus*), roseate terns (*Sterna dougallii*), red knots (*Calidris canutus*), American burying beetles (*Nicrophorus americanus*), and sandplain gerardia (*Agalinis acuta*) have been documented on or in the vicinity of the refuge.

B. Proposed species and/or proposed critical habitat within the action area:

None

C. Candidate species within the action area:

None

IV. Geographic area of station name and action:

Opening of parts of the Rhode Island National Wildlife Refuge Complex in Rhode Island to hunting for big game (white-tailed deer and turkey), small game (coyote and fox), migratory game birds (duck, goose, merganser, coot), and upland game birds (mourning dove), as well as for fishing.

V. Location:

- **Ecoregion Number and Name:**

  221A, Eastern Broadleaf Forest (Oceanic) Province, Lower New England Section
• **County and State:**

Washington County, Rhode Island (Block Island, John H. Chafee, Ninigret and Trustom Pond NWR)

Newport County, Rhode Island (Sachuest Point NWR)

• **Section, township, and range (or latitude and longitude):**

Block Island NWR, New Shoreham (41.2117, -71.5746)

John H. Chafee NWR, South Kingstown and Narragansett (41.4431, -71.4708)

Ninigret NWR, Charlestown (41.3633, -71.6659)

Sachuest Point NWR, Middletown (41.4805, -71.2444)

Trustom Pond NWR, South Kingstown (41.3766, -71.5876)

• **Distance (miles) and direction to nearest town:**

Block Island NWR is within the Town of New Shoreham, Rhode Island

Ninigret Refuge is within the Town of Charlestown, Rhode Island

John H. Chafee NWR is within the Towns of Narragansett and South Kingstown, Rhode Island

Sachuest Point is within the Town of Middletown

Trustom Pond is within the Town of South Kingstown

• **Species/habitat occurrence:**

NLEBs have not been documented on the refuge, although suitable habitat is present. Piping plovers, roseate terns, red knots, are present on all refuges in the Complex. The American burying beetle is only found at Block Island NWR and sandplain gerardia is only found at Trustom Pond NWR.

VI. **Description of Proposed Action**

The refuge has prepared a Hunting and Fishing Plan that is presented in this document as the Proposed Action Alternative. Under the Proposed Action, the Service would expand hunting opportunities on certain refuge units where hunting and/or fishing was found to be compatible. The Complex will open opportunities for saltwater fishing, big game (white-
tailed deer and wild turkey) hunting, small game (fox and coyote) hunting, and migratory bird hunting. Greater detail in describing the Proposed Action can be found in the Hunting and Fishing Plan, Compatibility Determinations, and Environmental Assessment.

VII. Determination of Effects

A. Explanation of effects of the action on species and critical habitats in items III. A, B, and C:

Some of the hunt areas on the refuges contain suitable summer roost tree habitat for NLEB, however, acoustic surveys conducted from 2013 to 2016 failed to detect the presence of NLEB on refuge lands during summer or fall. Potential suitable habitat exists at the Salt Pond Unit on Ninigret NWR, but not NLEBs have been detected at this time. If bats are present, hunting activities may cause disturbance to roosting bats if roost trees are disturbed or used to erect tree stands. Disturbance to foraging bats is not anticipated, as bats are least active during hunting hours, which are 1-hour before sunrise to 1-hour after sunset. There is also no overlap between hunting seasons and the NLEBs maternity period (June 1 to July 31). The majority of hunting seasons fall within the bats’ fall migratory period, or during winter when bats are hibernating and least active on the landscape. There are no known hibernacula on the refuges so disturbance to wintering NLEB is not anticipated. Current and proposed fishing areas will not overlap NLEB habitat so no disturbance is expected.

The hunt areas on the refuge do not provide nesting habitat for piping plover, roseate terns, and red knots nor does the nesting season coincide with the hunt seasons. Any disturbance would be to foraging/migrating birds. However, this should be at a minimum since the hunting season begins near the end of fall migration period for the piping plovers and roseate terns. The proposed fishing area at John H. Chafee NWR is from the bank along the refuge shoreline that consists of salt marsh habitat, therefore, no disturbance is expected. The refuge will maintain current beach closures at Ninigret NWR, Second Beach at Sachuest Point NWR, and at Trustom Pond NWR from April 1 through September 15 annually to limit disturbance to piping plovers, roseate terns, and red knot.

American burying beetle is only found on Block Island and the areas of refuge lands used by the beetles is small. Adults are mostly active between June and July and the tenerals are typically active from June through September. Most of the hunting season falls outside the months of activity for the American burying beetle, therefore, little disturbance is expected during their active period. Disturbance may include stepping on the beetles if they are present and above ground. No ground disturbing activities are expected on Block Island NWR with the proposed hunting and fishing plan, therefore little to no disturbance is expected.

Sandplain gerardia is only found at Trustom Pond NWR in the area closed to hunting and fishing. The potential disturbance would be damage caused by trampling the site, however, the area is closed to the public. No disturbance is expected.
B. Explanation of actions to be implemented to reduce adverse effects:

Disturbances from hunting activities on piping plovers, red knots, and roseate terns would be minimal. Due to the short overlap between bird migrations and migratory game bird hunting, and because hunter participation will be limited, disturbance is likely to occur on a very rare basis. Since any disturbance would be minimal and short-term, no actions will be taken to reduce effects.

Northern long-eared bats have been documented in Rhode Island, but not on refuge lands at this time, although suitable summer habitat exists. Areas open to hunting or fishing are not expected to impact northern long-eared bats since the hunting seasons do not coincide with the maternity season, there will not be any removal of trees, and hunters are not permitted on the refuge after sunset, which is when bats are most active. The exception is at Sachuest Point NWR where nighttime fishing is allowed by refuge permit; however northern long-eared bats have not been documented there and suitable habitat is limited. Therefore, no additional actions will be taken to reduce effects.

Northern long-eared bats
Effective May 4, 2015, the NLEB was federally listed as a threatened species under the Endangered Species Act (80 FR 17974). NLEBs emerge from hibernation and migrate to summer habitat in late March or early April. During the summer, they roost singly or in colonies in forested habitat underneath exfoliating bark, in cavities or in crevices of both live trees and snags (dead trees). Suitable roosts are trees with a diameter at breast height (DBH) of ≥ 3 inches. NLEBs typically give birth and raise their young from June 1 through July 31. During the evening, NLEBs can be found foraging in a variety of forested and non-forested habitats, including wetlands. NLEBs leave summer habitat in mid-August to mid-November and migrate to caves and mines (hibernacula) with constant temperatures, high humidity, and no air currents where they spend the winter. Factors affecting the species include, white-nose syndrome, modifications to bat hibernacula, disturbance of hibernating bats, and loss of forest habitat including forest fragmentation.

Piping Plover
Piping plover was federally listed as a threatened species under the Endangered Species Act during 1986. Piping plovers regularly nest on refuge beaches located at Ninigret, Trustom Pond, and Sachuest Point NWRs. They have not nested on Block Island NWR since 2009. Plovers nesting in Rhode Island begin to arrive in early April and establish territories and remain on nesting sites through July and into August depending on the season. Individual plovers and other migratory shorebirds continue to use refuge beaches and mudflats through mid-September.

Roseate tern
The Northeastern population of roseate tern were listed as endangered on November 2, 1987. Historically roseate terns nested in moderately sized nesting colonies along the coast of Rhode Island up until the 1940s, however, this species no longer nests in Rhode Island. The largest nesting colony is Great Gull Island off of the coast of Long Island, New York.
approximately 27 miles south and west of the project area. In late summer, the majority of the Northeast population stages on Cape Cod before migrating to South America. Roseate terns are regularly recorded on refuge beaches and the adjacent shallow waters during post-breeding dispersals from their nesting colonies from July to August.

**Red Knot**

Effective December 11, 2014, the rufa red knot was federally listed as a threatened species under the Endangered Species Act (79 FR 73706). During their southward migration to wintering areas, red knots typically feed on small clams and mussels found along coastal beaches and intertidal flats. Although the red knot is present as a mid-summer-early fall migrant on Cape Cod and they are occasionally seen in Rhode Island at Napatree Point (13 miles to the west of the project site), there are limited records confirming their presence on refuges in the Rhode Island NWR Complex (primarily from Sachuest Point and Block Island NWR). Fall migration is typically completed by mid-September to early October.

**American burying beetle**

The American burying beetle (ABB) was listed as federally endangered in 1989. The ABB is native to 35 states in the United States and the southern borders of three eastern Canadian provinces. Currently, it is known to occur in only portions of Arkansas, Kansas, Oklahoma, Nebraska, South Dakota, and Texas (not documented since 2008), southwest Missouri, on Block Island off the coast of Rhode Island, and reintroduced populations on Nantucket Island off the coast of Massachusetts.

The Block Island population occurs on glacial moraine deposits vegetated with a post-agricultural maritime scrub plant community. ABBs are most active at night from late spring through early fall (June 1 to October 15). When nighttime temperatures drop below 59°F they bury themselves in the soil to hibernate for the duration of the winter. Reproduction occurs in the spring-early summer. New adult beetles or offspring (called tenerals), usually emerge in summer, over-winter (hibernate) as adults, and comprise the breeding population the following summer (Kozol 1988, p 2; Amaral et al. 2005, pp. 30, 35). ABBs have been occasionally recorded on Block Island NWR; however, the majority of the population occurs off-refuge on the southern portion of the island.

**Sandplain gerardia**

Sandplain gerardia is an annual plant that was listed as endangered in 1988. The plant typically occurs on dry, sandy, poor-nutrient soils of sparsely vegetated sandplain environments and serpentine barrens where it is often found growing with native bunch grasses (especially little bluestem). The range/distribution of *A. acuta* extends from Massachusetts, Rhode Island, Connecticut, and New York, to Maryland. The continuing threats to the species include habitat loss and degradation from development, change in land use, vegetation succession, and the loss of the natural processes that maintain suitable habitat. Sandplain gerardia germinates and grows beginning in mid-May, and flowers in late summer (August-September). There are four known sites in Rhode Island where sandplain gerardia is known to occur. One of these sites includes Trustom Pond NWR, where a population was established from seed in 2007.
Refuge staff will continue to monitor for the presence of threatened or endangered species on the refuge. If they are found on the refuge, the effects of hunting on these species will be evaluated.

VIII. Effect determination and response requested:

A. Listed species/designated critical habitat:

<table>
<thead>
<tr>
<th>Determination</th>
<th>Response Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>No effect/no adverse modification</td>
<td>___ Concurrence</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
<tr>
<td>May affect, but is not likely to adversely affect species/adversely modify</td>
<td>___ Concurrence</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
<tr>
<td>May affect, and is likely to adversely affect species/adversely modify critical</td>
<td>___ Formal Consultation</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
</tbody>
</table>

B. Proposed species/proposed critical habitat:

<table>
<thead>
<tr>
<th>Determination</th>
<th>Response Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>No effect/no adverse modification</td>
<td>___ Concurrence</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
<tr>
<td>Is likely to jeopardize proposed species/Adversely modify proposed critical</td>
<td>___ Conference</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
</tbody>
</table>

C. Candidate species:

<table>
<thead>
<tr>
<th>Determination</th>
<th>Response Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>No effect</td>
<td>___ Concurrence</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
<tr>
<td>Is likely to jeopardize</td>
<td>___ Conference</td>
</tr>
<tr>
<td>(species: __________________________)</td>
<td></td>
</tr>
</tbody>
</table>
IX. Reviewing Ecological Services Office Evaluation:

A. Concurrence___________ Non-concurrence___________

B. Formal consultation required___________

C. Conference required___________

D. Informal conference required___________

E. Remarks (attach additional pages as needed)___________

__________________________  ______________________
Supervisor, New England Field Office    Date