



**U.S. Fish and Wildlife Service**

# **Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges *Hunting and Fishing Plan* *August 2021***



Photo Credit: Pam Denmon/USFWS

***Appendix A – ESV NWR Hunting Compatibility Determination***

***Appendix B – ESV NWR Fishing Compatibility Determination***

***Appendix C – FSH NWR Migratory Bird Hunting Compatibility Determination***

***Appendix D – Environmental Assessment***

***Appendix E – Intra-Service Section 7 Evaluation***

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***Appendix G – Finding of No Significant Impact***

**Eastern Shore of Virginia and Fisherman Island  
National Wildlife Refuges  
Hunting and Fishing Plan**

**August 2021**

**U.S. Fish and Wildlife Service**

**Eastern Shore of Virginia National Wildlife Refuge  
5003 Hallett Circle  
Cape Charles, VA 23310**

Submitted By:  
Project Leader

\_\_\_\_\_  
Signature

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Date

Concurrence:  
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Approved:  
Regional Chief  
National Wildlife Refuge System

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Signature

\_\_\_\_\_  
Date

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Hunting and Fishing Plan

# **EASTERN SHORE OF VIRGINIA AND FISHERMAN ISLAND NATIONAL WILDLIFE REFUGES HUNTING AND FISHING PLAN**

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# **EASTERN SHORE OF VIRGINIA AND FISHERMAN ISLAND NATIONAL WILDLIFE REFUGES HUNTING AND FISHING PLAN**

## **I. Introduction**

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

Eastern Shore of Virginia National Wildlife Refuge (NWR, refuge) was established pursuant to the following authorities: Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 U.S.C. 667b-667d); Refuge Recreation Act (16 U.S.C. 460k-460k-4); and the Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r). Fisherman Island NWR was established through the Transfer of Certain Real Property for Wildlife Conservation Purposes Act, and the Migratory Bird Conservation Act.

The 1,442-acre Eastern Shore of Virginia (ESV) NWR was established to protect, restore, and enhance habitat for forest and shrub-dependent neotropical and temperate migratory birds, while promoting compatible wildlife-dependent recreational opportunities in support of these efforts. The lower Delmarva Peninsula is hemispherically important to migrating songbirds. The narrowing peninsula concentrates millions of southward migrating birds into this small area. Adequate cover and food along the migratory route are essential for the long-term viability of these species. The refuge contains a variety of habitats such as maritime forest, myrtle and bayberry thickets, grassland, fresh and brackish ponds, tidal salt marsh, and beach.

The 1,896-acre Fisherman Island (FSH) NWR is located on Virginia's southernmost barrier island and was established to protect habitat important for migratory birds. Habitat succession has formed a mosaic of vegetative communities capable of withstanding the harsh conditions present on the island. The variety of habitats combined with the geographic location of the island, the accessibility of food, protective shrub and thicket cover, and minimal human disturbance make this island an important stopover location for migratory birds. Fisherman Island, however, is not undisturbed. The Chesapeake Bay Bridge-Tunnel (Bridge-Tunnel), which links mainland Virginia to the eastern shore, cuts through the western part of the island.

Both refuges are managed as part of the Chincoteague National Wildlife Refuge Complex (NWR). Additionally, both refuges are located within the Mid-Atlantic Coastal Plain and play an important role in achieving the objectives of the Atlantic Coast Joint Venture Plan, Partners-In-Flight Mid-Atlantic Coastal Plain Bird Conservation Plan, and the United States Shorebird Conservation Plan.

The Service proposes to expand the hunting program at Eastern Shore of Virginia NWR for big game, upland game, and migratory game birds. We will also open Eastern Shore of Virginia NWR to fishing for the first time, and open Fisherman Island NWR to migratory game bird

hunting for the first time. These actions will provide additional wildlife-dependent recreational opportunities, improve efficiency and management of the refuge's hunting program, and better align with State programs. In addition to the new openings, we propose the following changes as part of an update to the existing hunting plan:

1. *Species changes*: At Eastern Shore of Virginia NWR we will add turkey, upland game (rabbit, squirrel, quail), furbearers (raccoon, opossum, fox, coyote), nuisance species (groundhog, European starling, English sparrow, pigeon), and migratory bird (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) to the current hunting program, which is only white-tailed deer. At Fisherman Island NWR we will open to migratory bird (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) for the first time.

2. *Huntible acreage*: The current white-tailed deer hunt at Eastern Shore of Virginia NWR occurs on 250 acres, and we propose to allow big and upland game hunting on 1,043 acres, and migratory game bird hunting on 383 acres. On Fisherman Island NWR, we proposed to allow migratory bird hunting on 758 acres.

3. *Method of take changes*: The current hunt allows archery and a 1-week firearms (shotgun with buckshot only) for white-tailed deer. Proposed changes would follow State regulations and seasons allowing for use of archery, shotgun, muzzleloader, and rifle (upland game only) in designated areas. Non-toxic ammunition would be required for turkey, upland game, furbearers, and nuisance species in the firearms zone.

4. *Hunter orange*: No proposed changes for either refuge.

5. *Season/date changes*: Hunting on both Eastern Shore of Virginia and Fisherman Island NWRs would occur from September 1 to February 28. This is an overall increase of hunting days from 93 days to 151 days.

6. *Permit Fees*: No FWS Permit Fees. All hunters will be required to read and sign a refuge hunt brochure prior to hunting on the refuge.

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

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

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

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System;

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

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

Public hunting at Eastern Shore of Virginia NWR began in 1993 with an annual white-tailed deer hunt occurring on 185 acres of the refuge. Hunting was established on the refuge for the primary objective of reducing habitat degradation by deer foraging on forest understory and to provide the public with big game hunting opportunities. Since then, hunting opportunities have been expanded to include additional acreage and an extension of the hunting season dates.

Access to Fisherman Island NWR has been closed to the public. In 2004 an archery white-tailed deer hunt was evaluated for compatibility and planned to help reduce deer density and negative impacts on shrub habitat. However, this hunt was never initiated due to concerns with safety over accessing the island from Highway 13 and a subsequent decline in available staff.

## **II. Statement of Objectives**

The objectives of a big game, upland game, furbearer, nuisance species, and migratory bird hunting program and fishing program on Eastern Shore of Virginia and Fisherman Island NWRs are to provide:

- Wildlife-dependent public recreation as mandated by, and according to, Service law and policy;
- The public with recreational opportunities to experience wildlife on more refuge lands and

increase opportunities for hunters/anglers, especially for youth and apprentice hunters;

- Increased access for saltwater angling opportunities;
- Continued reduction in white-tailed deer densities on Eastern Shore of Virginia NWR to maintain forest and shrub habitat quality consistent with refuge purposes for the benefit of migratory birds; and
- Support for reduction of nuisance species that have negative impacts on nesting migratory birds.

Hunting is consistent with the refuges' Comprehensive Conservation Plan (CCP) broader goals and objectives to:

- Increase the availability of forage and cover habitat for neotropical and temperate migrant birds and migrating monarch butterflies;
- Maintain the long-term productivity, integrity, and function of the marsh, beach, and interdunal communities;
- Actively participate in the conservation of healthy hardwood, understory, and grassland habitat for neotropical and temperate migratory birds during future development throughout Northampton County; and
- Provide wildlife-dependent recreational opportunities and community outreach with an emphasis on educating the public about the critical role the Delmarva Peninsula serves for neotropical and temperate migratory birds and migrating monarch butterflies.

### **III. Description of Hunting and Fishing Program**

#### **A. Areas to be Opened to Hunting and Fishing**

At the Eastern Shore of Virginia NWR, the Archery Only unit would be open for big game (white-tailed deer and turkey) and furbearers (raccoon, opossum, fox, and coyote). The Bull and Dixon tracts would be open to archery and firearms for big game, furbearers, upland game (rabbit, squirrel, and quail), migratory birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow), and nuisance species (groundhog, European starling, European sparrow, pigeon). Raccoon and Skidmore Islands would be open to migratory birds. The GATR unit, an in-holding of the Mockhorn Island WMA, would follow the surrounding State WMA regulations and would include a State-managed hunt for spring turkey, deer (archery and muzzleloader only), waterfowl, rail, and woodcock. In total, 1,185 acres will be open to hunting.

Firearms hunting would occur on the Dixon tract (83 acres), Bull tract (184 acres), Skidmore Island (84 acres) and the refuge-owned portion of Raccoon Island (58 acres) which totals 409 acres. Archery hunting would occur on all other refuge units open to hunting, on a total of 769 acres. These units include the ESV Marsh tract (186 acres), Wise Point Tip tract (158

acres), Southern Tip tract (66 acres), Headquarters tract (116 acres), Central Shrubland tract (100 acres), Management Unit 10 (72 acres), Management Unit 13 (60 acres), and Management Unit 14 (11 acres). The GATR unit (7 acres) would follow the surrounding State WMA regulations and would include a State-managed hunt for spring turkey, deer (archery and muzzleloader only), waterfowl, rail, and woodcock. No hunting zones (firearms or archery) would occur near the Visitor Center, Headquarters, staff quarters and bunkhouse, Maintenance Area and parking area/trailhead of Bull tract (57 acres). There would be no hunting in the Latimer tract (26 acres).

Fishing would occur by access from designated areas only, Wise Point Boat Dock (phased opening) and from the shore of Skidmore Island and Bull tract. Refer to Map A – Eastern Shore of Virginia NWR Hunt Area (with proposed hunting units for firearms, archery, and GATR unit).

On Fisherman Island NWR, migratory bird hunting would occur in areas of the marsh east of Highway 13 (758 acres) with access and hunting from a boat only. If a refuge, or portion thereof, has been designated, acquired, reserved, or set apart as an inviolate sanctuary, we may only allow hunting of migratory game birds on no more than 40 percent of that refuge. Refer to Map B – Fisherman Island NWR Migratory Bird Hunt Area.

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

Hunting at Eastern Shore of Virginia and Fisherman Island NWRs will be permitted from September 1 to February 28. Hunting hours and season dates within this time period will be in accordance with State regulations.

Migratory game bird hunting is permitted at Eastern Shore of Virginia NWR Dixon and Bull tracts, Skidmore and Raccoon Islands, and Fisherman Island NWR for waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow. At Fisherman Island NWR hunting and access for migratory birds is by boat only, limiting hunting to accessible areas of refuge marshes and creeks. Sunday hunting is permitted for all migratory birds. These regulations do not apply on the GATR Unit at Eastern Shore of Virginia NWR. This unit will follow surrounding WMA regulations and hunting is only permitted for waterfowl, rail, and woodcock.

Furbearer, upland game, and nuisances species hunting is permitted on the Bull and Dixon tracts. Hunting for these species would be on a first-come, first-served basis with the number of hunters limited to available designated parking spaces. Use of non-toxic ammunition will be required within the firearms zone. Upland game hunting will not be permitted on Sundays or at night.

Big game hunting is permitted at Eastern Shore of Virginia NWR only. Hunting is permitted for white-tailed deer and wild turkey. Hunting will be on a first-come, first-served basis with number of hunters limited to available designated parking spaces. Spring turkey hunting will be allowed and initially targeted to hunts for youth and apprentice hunters to assist the State with hunter recruitment and retention efforts, and this hunt will require the use of non-toxic shot. The use of non-toxic ammunition for white-tailed deer will be encouraged upon

implementation of this plan, and requirement for use will be considered in the future. These hunts will occur on all firearm and archery hunt units of the refuge with the exception of Raccoon and Skidmore Islands. Participation and selection of targeted hunt participants will initially be managed by the Virginia Department of Wildlife Resources (VDWR) and possibly other partners such as the National Wildlife Turkey Federation. Big game hunting will not be permitted on Sundays per State law.

Fishing would occur year-round at Eastern Shore of Virginia NWR and would be in accordance with State seasons for each species. Fishing access would be permitted only from designated improved areas at the Wise Point Boat Ramp and the shoreline of Bull tract and Skidmore Island. Refer to Map A. Fishing at the Wise Point Boat Ramp would be phased in over time to reduce conflicts with the commercial waterman already permitted to use the dock.

### **C. Permit Requirements**

Hunters will be required to follow State regulations for license requirements for hunting. In addition, they will be required to read, sign and carry a signed refuge hunt brochure. See “Hunter Permit Application and/or Registration Procedures” below.

### **D. Consultation and Coordination with the State**

The refuge reviewed the operations and regulations for neighboring State WMAs and refuges to find consistency where possible. The refuge met with the State on January 14, 2020 to discuss alignment of hunting regulations and collaboration opportunities for recruitment and retention efforts. In addition, the refuge reached out to the State area biologist on June 11, 2020, to discuss this hunt plan and specific changes to the hunt and fish program. On December 10, 2020, the State Executive Director provided a letter of support for restrictions on use of lead ammunition for hunting, and comments were incorporated as part of this plan. We requested review from the State regional office that covers our area to help adjust our plan to align, where possible, with State management goals, specifically if they would include the GATR unit of the refuge with State-owned and managed GATR WMA. In addition, we requested that the State manage a spring turkey hunt that targets participation by youth and apprentice hunters to help contribute to State R3 goals. We continue to consult and coordinate on specific aspects of the Hunting and Fishing Plan.

Eastern Shore of Virginia NWR and VDWR will continue to work together to ensure safe and enjoyable recreational hunting and fishing opportunities. Hunter participation and harvest data are collected by the State. Both Federal and State entities work together to patrol the refuge, safeguard hunters, visitors, and both game and non-game species.

### **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 officers, Special Agents, State game wardens, and the local Sheriff’s Department may assist the Chincoteague NWRC (or Zone) FWOs.

The following methods will be used to control and enforce hunting regulations:

- The refuge will provide a brochure including a map that delineates hunt areas and designated parking on the refuge and will require hunters to sign and carry the brochure while engaged in hunting on the refuge.
- Refuge Zone law enforcement staff will randomly check hunters and anglers for compliance with Federal and State Laws.

## **F. Funding and Staffing Requirements**

Expansion of the hunting and fishing programs will result in additional administration costs for Eastern Shore of Virginia NWR, including incurred salary and operational costs such as brochures, signs, installing and maintaining new parking areas, etc. and totals approximately \$28,000. Operational funds are used to implement these activities. It is anticipated that funding would continue to be sufficient to continue the proposed hunting or fishing programs at both refuges in the future.

**Table 1. Estimated Costs for Hunting and Fishing at Eastern Shore of Virginia and Fisherman Island NWR**

<b>Identifier</b>	<b>Cost</b>
Brochures/Sign Maintenance	\$2,000
Hunt management, monitoring resource impacts	\$1,000
Parking area maintenance, etc.	\$9,000
Law Enforcement and administration costs	\$14,000
Dock maintenance	\$2,000
<b>Total Annual Cost</b>	<b>\$28,000</b>

## **IV. Conduct of the Hunting and Fishing Program**

### **A. Permit Procedures**

All hunters will be required to read and sign a refuge hunt brochure prior to hunting on either refuge. Brochures will be available on the refuge website:

[www.fws.gov/refuge/eastern\\_shore\\_of\\_virginia/](http://www.fws.gov/refuge/eastern_shore_of_virginia/), and at the Refuge Headquarters, 5003 Hallett Circle, Cape Charles, VA 23310, phone (757) 331-2760.

Hunting will be on a first-come, first-served basis with number of hunters limited to available designated parking spaces for white-tailed deer, upland game, furbearers, nuisance species, and migratory bird hunters. The spring turkey hunt will be managed by VDWR and partners for youth and apprentice hunters. This use will take place on all units of Eastern Shore of Virginia NWR, excluding Raccoon and Skidmore Islands. The refuge will host this hunt but does not play a role in hunter application, registration, or selection processes.

## **B. Refuge-Specific Hunting and Fishing Regulations**

To ensure compatibility with refuge purposes and the mission of the Refuge System, hunting must be conducted in accordance with State and Federal regulations, supplemented by refuge-specific regulations (50 CFR §32.65) and information sheets/brochures. Stipulations are detailed in the Hunting and Fishing Compatibility Determinations (CD) (Appendix A, B and C). Listed below are refuge-specific regulations or procedures that pertain to hunting and fishing on Eastern Shore of Virginia NWR and Fisherman Island NWR as of the date of this plan. These regulations may be modified as conditions change or if refuge expansion occurs.

**Migratory Game Bird Hunting.** We will allow hunting of migratory game birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) in designated units on Eastern Shore of Virginia NWR and Fisherman Island NWR in accordance with State regulations and subject to the following conditions:

1. Hunters must have in possession a signed refuge hunt brochure.
2. Sunday hunting will only be allowed for waterfowl and rails (per State regulations on public land).
3. Access and hunting on Fisherman Island NWR will be by boat only. Hunters must hunt from their boat and temporary blinds outside of the boat are not allowed.

**Upland Game Hunting.** We will allow hunting of rabbit, squirrel, and quail in designated units located on Eastern Shore of Virginia NWR in accordance with State regulations and subject to the following conditions:

1. Hunters must have in possession a signed refuge hunt brochure.
2. We will allow the use of firearms and archery tackle, as defined by the State, in designated Firearms Units (refer to Map A).
3. We require the use of non-toxic ammunition for hunting all upland game species in the Firearms Units.
4. No Sunday or night hunting allowed.
5. Use of dogs is permitted in Firearm Units only.

**Furbearer Hunting.** We will allow hunting of raccoon, opossum, fox, and coyote in designated units subject to the following conditions:

1. Hunters must have in possession a signed refuge hunt brochure.
2. We will allow the use of archery tackle as defined by the State in Archery Units.
3. We will allow the use of firearms and archery tackle, as defined by the State, in

designated Firearms Units (refer to Map A).

4. We require the use of non-toxic ammunition for hunting all furbearer species in the Firearms Units.
5. Use of portable tree stands are permitted and must be removed daily.
6. No Sunday or night hunting allowed.
7. Use of dogs is permitted in Firearm Units only.

Nuisance Species. We will allow hunting of groundhog, European starling, English sparrow, and pigeon in designated units subject to the following conditions:

1. Hunters must have in possession a signed refuge hunt brochure.
2. We will allow the use of archery tackle as defined by the State in Archery Units.
3. We will allow the use of firearms and archery tackle, as defined by the State, in designated Firearms Units (refer to Map A).
4. We require the use of non-toxic ammunition for hunting all nuisance species in the Firearms Units.
5. No Sunday or night hunting allowed.

Big Game Hunting. We will allow hunting of white-tailed deer and spring turkey (managed State R3 hunt) in designated Units located on the Eastern Shore of Virginia NWR in accordance with State regulations and subject to the following conditions:

1. Hunters must have in possession a signed refuge hunt brochure.
2. We will allow the use of archery tackle as defined by the State in Archery Units.
3. We will allow the use of firearms and archery tackle, in accordance with State regulations, in designated Firearms Units (refer to Map A). Northampton County ordinance *does not* allow use of rifle for deer hunting.
4. We require the use of non-toxic shot when hunting turkey in the Firearms Units.
5. Use of portable tree stands are permitted and must be removed daily.
6. We prohibit deer drives. We define “drive” as four or more persons involved in the act of chasing, pursuing, disturbing, or otherwise directing deer so as to make the animal more susceptible to harvest.

Sport fishing. We allow sport fishing on designated areas of Eastern Shore of Virginia NWR

subject to the following conditions:

1. Fishing will be on a first-come, first-served basis with the number of anglers limited to available designated parking spaces at the Wise Point Boat Ramp and at the Bull tract parking area.
2. Anglers utilizing the parking area at the Wise Point boat ramp must pay the current daily use fee (\$10/daily use or \$120/annual pass - subject to change).

### **C. Relevant State Regulations**

All State of Virginia (and Northampton County) hunting and fishing regulations apply. Refer to the annual State of Virginia DWR hunting and trapping regulations digest for more information (available at <https://dwr.virginia.gov/hunting/regulations/>).

### **D. Other Refuge Rules and Regulations**

- Hunters must park in designated areas identified on the map.
- Hunters are required to follow State regulations and procedures for check-in and reporting of harvested game.
- No hunting within 100 feet (30.5 meters) of any building, road or trail or in areas designated on the map as “No Hunt” zones.
- Hunting closed to the public during the Freedom Hunters annual deer hunt (dates TBD).
- We prohibit nocked arrows and loaded firearms outside of the designated hunting areas.
- Night hunting will not be allowed. Hunting hours will occur in accordance with established State regulations. Hunters may access the refuge 2 hours before sunrise and must exit the refuge no later than 2 hours after sunset.
- Hunting for any species will be in accordance with State dates *and* limited between September 1 to February 28 on both Eastern Shore of Virginia and Fisherman Island NWRs (except for spring turkey State-managed hunt).
- Use of dogs will be limited to Firearm Units (refer to map) for the purpose of migratory game bird and upland game hunting (no chase dogs allowed for pursuit of deer – Northampton County Regulation). Dogs must be under the hunter's control at all times.
- We allow holders of a signed refuge hunt brochure (big game, upland game, furbearers, nuisance species, and migratory bird) to access areas of the refuge typically closed to the non-hunting public. All occupants of a vehicle or hunt party must possess a refuge hunt brochure and be actively engaged in hunting. We allow an exception for those persons aiding a disabled person who possesses a valid State-issued Commonwealth of Virginia

Disabled Resident Lifetime License or Commonwealth of Virginia Resident Disabled Veteran's Lifetime License.

## **V. Public Engagement**

### **A. Outreach for Announcing and Publicizing the Hunting and Fishing Program**

The refuge will contact conservation partners, adjacent landowners, the Chesapeake Bay Bridge Tunnel Authority, and issue a press release to the local newspaper, Eastern Shore Post. Special announcements and articles may be released in conjunction with hunting seasons on the Chincoteague NWR Complex social media page. In addition, information about the hunt will be available at Eastern Shore of Virginia NWR headquarters and on the refuge website.

### **B. Anticipated Public Reaction to the Hunting and Fishing Program**

Based on the comments received during the previous Hunt Plan and CCP process (1992 and 2003), and that hunting has been allowed on the Eastern Shore of Virginia NWR for more than 27 years, we expect little negative public reaction. Hunting is an important economic and recreational use of Virginia's natural resources. Some individuals may have concerns of conflicts with other public uses of the same areas simultaneously on the refuge (i.e., birders, photographers, etc.). Some commercial watermen may have concern with migratory bird hunting occurring on Fisherman Island, as it may result in increased boat traffic in commercial clamming and oyster beds.

We released the draft plan, Compatibility Determinations (CD) for hunting and fishing, and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge website. No meetings were held due to COVID-19 public gathering safety guidance. During the comment period, we received 27 letters through email from individuals and on behalf of various organizations. A summary of all substantive comments, and our responses, can be found in Appendix F to this Hunting and Fishing Plan.

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

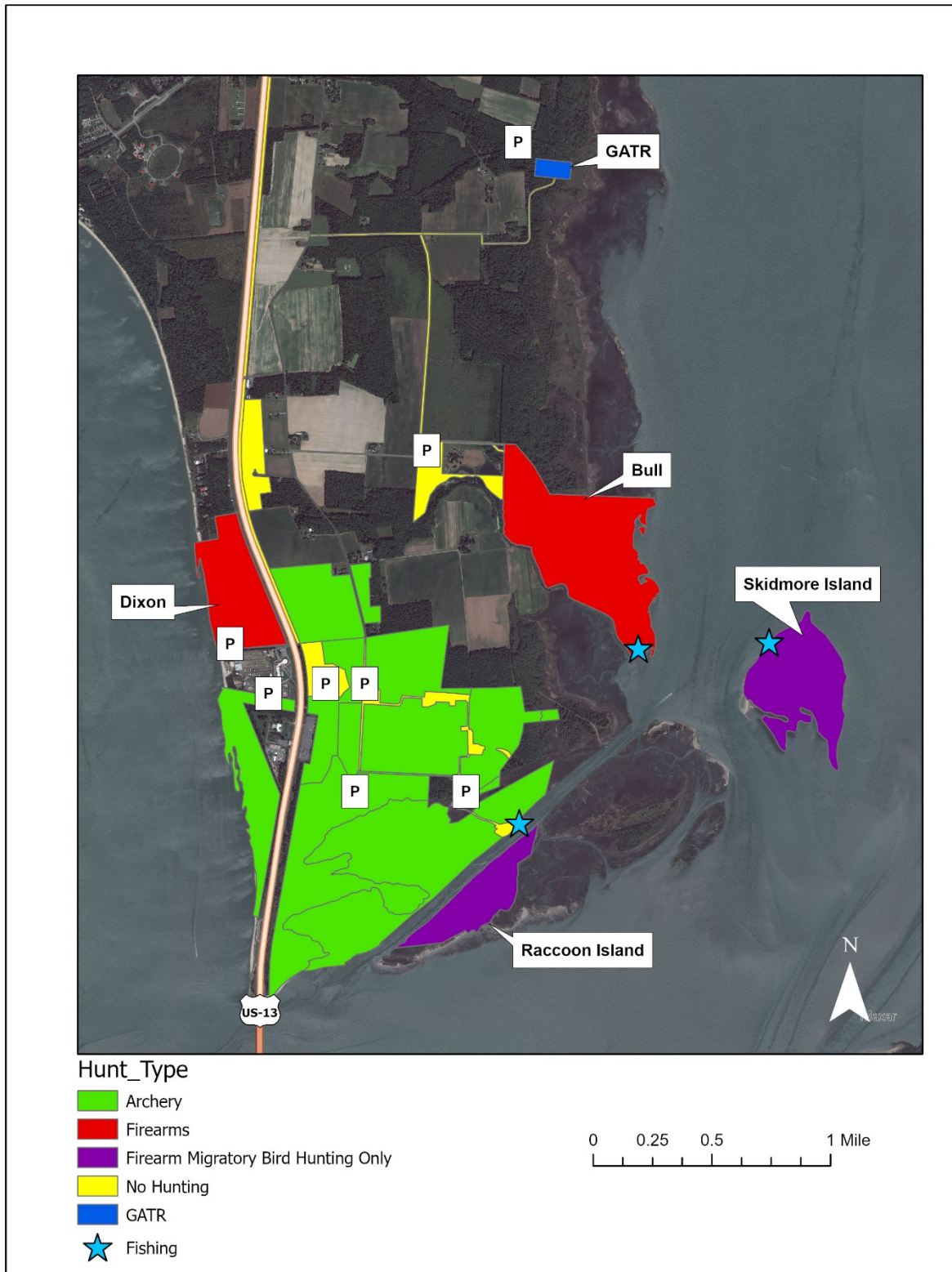
General information regarding hunting and other wildlife-dependent public uses can be obtained at the Eastern Shore of Virginia NWR headquarters located at 5003 Hallett Circle, Cape Charles, VA 23310, or by calling (757) 331-2760. Dates, forms, hunting unit directions, maps, and brochure requirements for the hunt will be available on the station website at: [www.fws.gov/refuge/eastern\\_shore\\_of\\_virginia/](http://www.fws.gov/refuge/eastern_shore_of_virginia/) and at the Refuge Headquarters and Visitor Center. Information on Virginia State hunting regulations and seasons is available from the VDWR office located at P.O. Box 90778, Henrico, VA 23228-0778, by calling (804) 367-1000, or online at <https://dwr.virginia.gov/>. In addition, contact information for the Virginia Aquarium 24-hour Stranding Hotline (757) 385-7575 will be available to the public via posting on the refuge kiosk located at the boat ramp to facilitate contact for assistance in the event an incidental catch or vessel strike of a sea turtle occurs.

## **VI. Compatibility Determination**

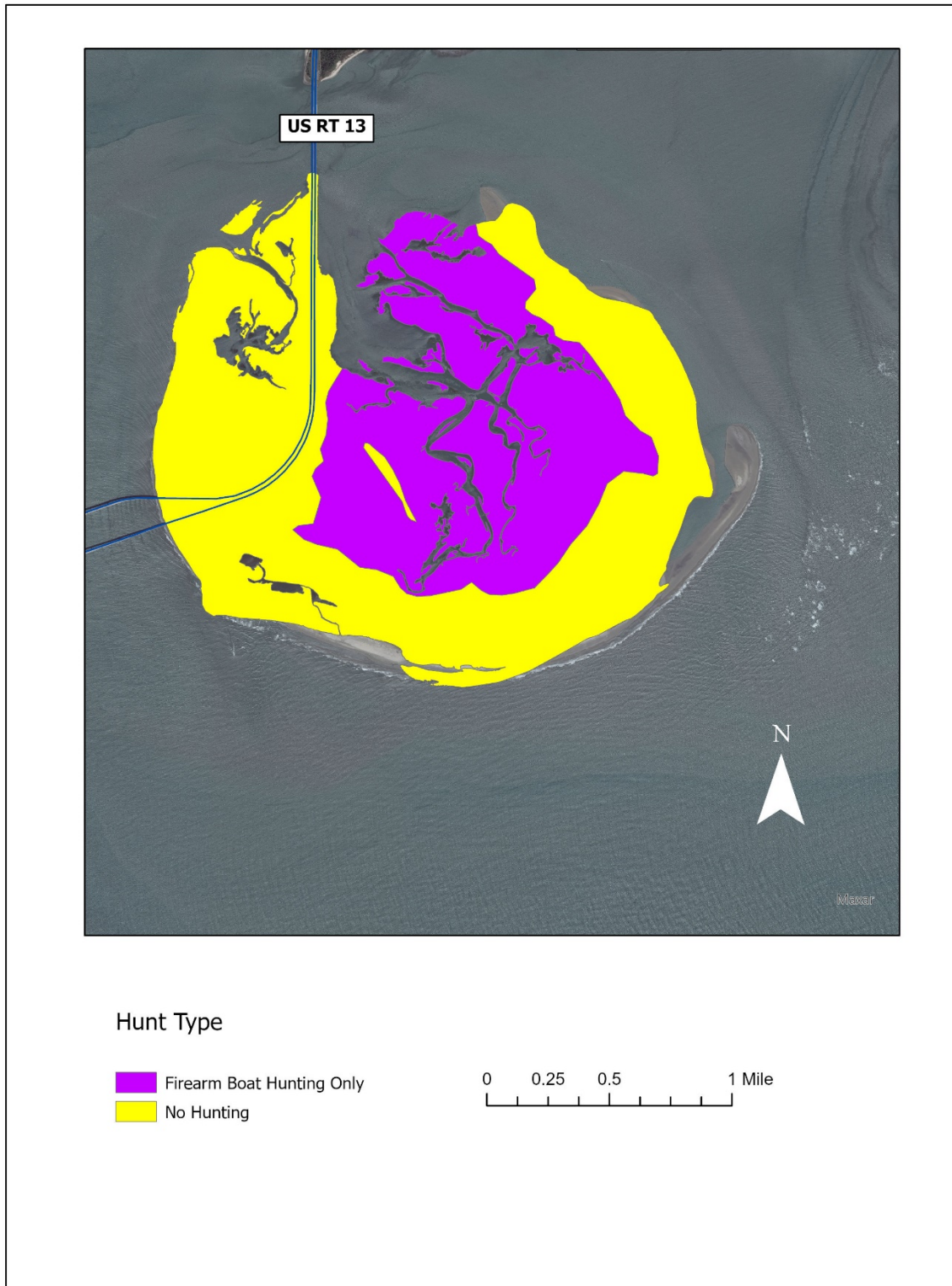
Hunting and all associated program activities proposed in this plan are compatible with the purposes of the refuge. See attached Hunting and Fishing Compatibility Determinations (Appendix A, B, and C).

## VII. Maps

Map A. Eastern Shore of Virginia NWR Hunt Area



Map B. Fisherman Island NWR Migratory Bird Hunt Area



## **APPENDIX A. COMPATIBILITY DETERMINATION**

**USE:** Hunting (Big game, upland game, furbearers, migratory game bird, and nuisance species hunting)

**REFUGE NAME:** Eastern Shore of Virginia National Wildlife Refuge

**DATE ESTABLISHED:** August 6, 1984

### **ESTABLISHING and ACQUISITION AUTHORITIES:**

Eastern Shore of Virginia National Wildlife Refuge (NWR, refuge) was established under the Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 U.S.C. 667b-667d), the Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r), and the Refuge Recreation Act (16 U.S.C. 460k-460k-4).

### **REFUGE PURPOSE(S):**

“...authorizing land to be transferred without reimbursement to the Secretary of the Interior if the land has particular value for migratory birds.” 16 U.S.C. 667b (Transfer of Certain Real Property for Wildlife Conservation Purposes Act).

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

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

### **NATIONAL WILDLIFE REFUGE SYSTEM MISSION:**

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

### **DESCRIPTION OF USE:**

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

The use is public hunting of big game (white-tailed deer and turkey), upland game (rabbit, squirrel, and quail), furbearers (raccoon, opossum, fox, coyote), migratory game birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) and nuisance species (groundhog, European starling, English sparrow, and pigeon) on the Eastern Shore of Virginia National Wildlife Refuge (NWR). Hunting was identified as one of six priority public uses of the Refuge System by the Refuge System Administration Act of 1966, as amended by the

Refuge System Improvement Act of 1997 (Public Law 105-57), when found to be compatible.

**(b) Where would the use be conducted?**

At the Eastern Shore of Virginia NWR, the Archery Only unit would be open for big game (white-tailed deer and turkey) and furbearers (raccoon, opossum, fox, and coyote). The Bull and Dixon tracts would be open to archery and firearms for big game, furbearers, upland game (rabbit, squirrel, and quail), migratory birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow), and nuisance species (groundhog, European starling, European sparrow, pigeon). Raccoon and Skidmore Islands would be open to migratory birds. The GATR unit, an in-holding of the Mockhorn Island WMA, would follow the surrounding State WMA regulations and would include a State-managed hunt for spring turkey, deer (archery and muzzleloader only), waterfowl, rail, and woodcock. In total, 1,185 acres will be open to hunting. If a refuge, or portion thereof, has been designated, acquired, reserved, or set apart as an inviolate sanctuary, we may only allow hunting of migratory game birds on no more than 40 percent of that refuge.

Firearms hunting would occur on the Dixon tract (83 acres), Bull tract (184 acres), Skidmore Island (84 acres) and the refuge-owned portion of Raccoon Island (58 acres) which totals 409 acres. Archery hunting would occur on all other refuge units open to hunting, on a total of 769 acres. These units include the ESV Marsh tract (186 acres), Wise Point Tip tract (158 acres), Southern Tip tract (66 acres), Headquarters tract (116 acres), Central Shrubland tract (100 acres), Management Unit 10 (72 acres), Management Unit 13 (60 acres), and Management Unit 14 (11 acres). The GATR unit (7 acres) would follow the surrounding State WMA regulations and would include a State-managed hunt for spring turkey, deer (archery and muzzleloader only), waterfowl, rail, and woodcock. No hunting zones (firearms or archery) would occur near the Visitor Center, Headquarters, staff quarters and bunkhouse, Maintenance Area and parking area/trailhead of Bull tract (57 acres). There would be no hunting in the Latimer tract (26 acres).

**(c) When would the use be conducted?**

Hunting would be permitted from September 1 to February 28. Season dates within this time period will be in accordance with State regulations. The only exceptions are for spring turkey, which will be a State-managed hunt during the State spring season from mid-April through early May. Hunting will occur in accordance with State regulations and hunters may access the refuge 2 hours before sunrise until 2 hours after sunset. Night hunting will not be allowed. Sunday hunting is only allowed for waterfowl and rails (as per State regulations on public land).

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

Hunting would be permitted in designated areas of the refuge in accordance with State and refuge-specific regulations. Hunters would be required to read and sign a refuge hunt brochure before hunting on the refuge. Brochures will be available on the refuge website and at an onsite hunt kiosk near the refuge headquarters. Hunting will be on a first-come, first-served basis with number of hunters limited to available designated parking spaces (refer to Map A). Hunters accessing the refuge by boat for migratory bird hunting can also utilize the parking at Wise Point boat ramp (\$10 daily use fee or \$120 annual pass - subject to change).

Big game hunting would be subject to the following conditions: the use of firearms tackle will be

allowed in the designated firearm units, however, Northampton County ordinance currently does not allow use of rifle for deer hunting. Hunters may use all State defined legal tackle for deer in firearm units. The use of portable tree stands is permitted; however, they must be removed daily. Deer drives are prohibited. We define a “drive” as four or more persons involved in the act of chasing, pursuing, disturbing, or otherwise directing deer so as to make the animal more susceptible to harvest. A spring turkey hunt will be offered and managed by VDWR for youth and apprentice hunters.

Upland game, furbearers, and nuisance species hunting would be subject to the following conditions: the use of portable tree stands are permitted; however, they must be removed daily. Sunday hunting and night hunting will not be allowed (as per State regulations on public land) and the use of dogs is permitted in the firearm units only.

For migratory bird hunting, Sunday hunting will only be allowed for waterfowl and rails (as per State regulations on nearby public land).

**(e) Why is the use being proposed?**

Hunting is a healthy, traditional recreational use of renewable natural resources deeply rooted in America’s heritage, and it can be an important wildlife management tool. One of the primary goals of the Eastern Shore of Virginia NWR’s Comprehensive Conservation Plan (CCP) (2004) is to increase the availability of forage and cover habitat for neotropical and temperate migrant birds and monarch butterflies. The refuge deer hunt also achieves the biological objective of reducing the density of the white-tailed deer population. High densities of deer can cause serious habitat degradation by heavily browsing on forest understory and shrubs. Heavily browsed vegetation leaves less food and cover habitat for neotropical and temperate migratory birds, a trust resource which the refuge is focused on protecting. A controlled refuge hunt will help keep the deer population at a level that will reduce impacts to migratory bird habitat.

The purpose of the proposed action will bring the refuge into compliance with direction detailed in the CCP (2004). Furthermore, 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 promote one of the priority public uses of the Refuge System, and providing opportunities for visitors to hunt will promote stewardship of our natural resources and increase public appreciation and support for the refuge.

**AVAILABILITY OF RESOURCES:**

Cost analysis for administration and management of the hunt is \$15,000. Adequate Service resources currently exist and can be provided with existing personnel to properly develop, operate, and maintain the hunt and will not detract from refuge purposes or the Refuge System mission.

Resources involved in management and administration of the hunt include personnel to provide annual updates to the hunt brochure, website information, and hunt kiosk; personnel to maintain

refuge boundary markers in the field; Law Enforcement to enforce regulations as needed; staff and equipment to create designated parking and install signage in new units (see Table A-1).

**Table A-1. Estimated Costs for Hunting at Eastern Shore of Virginia NWR**

<b>Identifier</b>	<b>Costs</b>
Brochures/Sign Maintenance	\$2,000
Hunt management, monitoring resource impacts	\$1,000
Signage (parking, etc.)	\$5,000
Law Enforcement	\$7,000
<b>Total Annual Cost</b>	<b>\$15,000</b>

Monitoring of regional populations to determine harvest regulations will be conducted by the State. In addition, we will request State resources to manage the spring turkey hunt.

### **ANTICIPATED IMPACTS OF THE USE:**

The following are anticipated impacts for hunting on Eastern Shore of Virginia NWR. For more specific impacts related to all proposed changes detailed in the Hunting and Fishing Plan, please refer to the Environmental Assessment (Appendix D).

Hunting has been permitted on the refuge since 1993 with no discernible adverse impacts to resources. Hunting provides wildlife-dependent recreational opportunities and can foster a better appreciation and more complete understanding of the wildlife and habitats associated with the southern Delmarva Peninsula landscape. This could result in more widespread and stronger support for wildlife conservation, the refuge, the Refuge System, and the Service.

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

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

#### *White-tailed deer*

Deer hunting on the refuge has been occurring since 1993 and annual harvest numbers on the refuge remain relatively high (e.g., 2018: 55 deer harvested; 2019: 72 deer harvested). We anticipate a small increase in the number of deer harvested annually, but this will not meaningfully affect the current overpopulation of deer in the county. Deer may avoid hunting areas due to increased pressure, but this will not create negative impacts to the population.

### *Upland game*

We anticipate small harvest levels of these species and only minor impacts to their population levels. The majority of land use surrounding the refuge lands consists of agriculture and residential areas where populations of these species proliferate on the broader surrounding landscape. Any impacts will be short-term and minor and will mostly include changes in habitat use by individuals.

### *Furbearers*

We anticipate small harvest levels of these species and only minor impacts to their population levels. The majority of land use surrounding the refuge lands consists of agriculture and residential areas where populations of these species proliferate on the broader surrounding landscape. Any impacts will be short-term and minor and will mostly include changes in habitat use by individuals. In addition, hunting furbearers may have a positive effect on nesting migratory birds.

### *Nuisance Species*

We anticipate small harvest levels of these species and only minor impacts to their population levels. The majority of land use surrounding the refuge lands consists of agriculture and residential areas where populations of these species proliferate on the broader surrounding landscape. Any impacts will be short-term and minor and will mostly include changes in habitat use by individuals.

### *Migratory game birds*

Opening 40 percent of the marshes to waterfowl hunting will have some short-term disturbance to the waterfowl resting and feeding in the area. Marsh areas are prone to disturbance and increased foot traffic to access hunting sites will result in trampling of sensitive marsh plants in frequently used areas (Lomnický, Herlihy, and Kaufmann 2019). There will be few long-term impacts to waterfowl populations, since most of the marsh area on the Eastern Shore is owned by the State and is already open to migratory bird hunting.

### *Non-target Species*

Located on the Delmarva Peninsula, Eastern Shore of Virginia NWR hosts a wide diversity of both resident and migratory wildlife. The refuges are important stopover sites in the Atlantic flyway and provide important habitat for resident species in an area with rising development trends. Many common bird species will be in areas adjacent to hunting, in both upland and wetland areas, and they may relocate to other areas of the refuge during hunting.

Thirty-four mammal species are recorded on the lower Delmarva Peninsula and 9 species of bats may be found on or around the refuges. Frogs and toads that can be found at Eastern Shore of Virginia NWR include the northern spring peeper, southern green frog, southern leopard frog, Fowler's toad, and eastern narrow-mouthed toad. The freshwater and estuarine turtles that inhabit the refuge include the eastern painted turtle, spotted turtle, eastern mud turtle, northern red-bellied cooter, eastern box turtle, eastern snapping turtle, and the estuarine northern diamond-backed terrapin. The red-backed salamander is also commonly found.

Finfish of primary importance found near the refuges include the black drum, red drum, bluefish,

winter flounder, summer flounder, menhaden, spot, Atlantic croaker, grey trout, mullet, spotted seatrout, and striped bass.

Some disturbance of non-target wildlife species and impacts on vegetation may occur. While not targeted for hunting or fishing, other wildlife may experience disturbance, avoidance of areas, habitat damage, or injury as a result of the use (Cole 1990). Hunting is less likely to adversely affect these species given the time of year the activities take place (September 1 through February 28) and where the uses occur on the refuge. In addition, hunting will not be permitted on Sunday for big and upland game, and will not be permitted at night for any species.

Opening approximately 85 percent of refuge lands to furbearer hunting should result in fewer predator species (i.e., coyote, fox, and raccoons) that have negative impacts on nesting migratory birds on the refuge. Populations of these species prey on eggs and disturb nesting birds resulting in reduced productivity. Allowing harvest of these species may result in desirable, positive outcomes of decreased predation on nesting migratory birds.

#### *Threatened and Endangered Species*

Species that may be found on the refuge include Northeastern beach tiger beetle, piping plover, red knot, roseate tern, black rail, Northern long-eared bat, Atlantic sturgeon, bald eagle, and five species of sea turtles. While not federally listed as a threatened or endangered species, bald eagles (*Haliaeetus leucocephalus*) can be found nesting on or near the refuge, and are protected by the Bald and Golden Eagle Protection Act. The Service's Virginia Field Office has designated Bald Eagle focal areas for the State, but none fall within refuge lands.

Hunting is not likely to adversely affect these species given the time of year the activities take place (September 1 through February 28) and where the uses occur on the refuge. Present activities do not have adverse impacts on any threatened or endangered species. There is potential for disturbance from either walking, dogs, or noise to migrating red knot, roseate tern, piping plover, Northern long-eared bat, black rail and nesting sea turtles, which are addressed in more detail in the Intra-Service Section 7 analysis (see Appendix E to the Hunting and Fishing Plan). However, these impacts are minimized, as the refuge would limit hunting seasons and provide archery and no-hunting areas that will assist to disperse impacts. Potential impacts to Atlantic Sturgeon will be coordinated separately with the National Oceanic and Atmospheric Administration (NOAA). The refuge does not anticipate any impacts to Atlantic Sturgeon as a result of the hunting and fishing program. Hunting would not be permitted on Sunday for big and upland game and would not be permitted at night for any species.

We will avoid potential adverse impacts to bald eagles by following management guidelines developed in consultation with the State, including sight and distance setbacks from nests and concentration areas that may develop, and time-of-year restrictions. Bald eagle nesting season starts around December 15 and continues throughout the times of most winter and spring hunts. Hunting activities on the refuge end February 28. A historically active bald eagle nest on Eastern Shore of Virginia NWR is within an area that has been open to white-tail deer hunting using shotguns which will now be an archery only hunt thereby reducing noise disturbance.

Lead ammunition and tackle can be used on parts of the refuge during the hunting and fishing

seasons as detailed in the Hunting and Fishing Plan, in accordance with State and refuge-specific regulations. The amount of lead introduced to the environment as a result of hunting; however, is negligible. Upon implementation of this plan, lead ammunition may only be used for hunting white-tailed deer in designated Firearms Units (83 acres) during the appropriate season (usually November to January). Use of non-toxic ammunition will be encouraged initially and requirement may be considered in the future for white-tailed deer hunting on the refuge. We require the use of non-toxic ammunition for hunting all migratory game birds, turkey, furbearers, nuisance species and upland game species in the Firearms Units. The above listed species would not be exposed to lead ammunition, as they are either not present in the Firearms Units, or are not present on the refuge during the hunting season. Furthermore, many participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic ammunition and will educate hunters about lead. In addition, we will consider the requirement of non-toxic ammunition for hunting white-tailed deer in the future. As a result, there are no anticipated adverse impacts to any of the above listed species.

#### *Habitat and Vegetation*

Habitat types on Eastern Shore of Virginia NWR include forests, shrub/scrub, grasslands, and salt marsh. Hunting will be permitted for additional species over a larger geographical area. Waterfowl hunting may result in trampling of wetland vegetation, alteration of drainage patterns, and creation of trails (Liddle 1980). Upland game hunters will likely traverse a larger area of the refuge than other hunters in pursuit of game. Expanded areas for white-tailed deer hunting will disperse the current impacts over a greater area. However, all of these impacts will be reduced, as vegetation may be dormant or entering dormancy during the hunting seasons. Additionally, opening new acres of the refuge spreads these impacts out, resulting in less observable affects overall.

Heavily browsed forest understory and shrub vegetation leaves less food and cover for migratory birds, a resource that the refuge is focused on protecting. Reducing the deer population will decrease the browse effects on vegetation (Horsley et. al 2003) and enable the forest understory to grow and produce more food and cover for migrants. This will also provide additional habitat for small mammals, reptiles, and invertebrates.

#### *Visitor Use and Experiences*

Eastern Shore of Virginia NWR is open to all six priority public uses of the Refuge System. In 2017, Eastern Shore of Virginia NWR had 98,698 recreational visits. Of those visits, 286 were for hunting, 19,570 were for fishing, and the remaining 78,842 were for non-consumptive recreational uses (USFWS 2017). With the expanded hunting program at Eastern Shore of Virginia NWR, the likelihood for conflicts between hunters and conflicts with non-consumptive users increases. Public outreach, zoning, and 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 use will not have significant impacts to other user groups. Impacts to other users will primarily be limited to the hunting season and are minimized by time and space zoning that lessens the interactions between hunters, anglers and other wildlife-dependent users. There will be no hunting within 100 feet of any building, road, trail, and areas designated as No Hunt zones.

### *Summary of Impacts*

The refuge hunt program is designed to be sustainable through time, given relatively stable conditions, particularly because of close coordination with the VDWR. Accumulative impacts of hunting on big game, upland game, furbearers, and nuisance species, and migratory game bird populations at the refuge would be negligible. The proportion of the refuge's harvest of these species would be negligible when compared to local, regional, and statewide populations and harvest.

Because of the regulatory process for harvest management in place within the Service, the ability of individual refuge hunt programs to adapt refuge-specific hunting regulations to changing local conditions, and the wide geographic separation of individual refuges, we anticipate no significant impacts on resident wildlife, migratory birds, and non-hunted wildlife by use of hunting on Eastern Shore of Virginia NWR.

### **PUBLIC REVIEW AND COMMENT:**

This Compatibility Determination (CD) is part of the Eastern Shore of Virginia and Fisherman Island NWRs Hunting and Fishing Plan and the accompanying EA. The plan was coordinated with all interested and/or affected parties, including VDWR staff. We released the draft plan, CDs, and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge website. No meetings were held due to COVID-19 public gathering safety guidance. During the comment period, we received 27 letters through email from individuals and on behalf of various organizations. A summary of all substantive comments, and our responses, can be found in Appendix F to this Hunting and Fishing Plan.

### **DETERMINATION (CHECK ONE BELOW):**

☐ Use is not compatible

☒ Use is compatible, with the following stipulations

### **STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:**

To ensure compatibility with refuge purpose(s) and Refuge System mission, hunting can occur at Eastern Shore of Virginia NWR in accordance with State and Federal regulations, and special refuge-specific restrictions to ensure that wildlife and habitat management goals are achieved, and that the program is providing a safe, high-quality hunting experience for participants. This hunting program will be monitored and potentially modified or eliminated if any of the program's components are found not compatible.

The following stipulations are necessary to ensure compatibility:

- Hunters must have in possession a signed refuge hunt brochure.
- Hunting for any species will be in accordance with State dates and limited between

September 1 to February 28 (except for the spring turkey State-managed hunt).

- Use of non-toxic ammunition for migratory game birds, upland game, furbearers, nuisance species and turkey will be required in all firearms units.
- Night hunting will not be allowed. Hunting hours will occur in accordance with State regulations. We allow hunters to access the refuge 2 hours prior to sunrise and must exit the refuge no later than 2 hours after sunset.
- Use of dogs is permitted in firearm units only for the purpose of migratory game bird and upland game hunting.

**JUSTIFICATION:**

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

Not only does hunting satisfy a recreational need, but hunting on national wildlife refuges is also an important, proactive management action that can prevent overpopulation and the deterioration of habitat (i.e., overbrowsing by deer). Disturbance to other species will occur, but this disturbance is generally short-term or minor. Suitable habitat exists on refuge lands to support hunting as proposed.

This activity will have minimal conflicts with other priority public uses and will not adversely affect biological resources. Therefore, through this compatibility determination process, we have determined that hunting on the refuge, in accordance with the stipulations provided above, is a compatible use that will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes of the refuge.

**SIGNATURE:**

Refuge Manager

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**CONCURRENCE:**

Regional Chief

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**MANDATORY 15 YEAR RE-EVALUATION DATE:**

\_\_\_\_\_  
(Date)

## **LITERATURE CITED:**

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## **APPENDIX B. COMPATIBILITY DETERMINATION**

**USE:** Fishing

**REFUGE NAME:** Eastern Shore of Virginia National Wildlife Refuge

**DATE ESTABLISHED:** August 6, 1984

### **ESTABLISHING and ACQUISITION AUTHORITIES:**

Eastern Shore of Virginia National Wildlife Refuge (NWR, refuge) was established under the Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 U.S.C. 667b-667d), the Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r), and the Refuge Recreation Act (16 U.S.C. 460k-460k-4).

### **REFUGE PURPOSE(S):**

“...authorizing land to be transferred without reimbursement to the Secretary of the Interior if the land has particular value for migratory birds.” 16 U.S.C. 667b (Transfer of Certain Real Property for Wildlife Conservation Purposes Act).

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

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

### **NATIONAL WILDLIFE REFUGE SYSTEM MISSION:**

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

### **DESCRIPTION OF USE:**

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

The use is public fishing in saltwater that is accessed from the Eastern Shore of Virginia National Wildlife Refuge (NWR). Fishing was identified as one of six priority public uses of the Refuge System by the Refuge System Administration Act of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57), when found to be compatible.

**(b) Where would the use be conducted?**

Fishing access would be from designated improved areas including the Wise Point Boat Dock and the shoreline of Bull tract and Skidmore Island. Refer to Map A.

**(c) When would the use be conducted?**

Fishing would occur year-round and would be in accordance with State seasons for each species.

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

Fishing will be conducted in accordance with State regulations. Anglers will be required to adhere to State licensing requirements and Fishermen Identification Program rules. Fishing will be on a first-come, first-served basis with the number of anglers limited to available designated parking spaces at the Wise Point Boat Ramp and at the Bull tract parking area (refer to Map A). Anglers utilizing the parking area at the Wise Point boat ramp must pay the current daily use fee (\$10/daily use or \$120/annual pass - subject to change).

**(e) Why is the use being proposed?**

Fishing is a healthy, traditional recreational use of renewable natural resources deeply rooted in America's heritage. One of the primary goals of the Eastern Shore of Virginia NWR's Comprehensive Conservation Plan (CCP) (Goal 4; 2004) is to provide wildlife-dependent recreational opportunities. The refuge is located at the southern terminus of the Delmarva Peninsula where the Atlantic Ocean meets the Chesapeake Bay. The proximity of the two water bodies and accessible location offer premier saltwater angling opportunities.

The purpose of the proposed action will bring the refuge into compliance with direction detailed in the CCP (2004). Furthermore, 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 promote one of the priority public uses of the Refuge System. Providing opportunities for visitors to fish will promote stewardship of our natural resources and increase public appreciation and support for the refuge.

**AVAILABILITY OF RESOURCES:**

Cost analysis for administration and management of fishing is \$10,000. Adequate Service resources currently exist and can be provided with existing personnel to properly develop, operate, and maintain access to fishing and will not detract from the refuge purpose or the Refuge System mission.

Resources involved in the management and administration of fishing include personnel to modify the existing commercial dock to meet public access needs; installation and maintenance of additional litter control; personnel and equipment to maintain parking areas and access roads to the boat ramp including signage (see Table B-1).

**Table B-1. Estimated Costs for Fishing at Eastern Shore of Virginia NWR**

<b>Identifier</b>	<b>Costs</b>
Dock maintenance	\$2,000
Brochures, signage (Parking area maintenance, etc.)	\$4,000
Law Enforcement and administration costs	\$4,000
<b>Total Annual Cost</b>	<b>\$10,000</b>

**ANTICIPATED IMPACTS OF THE USE:**

Fishing access will be limited and is not expected to result in significant or adverse impacts to wildlife, habitats, or refuge visitors. Regular human use of pathways and shoreline access can alter or eliminate certain native plant communities and cause soil erosion (Lewin et al. 2006). Human presence in riparian habitat can also induce avoidance behaviors in wildlife, possibly causing them to seek less favorable habitats or less nutritious food sources. Waterbirds specifically may experience reduced nesting success in areas where human disturbance from fishing is present, as flushing birds from their nests causes cooling of eggs and can result in mortality. Additionally, fishing activities could result in injury or mortality of some individuals including sea turtles. The refuge will manage this use to mitigate potential impacts and to prevent overfishing.

*Non-target wildlife*

Opening the refuge to fishing in a few areas of the Eastern Shore of Virginia NWR will have minimal impacts on resources and conflicts with other wildlife. Recreational anglers can affect littoral habitats through the act of bank fishing by creating paths to gain access to water, or parallel to shorelines. This would likely influence wildlife resource allocation, reproduction, or the spatial distribution of individuals, thus indirectly affecting an individual's fitness and population dynamics (Knight and Cole 1995, Lewin et al. 2006). Compared to other non-consumptive land-based activities, recreational bank fishing is considered to have greater impacts on water bird communities, including waterfowl, shorebirds, marsh- and wading-birds, and aquatic species due to the prolonged nature of the activity (Watson et al. 1996, Quan et al. 2002). Often during recreational fishing, anglers lose fishing lines, sinkers, hooks, and other general litter. Angling litter can have negative impacts on the health and survival of sessile invertebrates (Asoh et al. 2004) and vertebrate species such as water birds and turtles, which can become entangled (Chiappone et al 2005). To minimize the effects of angler litter, the refuge employs a "Leave No Trace" policy. The refuge also provides disposal areas for fishing line and tackle at the boat ramp to prevent this material from being disposed of improperly. Additionally, lead is a known metabolic poison that can negatively influence biological processes in both wildlife and humans (Haig et al. 2014). The use of lead fishing tackle (sinkers and jigs) is a major source of lead deposition in the environment (Bellinger et al. 2013). As such, the refuge will encourage voluntary use of non-lead tackle when fishing on or near the refuge, and will consider requiring non-lead alternatives in the future.

### *Target Sport Fish Species*

Monitoring of regional fish populations to determine harvest and size regulations will be conducted by the State of Virginia Marine Resources Commission. Recent studies of recreational fishing have found fish populations to be exploited if not properly managed (Coleman et al. 2004). In general, recreational fishing tends to be highly selective for species and size (Lewin et al. 2006). This combination of exploitation and selectivity in recreational fishing can cause direct and indirect effects on fish populations.

Fish populations on the refuge are seasonally plentiful and are present in numbers sufficient to sustain population levels for priority refuge objectives other than fishing. There have not been biological concerns of unacceptable levels of predation and competition for habitat from recreational fish species. Federal and State regulations will provide guidance for all fishing activities that occurs on the refuge. We do not anticipate that projected fishing pressure will affect the refuge's fish population as a whole. Anglers must abide by the State's seasons, catch limits, and regulations to protect the State's fish populations. The refuge's fishing pressure is projected to be sustainable. Other fishing opportunities exist nearby in the Chesapeake Bay and adjacent Delmarva Peninsula areas.

### *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. However, we expect those impacts to be minimal considering anglers are not repeatedly using the same paths, and levels of use are unlikely to create adverse effects. Refuge staff has observed only negligible problems associated with erosion, incision, compaction or stream alteration, and we do not expect any increase in these negligible impacts. The recreational fishing program would not violate Federal or State standards from contributing pollutants to water sources and would comply with the Clean Water Act.

### *Threatened and Endangered Species*

Species that may be found on the refuge include Northeastern beach tiger beetle, piping plover, red knot, roseate tern, black rail, Northern long-eared bat, Atlantic sturgeon, bald eagle, and five species of sea turtles. While not federally listed as a threatened or endangered species, bald eagles (*Haliaeetus leucocephalus*) can be found nesting on or near the refuge, and are protected by the Bald and Golden Eagle Protection Act. The Service's Virginia Field Office has designated Bald Eagle focal areas for the State, but none fall within refuge lands. There is a slight chance that fishing could result in the incidental take of an aquatic listed species. While the occurrence would be unlikely it is possible, and therefore was addressed in the Intra-Service Section 7 analysis (see Appendix E of the Hunting and Fishing Plan). The refuge staff will provide the public with the Virginia Aquarium 24-hour stranding hotline (posted on the boat ramp kiosk) in the event an incidental catch occurs. The refuge will also provide a disposal site for fishing line and tackle to reduce improper disposal of these items. In addition, Northampton County maintains a no-wake zone within the intercoastal channel in state waters adjacent to the boat ramp. The reduced speeds should minimize potential for vessel strikes of sea turtles within the channel. Potential impacts to Atlantic Sturgeon will be coordinated separately with the National Oceanic and Atmospheric Administration (NOAA). The refuge does not anticipate any impacts to Atlantic Sturgeon as a result of the hunting and fishing program.

Lead tackle can be used on parts of the refuge during the fishing seasons as detailed in the Hunting and Fishing Plan, in accordance with State and refuge-specific regulations. The amount of lead introduced to the environment as a result of refuge fishing activity; however, is negligible. We also encourage use of non-toxic fishing tackle when fishing on or near the refuge, and will educate anglers about lead. We will consider requiring non-lead alternatives for fishing tackle in the future. As a result, there are no anticipated adverse impacts to any of the above listed species.

#### *Visitor Use and Experience*

Eastern Shore of Virginia NWR is open to all six priority public uses of the Refuge System. In 2017, Eastern Shore of Virginia NWR had 98,698 recreational visits. Of those visits, 286 were for hunting, 19,570 were for fishing, and the remaining 78,842 were for non-consumptive recreational uses (USFWS 2017). The Wise Point boat ramp has historically been accessed for recreational saltwater fishing, so impacts are anticipated to remain the same. Opening recreational fishing on a portion of the dock will increase congestion at the boat ramp and may cause some short-term conflicts with local commercial watermen when launching their boats. As with the hunting program, public outreach, zoning, and restrictions in some locations have been proposed to reduce conflicts among the different user groups. Public fishing access to the commercial fishing dock will be phased in over time to strategically reduce user conflicts. If conflicts still arise among user groups, mitigation efforts can be implemented to ensure that the proposed use will not have significant impacts to other user groups.

#### *Summary of Impacts*

The proportion of harvest of these fish species that would occur due to access provided on the refuge is negligible when compared to local, regional, and statewide populations and harvest. Because of the regulatory process for fisheries management in place within the State of Virginia, we anticipate no significant effects on resident wildlife, migratory birds, and non-hunted wildlife by use of fishing and access to fishing occurring on the Eastern Shore of Virginia NWR. The overall impacts of this use are fully reviewed and discussed in the EA (Appendix D).

### **PUBLIC REVIEW AND COMMENT:**

This Compatibility Determination (CD) is part of the Eastern Shore of Virginia and Fisherman Island NWRs Hunting and Fishing Plan and the accompanying EA. The plan was coordinated with all interested and/or affected parties, including VDWR staff. We released the draft plan, CDs, and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge website. No meetings were held due to COVID-19 public gathering safety guidance. During the comment period, we received 27 letters through email from individuals and on behalf of various organizations. A summary of all substantive comments, and our responses, can be found in Appendix F to this Hunting and Fishing Plan.

**DETERMINATION (CHECK ONE BELOW):**

\_\_\_\_\_ Use is not compatible

\_\_\_X\_\_\_ Use is compatible, with the following stipulations

**STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:**

To ensure compatibility with refuge purposes and Refuge System mission, fishing can occur at Eastern Shore of Virginia NWR in accordance with State and Federal regulations. Fishing access will be monitored and potentially modified or eliminated if any of the program's components are found not compatible.

The following stipulations are necessary to ensure compatibility:

- Saltwater fishing will occur only from the shoreline of Bull tract (access by foot trail) and Skidmore Island (access by boat).
- Fishing will be phased in to occur from the Wise Point Boat Dock in areas designated for public access (commercial access to the dock will remain until privileges expire from all current permit holders).

**JUSTIFICATION:**

Fishing is a priority wildlife-dependent use for the Refuge System through which the public can develop an appreciation for fish and wildlife. Service policy is to provide expanded opportunities for wildlife-dependent uses when compatible and consistent with sound fish and wildlife management and ensure that they receive enhanced attention during planning and management. Fishing on the refuge is not expected to adversely affect any targeted or non-targeted species.

Fishing on national wildlife refuges satisfies an important recreational need. Disturbance to other species will occur through presence of more people, but this disturbance is generally short-term and expected to be minimal. Suitable access exists on refuge lands to support fishing as proposed.

This activity will have minimal conflicts with other priority public uses (i.e., hunting, wildlife observation, etc.), and will not adversely impact biological resources. Therefore, through this compatibility determination process, we determine that fishing on the refuge, in accordance with the stipulations provided above, is a compatible use that will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes of the refuge.

**SIGNATURE:**

Refuge Manager

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**CONCURRENCE:**

Regional Chief

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**MANDATORY 15 YEAR RE-EVALUATION DATE:**

\_\_\_\_\_  
(Date)

**LITERATURE CITED:**

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## **APPENDIX C. COMPATIBILITY DETERMINATION**

**USE:** Migratory bird hunting

**REFUGE NAME:** Fisherman Island National Wildlife Refuge

**DATE ESTABLISHED:** January 17, 1969

### **ESTABLISHING and ACQUISITION AUTHORITIES:**

Fisherman Island National Wildlife Refuge (NWR, refuge) was established under the Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 U.S.C. 667b-667d) and the Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r).

### **REFUGE PURPOSE(S):**

“...authorizing land to be transferred without reimbursement to the Secretary of the Interior if the land has particular value for migratory birds.” 16 U.S.C. 667b (Transfer of Certain Real Property for Wildlife Conservation Purposes Act).

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

### **NATIONAL WILDLIFE REFUGE SYSTEM MISSION:**

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

### **DESCRIPTION OF USE:**

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

The use is public hunting of migratory birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) on Fisherman Island NWR. Hunting was identified as one of six priority public uses of the Refuge System by the Refuge System Administration Act of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57), when found to be compatible.

#### **(b) Where would the use be conducted?**

Migratory bird hunting on Fisherman Island NWR would occur on less than 40 percent of the refuge (758 acres) of creeks and marsh areas east of State Highway 13. If a refuge, or portion thereof, has been designated, acquired, reserved, or set apart as an inviolate sanctuary, we may only allow hunting of migratory game birds on no more than 40 percent of that refuge. Hunting access would be by boat only. Refer to Map A in the Hunting and Fishing Plan for details on the hunting areas.

**(c) When would the use be conducted?**

Migratory bird hunting would be permitted from September 1 to February 28. Season dates within this time period and hunting hours will be in accordance with the State regulations. We will allow hunters to access the refuge 2 hours prior to sunrise and must exit the refuge no later than 2 hours after sunset. Sunday hunting will only be allowed for waterfowl and rail (per State regulations on public land).

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

Migratory bird hunting would be permitted in designated areas of the refuge in accordance with State and refuge-specific regulations. Migratory bird hunters would be required to read and sign a refuge hunt brochure before hunting on the refuge. Brochures will be available on the refuge website ([www.fws.gov/refuge/eastern\\_shore\\_of\\_virginia/](http://www.fws.gov/refuge/eastern_shore_of_virginia/)) and in an onsite hunt kiosk near the refuge headquarters. Number of hunters will be limited by available designated parking at the hunt unit access points and the boat ramp. Hunting would be by boat only. Temporary and permanent blinds outside of the boat are not permitted.

**(e) Why is the use being proposed?**

Hunting is a healthy, traditional recreational use of renewable natural resources deeply rooted in America's heritage, and it can be an important wildlife management tool. In particular, waterfowl hunting in these areas is a historic, traditional, and sustainable activity. Migratory bird hunting provides a wildlife-dependent recreational opportunity and helps achieve refuge management goals and objectives. One of the primary goals of the Eastern Shore of Virginia and Fisherman Island NWR's Comprehensive Conservation Plan (CCP) (2004) is to increase hunting opportunities when compatible with refuge purposes. Much of the marsh area on the Eastern Shore of Virginia is owned by the State and is already open to migratory bird hunting.

The purpose of the proposed action will bring the refuge into compliance with direction detailed in the CCP (2004). Furthermore, 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 promote one of the priority public uses of the Refuge System, and providing opportunities for visitors to hunt will promote stewardship of our natural resources and increase public appreciation and support for the refuge.

**AVAILABILITY OF RESOURCES:**

Cost analysis for administration and management of the hunt is \$3,000. Adequate Service resources currently exist and can be provided with existing personnel to properly develop, operate, and maintain the hunt and will not detract from refuge purpose/Refuge System mission.

Resources involved in management and administration of hunting include personnel to provide annual updates to the hunt brochure, website information, and kiosk; personnel to maintain refuge hunt unit boundary markers in the field; and Law Enforcement to enforce regulations as needed. Monitoring of regional populations to determine harvest regulations will be conducted by the State.

## **ANTICIPATED IMPACTS OF THE USE:**

The overall impacts of this use are fully reviewed and discussed in the Environmental Assessment (EA) (Appendix D).

Hunting provides wildlife-dependent recreational opportunities and can foster a better appreciation and more complete understanding of the wildlife and habitats associated with the southern Delmarva Peninsula landscape. This could result in more widespread and stronger support for wildlife conservation, the refuge, the Refuge System, and the Service.

### *Migratory birds*

Opening the marshes to waterfowl hunting will have short-term disturbance to the waterfowl and shorebird resting and feeding in the area. There will be limited long-term impacts to waterfowl populations since most of the marsh area on the Eastern Shore of Virginia is owned by the State and is already open to migratory bird hunting. We anticipate these populations will experience additional harvest levels but will only have minor impacts on the overall populations. These populations are managed at the flyway level and harvest levels are derived from these estimates in close coordination between states and the Service to ensure long-term persistence of viable populations (USFWS 2019). Presence of additional people in proximity to resting and feeding areas may cause disturbance to some migratory species utilizing the island as a stopover site and may alter use of some areas within the marsh on the refuge (Bartlet 1987; Dooley 2010; Miller et al. 2001). If negative impacts are observed a permit system or reduction in hunting days will be implemented.

### *Non-target Species*

Located on the Delmarva Peninsula, Fisherman Island NWR hosts a wide diversity of both resident and migratory wildlife. The refuges are important stopover sites in the Atlantic flyway and provide important habitat for resident species in an area with rising development trends. Many common bird species will be in areas adjacent to hunting, in both upland and wetland areas, and they may relocate to other areas of the refuge during hunting.

Thirty-four mammal species are recorded on the lower Delmarva Peninsula and 9 species of bats may also be found on or around the refuges. Some disturbance of non-target wildlife species and impacts on vegetation may occur. While not targeted for hunting or fishing, other wildlife may experience disturbance, avoidance of areas, habitat damage, or injury as a result of the use (Cole 1990). However, these impacts should be minimal, because the refuge will provide non-hunting areas that will disperse the impacts, and hunting will not be permitted at night for any species.

### *Habitat and Vegetation*

Impacts to vegetation are expected to be minimal since hunting will occur from boats only. Some marsh vegetation may get trampled while people or dogs retrieve shot birds on occasion.

### *Threatened and Endangered Species*

Species that may be found on the refuge include piping plover, red knot, roseate tern, black rail, and five species of sea turtles. While not federally listed as a threatened or endangered species, bald eagles (*Haliaeetus leucocephalus*) can also be found nesting on or near the refuge and are protected by the Bald and Golden Eagle Protection Act. The Service's Virginia Field Office has designated Bald Eagle focal areas for the State, but none fall within refuge lands.

Hunting is not likely to adversely affect these species given the time of year that hunting will take place (September 1 through February 28) does not overlap with the breeding and migration season for these species. In addition, the location of the migratory bird hunting (access by boat in the marsh areas on a portion of the island) will not overlap significantly with where these species are typically found at the time of year when hunting is occurring (September 1-February 28). For more details, please see Appendix E to the Hunting and Fishing Plan.

We will avoid potential adverse impacts to bald eagles by following management guidelines developed in consultation with the State, including sight and distance setbacks from nests and concentration areas that may develop, and time-of-year restrictions. Bald eagle nesting season starts around December 15 and continues throughout the times of most winter and spring hunts. Hunting activities on the refuge end February 28. If nests or other sensitive areas are identified, hunters will be notified on the refuge kiosk of distance buffers and areas to avoid disturbance to nesting eagles. Flagging will also be deployed in the field to signal location of distance buffer areas when needed.

#### *Visitor Use and Experiences*

Conflicts with commercial watermen may occur due to increased boat traffic. The refuge will mitigate conflicts between all user groups by clearly advertising refuge regulations, implementing safety procedures, and through time and space zoning.

#### *Summary of Impacts*

The refuge hunt program is designed to be sustainable through time, given relatively stable conditions, particularly because of close coordination with the Virginia Department of Wildlife Resources. Accumulative impacts of hunting on migratory bird (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) populations at the refuge are negligible. The proportion of the refuge's harvest of these species is negligible when compared to local, regional, and statewide populations and harvest.

Because of the regulatory process for harvest management in place within the Service, the ability of individual refuge hunt programs to adapt refuge-specific hunting regulations to changing local conditions, and the wide geographic separation of individual refuges, we anticipate no significant impacts on resident wildlife, migratory birds, and non-hunted wildlife by use of migratory bird hunting on Fisherman Island NWR.

### **PUBLIC REVIEW AND COMMENT:**

This Compatibility Determination (CD) is part of the Eastern Shore of Virginia and Fisherman Island NWRs Hunting and Fishing Plan and the accompanying EA. The plan was coordinated with all interested and/or affected parties, including VDWR staff. We released the draft plan, CDs, and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge website. No meetings were held due to COVID-19 public gathering safety guidance. During the comment period, we received 27 letters through email from individuals and on behalf of various organizations. A summary of all substantive comments, and our responses, can be found in Appendix F to this Hunting and Fishing Plan.

**DETERMINATION (CHECK ONE BELOW):**

\_\_\_\_\_ Use is not compatible

\_\_\_X\_\_\_ Use is compatible, with the following stipulations

**STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:**

To ensure compatibility with refuge purpose(s) and Refuge System mission, hunting can occur at Fisherman Island NWR in accordance with State and Federal regulations, and special refuge-specific restrictions to ensure that wildlife and habitat management goals are achieved, and that the program is providing a safe, high-quality hunting experience for participants. This hunting program will be monitored and potentially modified or eliminated if any of the program's components are found not compatible.

The following stipulations are necessary to ensure compatibility:

- Hunting is required by boat to limit access to sensitive marsh habitat to foot traffic disturbance, and to maintain 60 percent of the refuge lands as an inviolate sanctuary for migratory birds.
- Temporary and permanent blinds are not permitted outside of the boat.
- Hunters must have in possession a signed refuge hunt brochure.
- We require the use of non-toxic ammunition for hunting all migratory game bird species.
- A permit system or reduction in hunt days will be implemented if negative impacts are observed.

**JUSTIFICATION:**

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

Not only does hunting satisfy a recreational need, but hunting on national wildlife refuges is also an important, proactive management action. Disturbance to other species will occur, but this disturbance is generally short-term. Suitable habitat exists on refuge lands to support hunting as proposed.

This use will have minimal conflicts with other priority public uses (wildlife observation and photography), and will not adversely affect biological resources. Fisherman Island is closed to the public, with access only occurring outside of the nesting season via guided public tours. Therefore, through this compatibility determination process, we have determined that hunting on the refuge, in accordance with the stipulations provided above, is a compatible use that will not materially interfere

with, or detract from, the fulfillment of the Refuge System mission or the purposes of the refuge.

**SIGNATURE:**

Refuge Manager

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**CONCURRENCE:**

Regional Chief

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**MANDATORY 15 YEAR RE-EVALUATION DATE:**

\_\_\_\_\_  
(Date)

**LITERATURE CITED:**

Bartelt, G.A. 1987. Effects of disturbance and hunting on the behavior of Canada geese family groups in East Central Wisconsin. *Journal of Wildlife Management*, 51, 517-522.

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# **Environmental Assessment for Hunting and Fishing on Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges**

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

## **Proposed Action**

The U.S. Fish and Wildlife Service (Service) is proposing to open and/or expand hunting and/or fishing opportunities at Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges (NWRs) in accordance with each refuge's Comprehensive Conservation Plan (CCP). At Eastern Shore of Virginia NWR, the proposed action would occur on 1,211 acres of the refuge and would include white-tailed deer, turkey, rabbit, squirrel, quail, raccoon, opossum, fox, coyote, and migratory bird hunting. Eastern Shore of Virginia NWR would also open to recreational fishing. At Fisherman Island NWR the proposed action would occur on 758 acres of the refuge and would be limited to migratory game bird hunting only.

A proposed action may evolve during the NEPA process as the agency refines its proposal and gathers feedback from the public, tribes, and other agencies. Therefore, the final proposed action may be different from the original. The proposed action will be finalized at the conclusion of the public comment period for the EA.

## **Background**

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System), the purposes of an individual refuge, Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act 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 Fish and Wildlife Service Manual.

Eastern Shore of Virginia NWR was established pursuant to the following authorities: Transfer of Certain Real Property for Wildlife Conservation Purposes Act (16 U.S.C. 667b-667d); Refuge Recreation Act (16 U.S.C. 460k-460k-4); and the Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r). The primary purpose of the refuge is to protect, restore, and enhance habitat for forest and shrub-dependent neotropical and temperate migratory birds, while promoting compatible wildlife-dependent recreational opportunities in support of these efforts.

Fisherman Island NWR was established through the Transfer of Certain Real Property for Wildlife Conservation Purposes Act and the Migratory Bird Conservation Act. The primary purpose of the refuge is to protect habitat important for migratory birds.

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

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

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

- 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 is 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.

Public hunting at Eastern Shore of Virginia NWR began in 1993 with an annual white-tailed deer hunt occurring on 185 acres of the refuge. Since then, hunting opportunities have been expanded to include additional acreage and an extension of the hunting season dates.

Access to Fisherman Island NWR is closed to the public. In 2004 an archery white-tailed deer hunt was evaluated for compatibility but was never initiated due to safety concerns over accessing the island from Highway 13 and a subsequent decline in available staff.

### **Purpose and Need for the Proposed Action**

Hunting is identified as one of the priority public uses legislatively mandated by the NWRSA of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57) and reinforced as a priority use by Department of the Interior Secretarial Order 3356 (September 15, 2017). The need for action revolves around hunting and fishing as priority uses and the requirement to facilitate those activities that are compatible with the purpose of the refuge and consistent with State of Virginia regulations. Additionally, hunting and fishing are healthy, traditional recreational uses of renewable natural resources deeply rooted in America's heritage, and can be important wildlife management tools. National wildlife refuges, including Eastern Shore of Virginia, conduct hunting programs within the framework of Federal, State, and refuge regulations. Hunters and anglers on the refuge are expected to be ethical and respectful of other users, wildlife species, and the environment while on refuge lands.

The purpose of this proposed action is to provide compatible wildlife-dependent recreational opportunities on Eastern Shore of Virginia and Fisherman Island NWRs. The need for the proposed action is to meet the Service's priorities and mandates as outlined by the NWRSA 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)). Expanding hunting and fishing access on the refuges provide an opportunity to motivate visitors to value, support, and contribute to the refuges, and the Refuge System and become better environmental stewards.

Department of the Interior Secretarial Order 3356 directs the Service to enhance and expand public access to lands and waters on refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. The proposed action will also promote priority public uses of the Refuge System, and will promote stewardship of our natural resources and increase public appreciation and support for the refuge by providing opportunities for visitors to hunt and fish. To address the needs stated above, the proposed action will bring the refuge into greater compliance with the management guidance detailed in the orders, policy, and Federal law to "recognize compatible wildlife-dependent recreational uses as the priority general uses of the Refuge System..." and "... ensure that opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses" 16 U.S.C. 668dd (a) (4). Finally, the proposed action will help to meet the statement of objectives detailed in the Hunting and Fishing Plan.

This EA serves as the NEPA document that analyzes the impacts on environmental, cultural, and historical resources of expanding hunting and fishing opportunities on the refuge.

### **Alternatives**

#### **Alternative A – No Action Alternative (Current Management)**

Under the no action alternative, no expansion or reduction of hunting and fishing access would occur and the program would be conducted as it is currently. This alternative would continue Eastern Shore of Virginia's current white-tailed deer hunting program, which allows designated areas of the refuge to be hunted under the guidance that includes the 2004 CCP and 1993 Hunt Plan. Fishing would not be permitted at Eastern Shore of Virginia NWR under this alternative. No hunting or fishing would be permitted at Fisherman Island NWR.

### **Alternative B – Proposed Action Alternative**

The refuge has prepared a Hunting and Fishing Plan, which is presented in this document as the Proposed Action Alternative. Under this alternative, the hunting program at Eastern Shore of Virginia NWR would be expanded to include white-tailed deer, turkey, rabbit, squirrel, quail, raccoon, opossum, fox, coyote, nuisance species (groundhog, European starling, English sparrow, and pigeon), and migratory bird hunting across 1,211 acres of the refuge. Eastern Shore of Virginia NWR would also open to sport fishing under this alternative. At Fisherman Island NWR, 758 acres of the refuge would be opened to migratory bird hunting for the first time. Fishing would remain prohibited at Fisherman Island NWR. Refuge-specific regulations and procedures, and stipulations necessary to find refuge uses compatible, are included as part of the Proposed Action Alternative.

The refuge will make reasonable efforts to allow hunters and anglers access to all portions of hunting and fishing areas. The intention is to provide safe, quality hunting opportunities that consider the welfare of the refuge wildlife resources. If hunting/fishing conditions are deemed unsafe to hunters/anglers or refuge staff or negative impacts on resources are discovered, hunt/fish program procedures and timing are subject to change. Access points and hunter parking lots will be delineated on refuge hunt maps and will be included in the hunt brochures. Hunters will be permitted to enter refuge lands prior to normal refuge operating hours in order to reach hunt units at the start of State hunting hours. Access will be allowed 2 hours before sunrise and exit will be required 2 hours after sunset. All access for hunting at Fisherman Island NWR is by boat.

#### *Measures to Avoid Conflicts*

- 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.
- Big and small game hunting will take place during daylight hours only to avoid nighttime disturbance to wildlife.
- 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.
- Use of non-toxic ammunition for hunting migratory game bird, upland game, and turkey will be required in all firearms units.

### **Alternative(s) Considered, But Dismissed From Further Consideration**

In developing hunting plans for refuges, we regularly receive comments and requests from some members of the public to eliminate hunting. An alternative that would close the refuge to all hunting was therefore considered but dismissed from detailed analysis. A "No Hunting Alternative" would not accomplish the purposes we seek to accomplish by the adoption of this hunting and fishing plan, as described in the "purpose and need" section of this EA. Closing the refuge to hunting would conflict with the Refuge System Improvement Act, which provides that hunting is an appropriate and priority use of the Refuge System, shall receive priority consideration in refuge planning and management, mandates that hunting opportunities should be facilitated when feasible, and directs the Service to administer the Refuge System so as to

“provide increased opportunities for families to experience compatible wildlife-dependent recreation, particularly opportunities for parents and their children to safely engage in traditional outdoor activities, such as fishing and hunting.” Furthermore, Department of the Interior Secretarial Order 3356, signed in 2017, directs the Service to enhance and expand public access to lands and waters on national wildlife refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. An alternative that failed to provide any opportunity to participate in hunting activities, where such activities are compatible with the purposes of the Refuge System, would also fail to meet the goals of the Refuge System.

Refuge staff have worked closely with stakeholders, Virginia Department of Wildlife Resources, and Virginia Department of Conservation and Recreation to develop the proposed hunting and fishing plan. There are no unresolved conflicts about the proposed action with respect to alternative uses of available resources. Additionally, the proposed action builds on an existing hunt program, and includes the addition of seasons and areas developed, in part, from an initial scoping process of the Comprehensive Conservation Plan (CCP). Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310). Table D-1 summarizes the primary differences between alternatives.

**Table D-1. Comparison of Alternatives**

Comparison Factor	No Action Alternative	Proposed Action Alternative
Cost of program	\$5,000	\$28,000
Species open to hunting/fishing	<p><i>ESV NWR</i> Big game: White-tailed deer</p> <p>Saltwater fishing: Closed</p> <p><i>FSH NWR</i> Hunting: Closed to all species</p> <p>Saltwater fishing: Closed</p>	<p><i>ESV NWR</i> Big game: Deer and turkey</p> <p>Upland game: Rabbit, squirrel, quail, raccoon, opossum, fox, coyote, and nuisance species</p> <p>Migratory birds: Waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow</p> <p>Saltwater fishing: Open</p> <p><i>FSH NWR</i> Migratory birds: Waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow</p> <p>Saltwater fishing: Closed</p>

Comparison Factor	No Action Alternative	Proposed Action Alternative
Areas open to fishing	<i>ESV NWR and FI NWR</i> No areas are currently open to fishing.	<i>ESV NWR</i> Access via improved areas only. Open fishing at Wise Point Boat Ramp from the dock. Two additional areas would be opened to fishing along the shoreline of Skidmore Island (access via boat) and Bull tract (access via walking trail) providing access to more than 20 acres for saltwater fishing.  <i>FSH NWR</i> Fishing remains closed.
Refuge permit required	Permit required for deer hunting.	Signed brochure for hunting only.
Days open to hunting	93 days	151 days
Acres open to hunting	<i>ESV NWR</i> Deer = 250 acres	<i>ESV NWR</i> Big game = 1,211 acres Upland game = 1,211 acres Migratory birds = 409 acres  <i>FSH NWR</i> Migratory birds = 758 acres
Estimated hunters	Big game = 500-600 hunters	<i>ESV NWR</i> Big game = 700 hunters Upland game = 50 hunters Migratory birds = 100 hunters  <i>FSH NWR</i> Migratory birds = 200 hunters
Refuge units open to hunting by method of take (migratory birds hunted in firearm units only)	<i>ESV NWR</i> (Deer only) Archery Zones 1-5 (Total = 250 acres)  Firearms Zones 1-4 (Total = 225 acres)	<i>ESV NWR</i> <u>Archery</u> (total = 795 acres) Latimer tract (26 acres) ESV Marsh (186 acres) Wise Point Tip (158 acres) Southern Tip (66 acres) Headquarters Unit (116 acres) Central Shrubland (100 acres) MU10 (72 acres) MU13 (60 acres)

Comparison Factor	No Action Alternative	Proposed Action Alternative
		MU14 (11 acres)  <u>Firearms</u> (Total = 409 acres) Bull Tract (184 acres) Dixon Tract (83 acres) Raccoon Island (58 acres) Skidmore Island (84 acres)  <i>FSH NWR</i> <u>Firearms</u> Marsh/creek areas east of Highway 13 = 758 acres

### Affected Environment and Environmental Consequences

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

Eastern Shore of Virginia and Fisherman Island NWRs lie on the southern tip of the Delmarva Peninsula. The peninsula is bordered on the east by the Atlantic Ocean and on the west by the Chesapeake Bay. The refuges are composed of a contiguous block of land located at the southern tip of the peninsula, several smaller parcels scattered north of the main refuge, and a barrier island. The peninsula is part of the Virginia barrier island classified as a “Wetland of International Importance” under the RAMSAR Convention. Located in Northampton County, Virginia, the refuges are in a rural area where development trends are on the rise. Habitat types on Eastern Shore of Virginia and Fisherman Island NWR include forests, shrub/scrub, grasslands, salt marsh, and beach habitat. For more information regarding the affected environment, please see Chapter 3 of the refuges’ Comprehensive Conservation Plan.

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

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

**TABLE D-2. Potential for Adverse Impacts from Proposed Action and Alternatives**

<b>Resources</b>	<b>Not Applicable:</b> Resource does not exist in project area	<b>No/Negligible Impacts:</b> Exists but no or negligible impacts	<b>Greater than Negligible Impacts:</b> Impacts analyzed in this EA
Species to Be Hunted/Fished	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Non-Target Wildlife and Aquatic Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Threatened and Endangered Species and Other Special Status Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat and Vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Geology and Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wilderness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visitor Use and Experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Refuge Operations and Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socioeconomics and Environmental Justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **White-tailed Deer**

#### *Affected resource description*

Virginia's Statewide pre-hunt deer population has been relatively stable over the past decade, fluctuating between 901,000 and 1,117,000 animals. VDWR annually evaluates hunter harvest data and biological data collected at check stations to inform management decisions.

### *Anticipated impacts*

#### No Action Alternative

Under the No Action Alternative, only white-tailed deer hunting would be permitted at Eastern Shore of Virginia NWR. Current levels of deer harvest (approximately 75 deer per year) would be expected as no new opportunities would be provided and public interest in big game hunting would likely remain the same. Impacts to white-tailed deer populations would also remain consistent and could include temporary or localized disturbance, changes in behavior, direct injury or mortality of individuals, and changes in population dynamics. Hunting on the refuge is regulated to minimize negative impacts to the overall population. Under this alternative, the refuge would continue monitoring the deer population and make adjustments to the hunt as needed to manage deer herds effectively and sustainably. No white-tailed deer hunting opportunities would be provided at Fisherman Island NWR under this alternative.

#### Proposed Action Alternative

Under the Proposed Action Alternative, expanded opportunities for white-tailed deer hunting would be provided at Eastern Shore of Virginia NWR. The expanded hunt program would occur over a wider area and would likely attract a small number of new hunters to the refuge. We anticipate approximately 30 new hunters would access the refuge as a result of the new opportunities. Impacts will be spread over a larger geographical area (from 250 acres to 1,211 acres) and may affect a greater proportion of the local deer population. Overall, impacts are not expected to have long-term negative impacts on local, statewide, or regional deer populations. White-tailed deer hunting would remain closed at Fisherman Island NWR under this alternative, and no new impacts are expected for this species.

### **Wild Turkey**

#### *Affected resource description*

VDWR announced a harvest of 17,929 turkeys during the 2019 spring gobbler season. The 2019 harvest was 11 percent higher than the previous year's harvest. Virginia uses the number of spring gobblers killed per square mile of suitable habitat as a relative index to turkey population density. VDWR estimated the wild turkey population as 0.8 gobblers-per-square-mile of suitable habitat for the Tidewater Region. Locally, 163 gobblers were harvested in Accomack County, a 5-year record and up 31 from 2018. In Northampton County, 59 birds were harvested in 2019, which was 10 fewer than 2018, and a 5-year low for the county.

While Virginia's turkey population is close to record levels for modern times, fall harvests will fluctuate due to a number of other factors beyond the population size. These factors, which vary across the state, include the length and timing of the fall season, annual variation in reproductive success, acorn abundance, hunting pressure, and weather.

### *Anticipated impacts*

#### No Action Alternative

Under the No Action Alternative, no opportunities for turkey hunting would be provided. While turkey populations may be disturbed in areas where hunting is permitted, no direct impacts from hunting are anticipated at either refuge.

#### Proposed Action Alternative

Under the Proposed Action Alternative, wild turkey hunting would open for the first time at Eastern Shore of Virginia NWR. Hunting would open during the spring season, would be permitted on over 1,211 acres of the refuge and would be managed by the State targeting youth and apprentice hunters. Use of non-toxic shot in firearms units would be required. With a managed hunt, we anticipate 5 to 10 hunters each year. Opening to turkey hunting for the first time would result in new impacts to this species, including greater disturbance, changes to wildlife behavior, changes to population dynamics, injury, and direct mortality. Spring hunting has a lower impact on wild turkey population numbers than fall hunting, but it can affect the age distribution of males in a population. While there would be direct mortality of individual turkeys, the hunt would be managed within State bag limits to mitigate impacts.

One of the most likely impacts is a change in turkey's behavior on and around the refuge. Studies examining the direct effects of hunting on turkey behavior and movement are limited. One study conducted in Louisiana tracked the movements of wild turkey during the hunting season and found that distances traveled by wild turkeys were only 8 percent greater during hunting days than non-hunting days (Gross et al. 2015). Although hunting made it more likely for a turkey to change their movement patterns, a small-scale increase in range may not be biologically significant. The refuge is open to big game hunting 6 days per week. Establishing days where no hunting occurs allows turkeys to recover and rest while simultaneously increasing quality of the hunt for the public. This may minimize changes to turkey behavior on the refuge and reduce the amount of stress hunting pressure places on turkeys. Like all hunts, spring turkey hunting would be conducted within State and refuge-specific regulations. While the refuge does expect to observe some localized impacts, the hunting program would not result in major negative changes to the turkey population Statewide or regional turkey populations.

Turkey hunting would remain closed at Fisherman Island NWR under this alternative. No new impacts are expected for this species.

#### **Upland Game (coyote, fox, quail, rabbit, squirrel, raccoon, opossum and nuisance species-groudhog, European starling, English sparrow, and pigeon)**

##### *Affected resource description*

##### *Coyote and fox*

Statewide trend data indicates coyote and red fox populations are rising while gray fox populations are falling (VDWR 2018). During the 2015-2016 season, an estimated 32,811 coyotes, 7,944 red fox, and 8,289 gray fox were harvested by hunters Statewide (Fies 2020, Pers. comm.).

##### *Quail*

Statewide trend data indicates that quail populations are declining. During the 2013-2014 season, and an estimated 172,148 quail were harvested Statewide. Of that total, 31,787 were wild quail and 140,360 were pen-raised (VADWR 2014).

##### *Rabbit, squirrel, raccoon and opossum*

Rabbit and squirrel are common and abundant species in Virginia. During the 2013-2014 season, an estimated 554,630 squirrels and 215,288 rabbits were harvested in the State. Raccoon and

opossum are also common species (VDWR 2014). During the 2013-2014 season, an estimated 72,657 raccoons were harvested Statewide. In the same year, trappers in Virginia harvested 19,759 raccoons and 7,927 opossum (VDWR 2014b).

#### *Anticipated impacts*

##### No Action Alternative

Upland game hunting is not permitted at Eastern Shore of Virginia or Fisherman Island NWRs under the existing hunting program. No impacts are expected under this alternative.

##### Proposed Action Alternative

Upland game hunting is often less utilized than hunting for turkey, deer, and other game species in the State. Potential impacts from this new use could include greater disturbance to habitat and landscape, changes in wildlife behavior, changes in species distribution, and temporary reductions in local populations. Use of non-toxic shot will be required in all firearms units. All impacts to these species would be localized to the refuge area and are not expected to result in long-term negative impacts. In the case of nocturnal species, impacts would be lessened as hunting is only permitted during the day.

Impacts to quail populations are unique as the Statewide wild population is supplemented with pen-raised quail. This prevents over-hunting of this species and minimizes the likelihood that impacts from hunting would damage the overall quail population. Impacts to all species and to refuge habitats would be minimized as hunting is spread out over a large geographic area. Upland game hunting would not be permitted at Fisherman Island NWR under this alternative, and no additional impacts are expected.

#### **Migratory Game Birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow)**

##### *Affected resource description*

Harvest for these species is cooperatively regulated among an international consortium (Atlantic Flyway Council) of wildlife managers and are based on surveys, harvest data, and habitat data. During the 2013-2014 season, an estimated 6,399 woodcock, 116,623 crow, and 521,810 dove were harvested Statewide (VDWR 2014). In 2017, an estimated 149,900 ducks, 61,100 geese, 200 coot, 3,600 rail, and less than 50 snipe were harvested Statewide. There was no reported gallinule harvest for the State in 2017 (VDWR 2018).

#### *Anticipated impacts*

##### No Action Alternative

Migratory game bird hunting is not permitted at Eastern Shore of Virginia or Fisherman Island NWRs under the existing hunting program. No impacts are expected under this alternative.

##### Proposed Action Alternative

Under the Proposed Action Alternative, migratory bird hunting would be permitted at both Eastern Shore of Virginia and Fisherman Island NWRs. Waterfowl management is on a Flyway basis; regulations are based on surveys and monitoring, data analyses, and rule making. Each year, the Service prescribes frameworks for migratory bird hunting dates and times, the allowable harvest, and the allowable number of birds in a hunter's possession. This framework

allows State selections of seasons and limits for recreation and sustenance and permits harvests at levels compatible with population status and habitat conditions. Other migratory bird species, including woodcock, crow, dove, and snipe are managed by the State. Harvest limits and hunting seasons are also set for these species to maintain sustainable populations.

Hunting on the refuge would likely result in a minimal increase in migratory bird hunting Statewide, resulting in additional mortality of individuals. As Eastern Shore of Virginia and Fisherman Island NWRs both provide important resting and feeding habitat for migratory birds. Opening hunting of these species may result in changes to wildlife behavior. Migratory birds may begin to avoid the refuge area during hunting season or may become more skittish or prone to disturbance on and around the refuges. Impacts to migratory birds from hunting at the refuges would not result in significant changes on a Statewide, regional, or flyway level, but localized impacts are expected. Eastern Shore of Virginia NWR expects approximately 100 migratory bird hunting visits annually and Fisherman Island expects approximately 200. Compared to the annual harvest of migratory birds in the State and Atlantic Flyway, hunting on the refuge would not have a significant adverse impact on migratory bird populations.

## **Fish**

### *Affected resource description*

Fishing is not permitted at Eastern Shore of Virginia or Fisherman Island NWRs, but is a common recreational activity throughout Virginia. There were 534,103 fishing license holders in Virginia in 2020 and 527,902 in 2019 (USFWS 2019). Although fishing is not currently permitted on the refuge, Eastern Shore of Virginia NWR does provide access to State waters for fishing. In 2017, there were 19,570 recreational visits to the refuge for this purpose (USFWS 2019).

### *Anticipated impacts*

#### **No Action**

Fishing is not currently permitted at Eastern Shore of Virginia or Fisherman Island NWRs. No adverse impacts are anticipated under this alternative.

#### **Proposed Action**

Under the Proposed Action Alternative, fishing would be opened at Eastern Shore of Virginia NWR. Fishing access would be limited due to availability of parking spaces at the boat ramp access and is not expected to result in an increase of the number of anglers or significant negative impacts to wildlife, habitats, or other refuge visitors.

Regular human use of pathways and shoreline access can alter or eliminate certain native plant communities and cause soil erosion (Lewin et al. 2006). The refuge would manage this use to mitigate potential impacts and to prevent overfishing. Excessive use of lead tackle may cause additional impacts from fishing. The use of lead sinkers could result in lead poisoning for some water birds. In North America, lead poisoning from sinker ingestion has been documented in common loons, trumpeter, tundra and mute swans, and sandhill cranes. Many other species of waterfowl have feeding habits similar to those in which sinker ingestion has been documented (e.g., diving ducks, grebes, herons, osprey, bald eagles). These species could also be at risk for lead poisoning from sinker ingestion (Scheuhammer 1996). The refuge will encourage the voluntary use of non-lead tackle when fishing on the refuge to mitigate potential impacts.

## **Non-target Wildlife and Aquatic Species**

### *Affected resource description*

Located on the Delmarva Peninsula, Eastern Shore of Virginia and Fisherman Island NWRs host a wide diversity of both resident and migratory wildlife. The refuges are important stopover sites in the Atlantic Flyway and provide important habitat for resident species in an area with rising development trends.

Common bird species found on and around the refuges include the black-bellied and semipalmated plover, greater and lesser yellowlegs, spotted sandpiper, whimbrel, ruddy turnstone, semipalmated and least sandpipers, dunlin, short-billed dowitcher, American oystercatcher, royal terns, black skimmers, willets, common snipe, clapper rail, red-throated loon, common loon, horned grebe, Carolina wren, yellow-rumped warblers, tree swallows, catbirds, white-throated sparrows, Northern mockingbird, American kestrel, Northern flicker, and the red-bellied, downy, hairy, and pileated woodpeckers.

Thirty-four mammal species are recorded on the lower Delmarva Peninsula and likely to be found at Eastern Shore of Virginia and Fisherman Island NWRs. Those include river otter, American mink, muskrat, Eastern cottontail, Southern flying squirrel, and Northern short-tailed shrew. Nine species of bats may also be found on or around the refuges. Those bats include the big brown bat, silver-haired bat, Eastern red bat, hoary bat, yellow bat, little brown bat, Northern bat, Eastern pipistrelle, and the evening bat.

Finfish of primary importance found near the refuges include the black drum, red drum, bluefish, winter flounder, summer flounder, menhaden, spot, Atlantic croaker, grey trout, mullet, spotted seatrout, and striped bass.

### *Anticipated impacts*

#### **No Action**

Under the current hunting program, white-tailed deer hunting at Eastern Shore of Virginia NWR creates some minor disturbances to non-target wildlife. Disturbance may include impacts to habitat from hunters walking off-trail, avoidance of areas while hunting is underway, or heightened stress during the hunting season. All impacts to non-target wildlife are indirect, localized, and confined to the hunting season.

#### **Proposed Action**

Some disturbance of non-target wildlife species and impacts on vegetation may occur. While not open to hunting or fishing, other wildlife at either refuge may experience disturbance, avoidance of areas, habitat damage, or injury as a result of the proposed actions. However, these impacts would be minimal because the refuges would limit hunting seasons and provide no hunting areas that will disperse the impacts. Hunting would not be permitted on Sunday for big and upland game and would not be permitted at night for any species. At Fisherman Island NWR, impacts to aquatic species would be minimal as hunting is from boats only, thereby reducing the impacts to shoreline habitats and non-target wildlife. Human presence while fishing in riparian habitat can also induce avoidance behaviors in wildlife, possibly causing them to seek less favorable habitats or less nutritious food sources. Waterfowl specifically may experience reduced nesting success

in areas where human disturbance from fishing is present, as flushing birds from their nests causes cooling of eggs and can result in mortality. Additionally, fishing could result in the injury or mortality of some individuals.

An additional impact to wildlife on and around the refuge may arise from the use of lead ammunition. Lead shot and bullet fragments found in animal carcasses and gut piles are the most likely source of lead exposure for non-target wildlife (Kelly et al. 2011). Many hunters do not realize that the carcass or gut pile they leave in the field usually contains lead bullet fragments. Research continues on the effects of lead ammunition and the fragments it can deposit in killed game. Avian predators and scavengers can be susceptible to lead poisoning when they ingest lead fragments or pellets in the tissues of animals killed or wounded by lead ammunition (Kramer and Redig 1997).

The amount of lead introduced to the environment as a result of refuge hunting and fishing activities, however, is negligible. Lead shot may only be used for hunting white-tailed deer in designated Firearms Units (409 acres) during the appropriate season (usually November to January). We require the use of non-toxic shot for hunting all migratory game birds, turkey, and upland game species in the Firearms Units. The refuge will encourage voluntary use of non-lead ammunition and tackle when hunting deer or fishing on the refuge to mitigate potential impacts.

### **Threatened and Endangered Species and Other Special Status Species**

#### *Affected resource description*

Species that may be found on the refuges include Northeastern beach tiger beetle, piping plover, red knot, roseate tern, black rail, Northern long-eared bat, Atlantic sturgeon, bald eagle, and five species of sea turtles.

The Northeastern beach tiger beetle is found at Eastern Shore of Virginia NWR. A 1999 survey conducted by the Service found 62 adult beetles on refuge property (Knisley and Hill 1999). Another 18 adults were found on the abutting property owned by the Sunset Beach Resort.

The piping plover nests on Fisherman Island, and refuge records dating from 1996 show nesting to occur with a maximum of six nesting pairs annually. Piping plovers have been observed in small flocks during migration.

Northern long-eared bats have not been detected, but cannot be ruled out on either refuge. Red knots occur on Fisherman Island, and could occur on Eastern Shore of Virginia NWR, while roseate terns could occur on either refuge on beaches, intertidal zones or mudflats.

Black rails historically occupied the lower Delmarva Peninsula, but have not been documented at either refuge; however, their occurrence during the winter months in salt marshes cannot be permanently ruled out. There is a small amount of suitable habitat on the Bull Tract unit.

While not federally listed as a threatened or endangered species, bald eagles (*Haliaeetus leucocephalus*) can be found nesting on or near both refuges, and are protected by the Bald and Golden Eagle Protection Act. The Service's Virginia Field Office has designated Bald Eagle

focal areas for the State, but none fall within refuge lands. We have consulted with Thomas Wittig (USFWS) and have mitigation measures in place.

Potential impacts to Atlantic Sturgeon will be coordinated separately with the National Oceanic and Atmospheric Administration (NOAA). The refuge does not anticipate any impacts to Atlantic Sturgeon as a result of the hunting and fishing program.

#### *Anticipated impacts*

##### No Action

There is currently no fishing at Eastern Shore of Virginia NWR and Fisherman Island NWR. The current hunting program, white-tailed deer hunting at Eastern Shore of Virginia NWR, may create some minor disturbances to listed species, including impacts to habitat from hunters walking off-trail, avoidance of areas while hunting is underway, or heightened stress during the hunting season. All impacts to listed species are indirect, localized, and confined to the hunting season and one small area of the refuge.

##### Proposed Action

Hunting is not likely to adversely affect these species given the time of year the activities take place (September 1 through February 28) and where the uses occur on the refuge. Present activities do not have adverse impacts on any threatened or endangered species. There may be a chance that additional fishing could result in the incidental take of an aquatic listed species. While the occurrence would be unlikely it is possible and therefore is addressed in the Intra-Service Section 7 analysis (see Appendix E of the Hunting and Fishing Plan). The refuge staff will provide the public with the Virginia Aquarium 24-hour stranding hotline (posted on the boat ramp kiosk) in the event an incidental catch occurs. The refuge will also provide a disposal site for fishing line and tackle to reduce improper disposal of these items. In addition, Northampton County maintains a no-wake zone within the intercoastal channel in state waters adjacent to the boat ramp. The reduced speeds should minimize potential for vessel strikes of sea turtles within the channel.

There is potential for disturbance from either walking, dogs, or noise to migrating red knot, roseate tern, piping plover, Northern long-eared bat, black rail and nesting sea turtles, which are also addressed in the Section 7 analysis. However, these impacts are minimized, as the refuges would limit hunting seasons and provide archery and no-hunting areas that will assist to disperse impacts. Hunting would not be permitted on Sunday for big and upland game and would not be permitted at night for any species.

We will avoid potential adverse impacts to bald eagles by requiring use of non-toxic shot for all upland game and turkey (species representing new hunting opportunities) and by following management guidelines developed in consultation with the State, including sight and distance setbacks from nests and concentration areas that may develop, and time-of-year restrictions. Bald eagle nesting season starts around December 15 and continues throughout the times of most winter and spring hunts. Hunting activities on the refuge will end February 28. Hunters will be notified with a posting on the hunting kiosk alerting of sensitive areas to avoid to reduce disturbance to nesting eagles. In some instances, these areas may be marked with flagging in the field further alerting hunters of the distance buffer to maintain.

Lead ammunition and fishing tackle can be used on parts of the refuge during the hunting and fishing seasons as detailed in the Hunting and Fishing Plan, in accordance with State and refuge-specific regulations. The amount of lead introduced to the environment as a result of refuge hunting and fishing activities, however, is negligible. Lead shot may only be used for hunting white-tailed deer in designated Firearms Units (409 acres) during the appropriate season (usually November to January). We require the use of non-toxic shot for hunting all migratory game birds, turkey, and upland game species in the Firearms Units. The above listed species would not be exposed to lead shot, as they are either not present in the Firearms Units, or are not present on the refuge during the hunting season. Furthermore, many participants in the hunt will choose non-lead methods of take such as archery. We also encourage use of non-toxic ammunition for deer hunting and alternatives to lead fishing tackle, and will educate hunters and anglers about the impacts of lead to non-target wildlife species. As a result, there are no anticipated adverse impacts to any of the above listed species.

### **Habitat and Vegetation**

#### *Affected resource description*

Habitat types on Eastern Shore of Virginia NWR include maritime forest, shrub/scrub, grasslands, salt marsh and beach/dune. Common vegetation on the refuge include loblolly pine, black cherry cedar, oak, bayberry, groundsel tree, blackberry, goldenrod, dog fennel, and Virginia creeper. Common invasive species include autumn olive, European fennel and Japanese honeysuckle.

Habitat types on Fisherman Island NWR include maritime forest, coastal shrub, salt marsh, beach/dune and mud flats. Common plants on the refuge include black cherry, sassafras, bayberry, groundsel tree, American beach grass, spartina alterniflora, saltwort and goldenrod. Phragmites is the predominant invasive species.

#### *Anticipated impacts*

##### **No Action Alternative**

Under the current management, Eastern Shore of Virginia NWR is open to white-tailed deer hunting. During hunting and scouting, white-tailed deer hunters walk off trail, damaging vegetation and creating new pathways in the process. Minor vegetation trampling is the most likely impact of the hunting program; however, this effect is reduced, as most plants are senescing or entering dormancy during the hunting season. No impacts from other hunts or from fishing are observed under this alternative, as no additional opportunities are provided.

##### **Proposed Action Alternative**

With the expanded hunting program, the impacts on vegetation are expected to increase. Waterfowl hunting would result in trampling of wetland vegetation, alteration of drainage patterns, and creation of trails. There will be increased seed transport of invasives and more impacts to salt marsh. Upland game hunting would also create impacts, as game hunters would likely traverse a larger area of the refuge in pursuit of game than other hunters would. However, like under the No Action Alternative, all of these impacts would be diminished, as vegetation may be dormant or entering dormancy during the hunting seasons. Additionally, opening new acres of the refuge spreads these impacts out, resulting in less observable impacts overall.

## **Visitor Use and Experience**

### *Affected resource description*

Eastern Shore of Virginia NWR is open to all six priority public uses of the Refuge System. These uses include hunting, fishing, wildlife observation, photography, environmental education, and interpretation. In 2017, Eastern Shore of Virginia NWR has 98,698 recreational visits. Of those visits, 286 were for hunting, 19,570 were for fishing, and the remaining 78,842 were for non-consumptive recreational uses (Banking on Nature 2017). Fisherman Island NWR is currently closed to all public uses.

### *Anticipated impacts*

#### **No Action Alternative**

Only Eastern Shore of Virginia NWR is open to public uses. With only very limited hunting opportunities open on the refuge, there are very few visitor use conflicts involving hunters. Hunters reflect a very small fraction of users on the refuge under this alternative. There are no visitor use conflicts at Fisherman Island NWR.

#### **Proposed Action Alternative**

There would be minimal visitor use conflicts at Eastern Shore of Virginia NWR or Fisherman Island NWR under this alternative. There could be conflicts amongst migratory bird hunters, but the refuge is closed to all other uses. Public outreach, zoning, and restrictions in some locations have been proposed to reduce conflicts among the different user groups (bird watchers, hikers, bike trail users, wildlife photographers). If conflicts arise among user groups, mitigation efforts can be implemented to ensure that the proposed use will not have significant impacts to other user groups. Impacts to other users will be limited to the hunting season and are minimized by time and space zoning that lessens the interactions between hunters and other wildlife dependent users.

## **Cultural Resources**

### *Affected resource description*

Eastern Shore of Virginia NWR has had a professional archaeological survey completed to assess the eligibility of its known sites. The refuge has one farmstead eligible for the National Register. In addition, there are structural remains of Fort John Custis and part of the Chesapeake Bay Harbor Defenses, which may be eligible for the National Register. Nine other known sites, including two cemeteries, have been evaluated for eligibility for the National Register. None of these sites are eligible.

At Fisherman Island NWR, no archaeological or professional architectural survey has been conducted. Known cultural resources on Fisherman Island consist of four structures remaining from Chesapeake Bay Harbor Defenses for World War II (gun emplacements and activities related to their support). In addition, there is one standing cabin related to hunting and fishing on the island. Sites of cabins from the late nineteenth and early twentieth century may exist as well. No cultural resources on Fisherman Island have yet been evaluated for National Register eligibility.

### *Anticipated impacts*

#### No Action Alternative

No adverse impacts would occur under this alternative.

#### Proposed Action Alternative

Hunting and fishing, regardless of method or target, are consumptive activities that do not pose any threat to prehistoric or historic properties on or near the refuge. No impacts to cultural resources are anticipated above what may be caused by any refuge visitor. Although hunters and anglers would be able to access parts of the refuges that are closed to other visitors, this access alone is not expected to increase vandalism or disturbance to cultural resources by individuals while they are hunting, nor is it likely that hunters would be more likely to engage in vandalism or disturbance than any other refuge visitor. At Fisherman Island NWR, hunting would be the only available public use; however, no adverse impacts to cultural resources are expected.

### **Refuge Operations and Management**

#### *Affected resource description*

Existing facilities at Eastern Shore of Virginia NWR include the Visitor Center, refuge headquarters, four maintenance buildings, one bunkhouse, and three refuge residences (including one house for university and non-governmental organization researchers). We also have a kiosk, trails, paved hike and bike trail, roads, gates, and signs.

The Eastern Shore of Virginia and Fisherman Island NWRs are administered as part of the Chincoteague NWR Complex but have a separate staff and annual budget. The refuge staff consists of three full-time, permanent staff including a refuge manager, wildlife biologist, and administrative assistant. The staff is augmented by one full-time term maintenance worker and several seasonal interns and volunteers. The refuge currently spends approximately \$10,000.00 per year to administer the hunt program. Staff spend approximately 10 percent of their time to manage and administer hunting activities on the refuge.

### *Anticipated impacts*

#### No Action Alternative

Hunters currently use refuge infrastructure, such as parking areas and refuge trails, to gain access to Eastern Shore of Virginia NWR lands. There are no adverse impacts to refuge facilities observed under this alternative. There would be no changes to refuge facilities or infrastructure under this alternative.

#### Proposed Action Alternative

Hunters would continue to use existing refuge infrastructure (parking areas, trails, roadways) to access hunting areas. It is anticipated that there would be 400 additional hunter visits per year and 100 fishing visits per year. While more visitors are expected to use the refuge under this alternative, no significant impacts to infrastructure or facilities are anticipated. No major changes to facilities or infrastructure are currently proposed as part of this alternative.

## **Socioeconomics and Environmental Justice**

### *Affected resource description*

As of July 1, 2017, the population of Northampton County was estimated at 11,710 people (U.S. Census 2019). From 2016 to 2017, employment in Northampton County grew by 3.18 percent (Data USA 2020). The most common job groups in the State are in sales, management, and administrative support. The Northampton County economy is projected to continue to grow over the next 3 years.

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

### *Anticipated impacts*

#### **No Action Alternative**

The current hunting program has a minor, long-term beneficial impact to the local economy. Only 286 visitors accessed the refuge for hunting in 2017, but each of those visits represents a minor contribution to the economy (Banking on Nature 2017). The majority of refuge visitors are not residents of the local area; therefore, many visitors spend money on gasoline, equipment, food, and lodging in the area surrounding the refuge. While positive, the contributions to the local economy can be considered negligible.

#### **Proposed Action Alternative**

While hunting visitation may increase due to increased opportunities, hunting only accounts for a fraction of expenditures related to the refuge. Expanding hunting and fishing programs at Eastern Shore of Virginia and Fisherman Island NWRs would likely enrich the local economy by attracting additional refuge visitors to the area, but the additional economic impact is expected to be negligible under this action. The Service has not identified any potential high and adverse environmental or human health impacts from any of the alternatives. The Service has identified no minority or low-income communities within the impact area. Minority or low-income communities would not be disproportionately affected by any impacts from any of the alternatives.

## **Monitoring**

Many game species populations are monitored by VDWR through field surveys and game harvest reports, which provide an additional means for monitoring populations. The State has determined that populations of game species are at levels acceptable to support hunting and these assessments are reviewed and adjusted periodically. The refuge will be adaptive towards harvest management under the hunt program to ensure species and habitat health. A Habitat Management Plan was approved in February 2019 and a yet to be finalized Inventory and Monitoring Plan will be used to assist in evaluating the impacts of hunting and fishing on habitat health. Refuge-specific hunting regulations may be altered to achieve species-specific harvest objectives in the future.

## **Summary of Analysis**

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

### Alternative A – No Action Alternative

As described above, 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 or fishing opportunities would not be created under this alternative. This alternative has negligible short-term impacts to physical and biological resources. This alternative, however, would reduce our actions as mandated under the Refuge System Administration Act and Secretarial Order 3356.

### Alternative B –Proposed Action Alternative

As described above, this alternative is the Service’s proposed action because it offers the best opportunity for public hunting and fishing that would result in minimal impacts 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, although the proposed action would be additive to existing hunting programs, it will not have a significant impact on local or regional wildlife populations at any scale. This alternative best meets the purpose and need stated earlier.

## **List of Sources, Agencies and Persons Consulted**

USFWS – Ecological Services – Virginia Field Office, Gloucester, VA (Section 7 process)  
Virginia Department of Wildlife Resources – State Office – Henrico, VA (Meeting)  
Virginia Department of Wildlife Resources – District Office – Charles City, VA (Meeting)  
Virginia Department of Conservation and Recreation - Natural Heritage - Richmond, VA  
NOAA (Section 7 process)

## **List of Preparers**

Stacey Lowe – (previous) Refuge Manager ESV NWR; Regional Chief of Hunting and Fishing  
Robert Leffel – Deputy Refuge Manager, Chincoteague NWR  
Pamela Denmon – Refuge Biologist, ESV NWR  
Tom Bonetti – Regional Hunting and Fishing Coordinator  
Laura Howard – Visitor Services Assistant

## **State Coordination**

Virginia refuges met on January 14, 2020, with the VDWR to discuss hunting on national wildlife refuges within the State of Virginia. A general overview of current opportunities and where other opportunities exist for the future.

The refuge also hosted a follow-up meeting with Michael (Todd) Englemeyer, VDWR District Wildlife Biologist on June 11, 2020. The Service discussed with VDWR the potential changes to the hunting and fishing plan for Eastern Shore of Virginia and Fisherman Island NWR’s. The State was supportive of the changes and recommended that the plan be reviewed by the Service’s Regional Office and then submitted to the VDWR State Office for official comment.

### **Tribal Consultation**

Eastern Shore of Virginia and Fisherman Island NWRs were part of a joint letter notifying tribal leadership of proposed changes to hunting and fishing on National Wildlife Refuges in Virginia. The groups addressed in this letter included the Chickahominy Indian Tribe, Monacan Indian Nation, Nansemond Indian Nation, Pamunkey Indian Tribe, Rappahannock Tribe, Upper Mattaponi Tribe, Catawba Indian Nation, Delaware Tribe of Indians, Delaware Nation of Oklahoma, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe of Oklahoma, and the Muscogee Creek Nation.

### **Public Outreach**

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

This EA is part of the Eastern Shore of Virginia and Fisherman Island NWRs Hunting and Fishing Plan, with accompanying Compatibility Determinations (CD). The plan was coordinated with all interested and/or affected parties, including VDWR staff. The public will be notified of the availability of the Hunting and Fishing Plan, EA, and CDs with no less than a 30-day review and comment period. We will inform the public through local venues, the refuge website, and social media.

### **Determination**

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

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

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

Preparer Signature:  Date: 8/13/2021

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

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## OTHER APPLICABLE STATUTES, EXECUTIVE ORDERS AND REGULATIONS

### *Cultural Resources*

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

### *Fish and Wildlife*

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

### *Natural Resources*

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

### *Water Resources*

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



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694 Fax: (804) 693-9032

<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:

September 23, 2020

Consultation Code: 05E2VA00-2020-SLI-6323

Event Code: 05E2VA00-2020-E-17490

Project Name: Hunting and Fishing on Eastern Shore of Virginia NWR

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Virginia Ecological Services Field Office**

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

## Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a></p>	<p>Proposed Threatened</p>
<p>Piping Plover <i>Charadrius melodus</i></p> <p>Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a></p>	<p>Threatened</p>
<p>Red Knot <i>Calidris canutus rufa</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a></p>	<p>Threatened</p>
<p>Roseate Tern <i>Sterna dougallii dougallii</i></p> <p>Population: Northeast U.S. nesting population</p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a></p>	<p>Endangered</p>

## Reptiles

NAME	STATUS
<p>Green Sea Turtle <i>Chelonia mydas</i></p> <p>Population: North Atlantic DPS</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a></p>	<p>Threatened</p>
<p>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a></p>	<p>Endangered</p>
<p>Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i></p> <p>There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/5523">https://ecos.fws.gov/ecp/species/5523</a></p>	<p>Endangered</p>
<p>Leatherback Sea Turtle <i>Dermochelys coriacea</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a></p>	<p>Endangered</p>
<p>Loggerhead Sea Turtle <i>Caretta caretta</i></p> <p>Population: Northwest Atlantic Ocean DPS</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a></p>	<p>Threatened</p>

## Insects

NAME	STATUS
Northeastern Beach Tiger Beetle <i>Cicindela dorsalis dorsalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8105">https://ecos.fws.gov/ecp/species/8105</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

**Endangered Species Act (ESA) Section 7 Determination Table**

Project Name: Hunting and Fishing on Eastern Shore of Virginia NWR

Date: 7/23/21

Consultation Code:

<b>Species / Resource Name</b>	<b>Habitat/Species Presence in Action Area</b>	<b>Sources of Info</b>	<b>ESA Section 7 Determination</b>	<b>Project Elements that Support Determination, and Potential Effects of the Proposed Action</b>
<i>Insert name of species or resource as listed on Official Species List.</i>	<i>Indicate if suitable habitat and species are present in the Action Area (see examples in Step 5).</i>	<i>Explain what info suitable habitat/species presence is based on.</i>	<i>Using reasoning and decision tables in Step 5, select determination for each species (e.g. no effect, not likely to adversely affect, or likely to adversely affect).</i>	<i>Explain which project elements may impact the habitat or individuals of each species and any Avoidance and Minimization Measures being implemented.</i>
Northern long-eared bat	Yes	VDWR bat biologist; species information in IPaC	Not likely to adversely affect. Received verification letter under ESA Section 4(d) rule through IPaC. Covered by 4(d) rule. Action may affect the Northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o).	<p>Project occurs during typical hibernation period and during daylight hours. Project not likely to disturb species or habitat.</p> <p>Noise disturbance could occur if bats are present in the project area, but low impacts expected since access to areas with firearm hunting will be limited. Areas near possible NLEB habitat would be restricted to archery-only hunting or closed to hunting altogether.</p> <p>Any gun use near bats' roosting trees could flush the bats from the trees, but it is more likely that the bats would remain in the tree than be flushed and instances of flushing would not result in bat mortality. There is no hunting near any cave or mine where NLEB could hibernate and hunting programs would not result in any tree cutting or other habitat alteration. Hunters may erect temporary tree stands during the hunting season that could damage trees or disturb roosting bats.</p>

Species / Resource Name	Habitat/Species Presence in Action Area	Sources of Info	ESA Section 7 Determination	Project Elements that Support Determination, and Potential Effects of the Proposed Action
Piping plover	Yes	Refuge biologist, VDWR coastal biologist	Not likely to adversely effect	Potential disturbance from walking and noise, but low impacts expected since access to hunting/fishing areas will be limited. Hunting seasons will end on February 28 to prevent impacts to shorebirds. Fishing will be permitted year-round, but limited to designated areas (i.e., the Wise Point Boat Dock, the shoreline of Skidmore Island, and the shoreline of Bull tract).to prevent impacts to threatened or endangered species.
Red knot	Yes	Refuge biologist, VDWR coastal biologist, Motus data	Not likely to adversely effect	Potential disturbance from walking and noise, but low impacts expected since access to hunting/fishing areas will be limited. Hunting seasons end before March to prevent impacts to shorebirds. Fishing permitted year-round, but limited to designated areas.
Roseate tern	Yes	USFWS Migratory Bird biologist	Not likely to adversely effect	Potential disturbance from walking and noise, but low impacts expected since accessto hunting/fishing areas will be limited. Hunting seasons will end on February 28 to prevent impacts to shorebirds. Fishing will be permitted year-round but is limited to designated areas to prevent impacts to threatened or endangered species.
Black rail	Yes	Refuge biologist	Not likely to adversely effect	Possibly present during the project and would be subjected to disturbance from walking and noise, but low impacts expected since access to hunting areaswill be limited.
Northeastern beach tiger beetle	Yes	Refuge biologist	Not likely to adversely effect	Hunters might possibly walk on beach, but no larvae disturbance will likely occur as larvae live in burrows in a 8 -12 m width in and above the intertidal zone. Mortality is due to predators, erosion, winter storms with low survival (estimated 5 percent) to adult stage. Adult

Species / Resource Name	Habitat/Species Presence in Action Area	Sources of Info	ESA Section 7 Determination	Project Elements that Support Determination, and Potential Effects of the Proposed Action
				beetles are not present during project timeline because hunting seasons are prohibited from March to September.
Loggerhead sea turtle Kemp's Ridley sea turtle Green sea turtle Leatherback sea turtle Hawksbill sea turtle	Yes	Refuge biologist, VDWR coastal biologist	Not likely to adversely effect	Hunting on beaches could only occur on Skidmore Island where there is a small amount of beach (approximately 4 acres); we will limit or close if nesting sea turtles are present.

## Lead

Lead ammunition can be used during the hunting season for white-tailed deer only. The amount of lead introduced to the environment because of deer hunting, however, is negligible given the refuge's efforts to encourage the voluntary use of non-toxic ammunition and its proposed restrictions for the use of lead. Lead ammunition is only permitted for white-tailed deer hunting in the firearms hunting area. On all other areas of the refuge and for all other species, lead ammunition is prohibited. The bioaccumulation of lead is a potential concern, but it does not present a significant issue for this activity on this refuge because the refuge encourages the voluntary removal of gut piles from the refuge. We encourage the use of non-toxic ammunition and will educate hunters about lead. Moreover, the scarce amount of lead introduced on this refuge is not likely to affect the Northern long-eared bat, piping plover, red knot, roseate tern, black rail, or Northeastern beach tiger beetle, because these species are not present or active on the refuge during the hunting season. The lead introduced on the refuge is not likely to affect the loggerhead sea turtle, Kemp's Ridley sea turtle, green sea turtle, leatherback sea turtle, or hawksbill sea turtle because these species are not present near the hunting areas. None of these species are scavengers and therefore would not be impacted by any lead fragments in gut piles left on the refuge after the hunting seasons have ended.

Lead tackle can be used during the fishing season. The amount of lead introduced to the environment because of sport fishing, however, is negligible given the expected levels of participation on the refuge. Fishing constitutes a small portion of refuge visitation and fishing on the refuge is only a small portion of the fishing that occurs statewide. As a result, impacts from lead would be unmeasurable. The bioaccumulation of lead is a potential concern, but it does not present a significant issue for sport fishing on this refuge due to the anticipated levels of use. We also encourage the use of non-toxic tackle and educate anglers about lead. Moreover, the lead introduced on this refuge is not likely to affect the Northern long-eared bat or Northeastern beach tiger beetle, because these species are not aquatic and would not come into contact with lead tackle. We anticipate no adverse impacts from secondary poisoning to piping plover, red knot, roseate tern, and black rail, based on their feeding habits (i.e., microinvertebrates in the intertidal zone, or very small fish) and the expected participation levels of sport fishing. The lead introduced on the refuge is not likely to affect loggerhead sea turtle, Kemp's Ridley sea turtle, green sea turtle, leatherback sea turtle, or hawksbill sea turtle because if these species are observed on refuge beaches, those areas would be closed to hunting and fishing to prevent disturbance.

## IPAC/ECOS

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

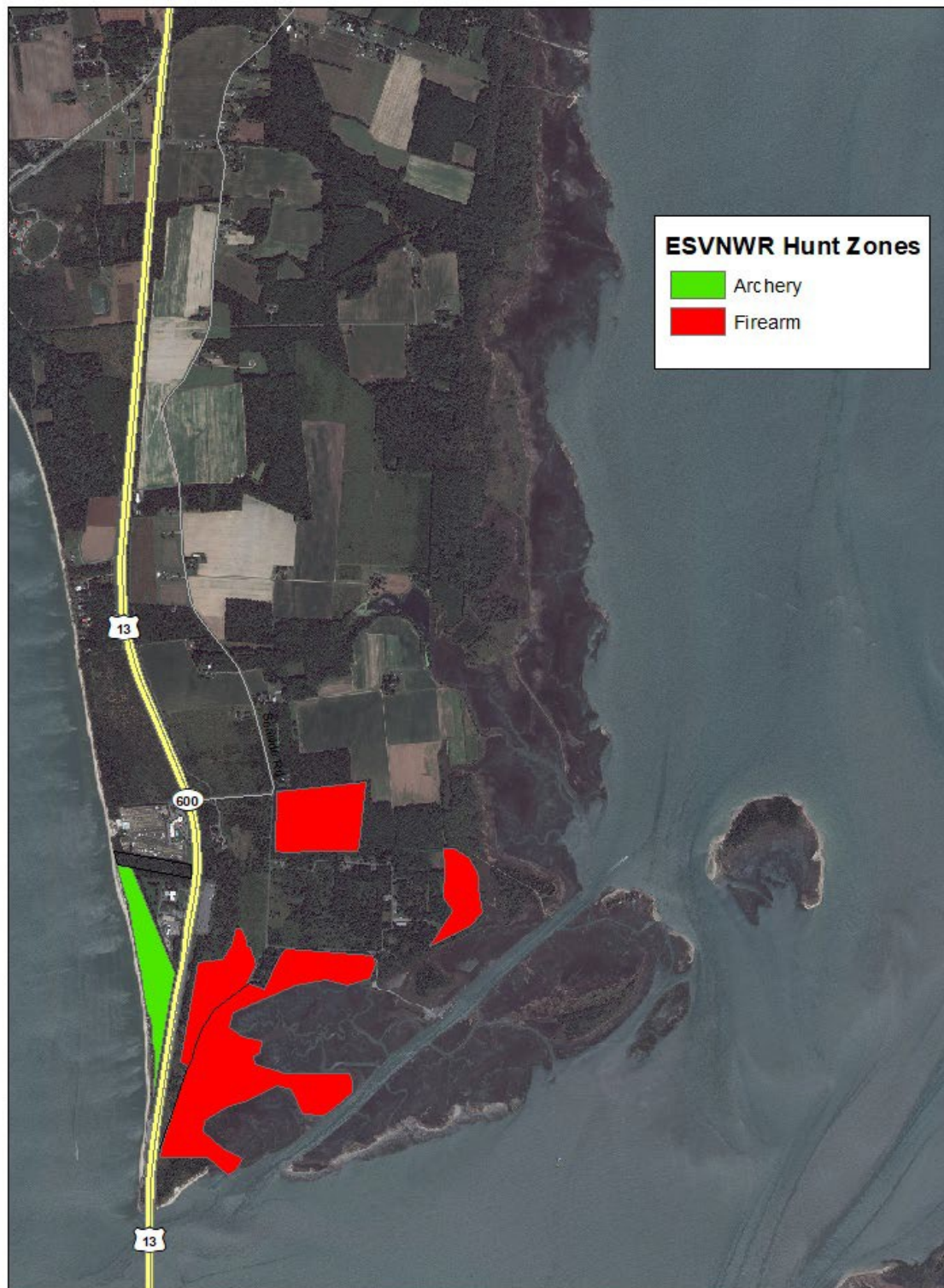
Staff present on the refuge and conducting this evaluation may have the best available information about the presence of fish and wildlife species. Thus, where species are identified by either database, but the refuge has information that the species is not actually present within the "action area,"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

## Hunting and Fishing on Eastern Shore of Virginia NWR

Dates: September 1 through February 28 annually

Description: Increase areas for hunting, add species hunted and add new fishing areas on Eastern Shore of Virginia National Wildlife Refuge.

### Eastern Shore of Virginia NWR Current Hunt Zone Map

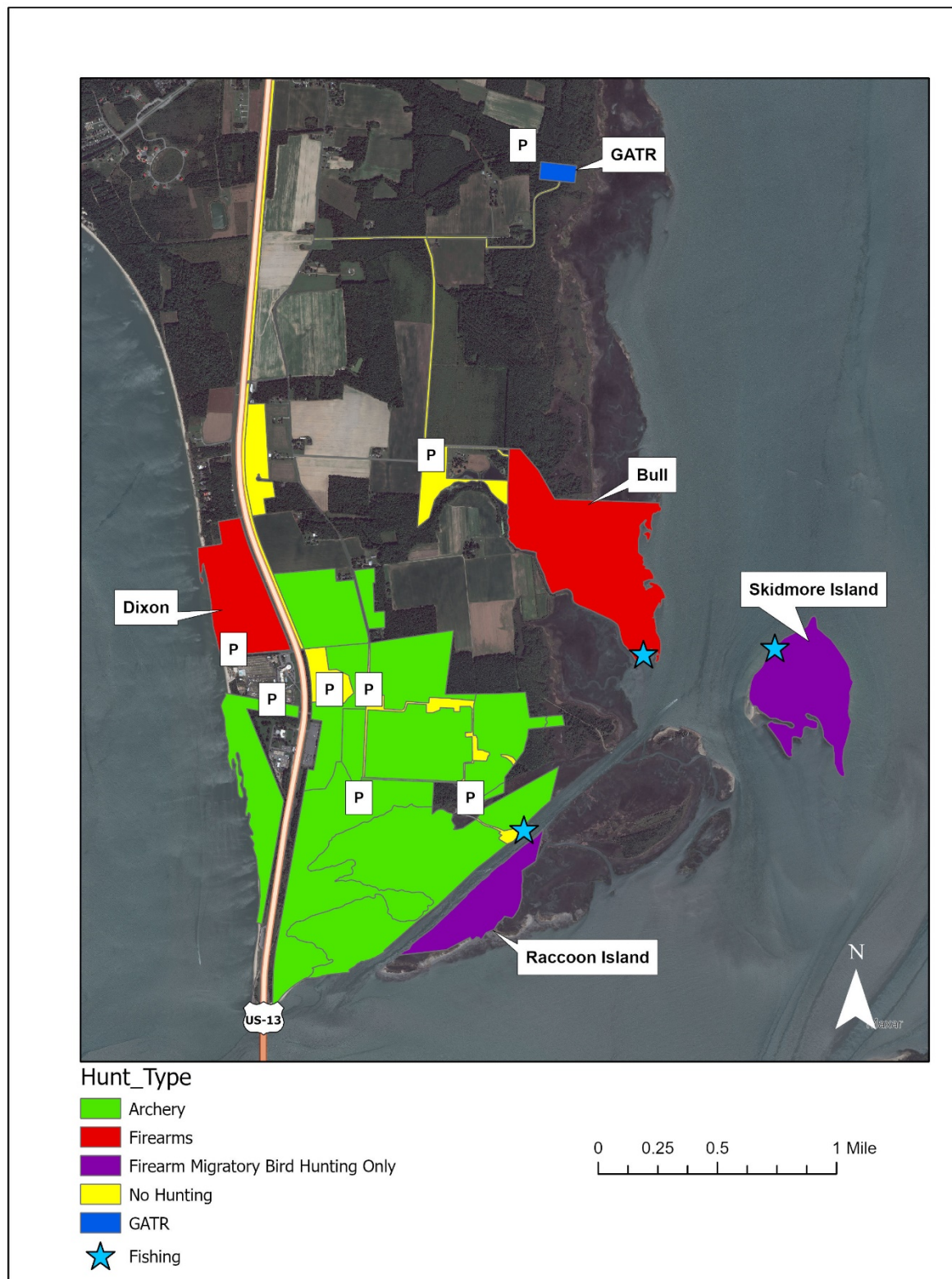


## Hunting and Fishing on Eastern Shore of Virginia NWR

Dates: September 1 through February 28 annually

Description: Increase areas for hunting, add species hunted and add new fishing areas on Eastern Shore of Virginia National Wildlife Refuge.

### PROPOSED HUNT ZONE MAP





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061

### Self-Certification Letter

Project Name: Hunting and Fishing on Eastern Shore of Virginia National Wildlife Refuge

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website [http://www.fws.gov/northeast/virginiafield/endspecies/project\\_reviews.html](http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html). If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

A handwritten signature in blue ink, reading "Cynthia A. Schulz".

Cindy Schulz  
Field Supervisor  
Virginia Ecological Services

Enclosures - project review package



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694 Fax: (804) 693-9032

<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:

Consultation Code: 05E2VA00-2020-TA-6323

Event Code: 05E2VA00-2020-E-17493

Project Name: Hunting and Fishing on Eastern Shore of Virginia NWR

Subject: Verification letter for the 'Hunting and Fishing on Eastern Shore of Virginia NWR' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Pamela Denmon:

The U.S. Fish and Wildlife Service (Service) received on September 23, 2020 your effects determination for the 'Hunting and Fishing on Eastern Shore of Virginia NWR' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"<sup>[1]</sup> prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Black Rail, *Laterallus jamaicensis ssp. jamaicensis* (Proposed Threatened)
- Green Sea Turtle, *Chelonia mydas* (Threatened)
- Hawksbill Sea Turtle, *Eretmochelys imbricata* (Endangered)
- Kemp's Ridley Sea Turtle, *Lepidochelys kempii* (Endangered)
- Leatherback Sea Turtle, *Dermochelys coriacea* (Endangered)
- Loggerhead Sea Turtle, *Caretta caretta* (Threatened)
- Northeastern Beach Tiger Beetle, *Cicindela dorsalis dorsalis* (Threatened)
- Piping Plover, *Charadrius melodus* (Threatened)
- Red Knot, *Calidris canutus rufa* (Threatened)
- Roseate Tern, *Sterna dougallii dougallii* (Endangered)

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

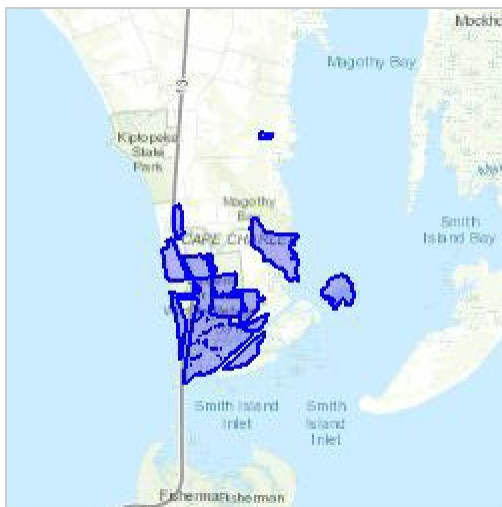
Hunting and Fishing on Eastern Shore of Virginia NWR

### 2. Description

The following description was provided for the project 'Hunting and Fishing on Eastern Shore of Virginia NWR':

Update new hunting areas and hunted species on Eastern Shore of Virginia NWR.  
Add new public fishing areas.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.12833226553104N75.95722889303792W>



## Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

## Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).



**United States Department of Commerce**  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Greater Atlantic Region  
55 Great Republic Drive  
Gloucester, MA 01930

March 2, 2021

Robert J. Leffel  
Deputy Refuge Manager  
Eastern Shore of Virginia National Wildlife Refuge  
5003 Hallett Circle  
Cape Charles, Virginia 23310

**Re: Informal Section 7 Consultation under the Endangered Species Act for the Proposed Opening of a Portion of the Eastern Shore of Virginia National Wildlife Refuge to Sport Fishing**

Dear Mr. Leffel:

We have completed our consultation under section 7 of the Endangered Species Act (ESA) in response to your request for consultation dated February 3, 2021. We reviewed your consultation request document and related materials. Based on our knowledge and your materials, we concur with your conclusion that the proposed action is not likely to adversely affect any ESA-listed species under our jurisdiction. As such, no further consultation pursuant to section 7 of the ESA is required. Overall, we agree with your analysis and effects determination as it relates to ESA listed species; however, we have provided a minor clarification as described below.

In the section of your letter describing recreational fishing, you state that opening a portion of the Refuge to sport fishing is not expected to have any effect on the current level of fishing in Magothy Bay. We would like to clarify that, at this time, we assume only a slight increase in risk from the limited amount of sport fishing added to the baseline level of activity in the action area and that any associated increase in risk of an incidental take would be too small to be meaningfully measured, detected, or evaluated and thus have an insignificant effect rather than no effect.

Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (a) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; (b) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation or; (c) If a new species is listed or critical habitat designated that may be affected by the identified action. No take is anticipated or exempted. Should you have any questions about this correspondence please contact Brian Hopper at [brian.d.hopper@noaa.gov](mailto:brian.d.hopper@noaa.gov). For questions related to Essential Fish Habitat, please contact David O'Brien, with our Habitat Conservation Division at (804) 684-7828 or [david.l.o'brien@noaa.gov](mailto:david.l.o'brien@noaa.gov).

Sincerely,

Jennifer Anderson  
Assistant Regional Administrator  
for Protected Resources

EC: O'Brien, NMFS HCD  
ECO: 2021-00274

File Code: H:\Section 7 Team\Section 7\Non-Fisheries\FWS\Informal\2020\Eastern Shore of Virginia NWR

Appendix E - Intra-Service Section 7 Evaluation





United States Department of the Interior  
FISH AND WILDLIFE SERVICE



Eastern Shore of Virginia National Wildlife Refuge  
5003 Hallett Circle  
Cape Charles, VA 23310  
(757) 331-2760

January 29, 2021

Mark Murray-Brown, Endangered Species Act Section 7 Coordinator  
National Oceanic and Atmospheric Administration  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
NOAA Fisheries Service  
Gloucester, MA 01930

RE: Informal Section 7 Consultation under the Endangered Species Act for the Proposed Opening of a Portion of the Eastern Shore of Virginia National Wildlife Refuge to Sport Fishing

Dear Mr. Murray-Brown:

The U.S. Fish and Wildlife Service (Service), Eastern Shore of Virginia National Wildlife Refuge (Refuge or NWR) is requesting informal consultation under the Endangered Species Act (ESA) for a proposal to open a portion of the Eastern Shore of Virginia NWR to sport fishing. The purpose of this proposed action is to provide compatible wildlife-dependent recreational opportunities on the Refuge.

**Proposed Action**

The proposal to open a portion of the Refuge to sport fishing meets the Service's priorities and mandates under the National Wildlife Refuge System Administration Act, as amended by the National Wildlife Refuge System Improvement Act (16 U.S.C. 668dd et seq.) (Refuge Improvement Act). The Refuge Improvement Act includes a mandate that the Secretary of the Interior recognize compatible wildlife-dependent recreational uses as the priority general public uses of the National Wildlife Refuge System through which the American public can develop an appreciation for fish and wildlife. The proposal to open a portion of the Refuge to sport fishing is also tied to the management direction adopted in the 2004 Comprehensive Conservation Plan (CCP) for the Eastern Shore of Virginia and Fisherman Island NRWs. Goal 4 of the CCP addresses the importance of providing opportunities for compatible wildlife-dependent recreation and interpretation to foster public appreciation of the unique natural and cultural heritage of the Eastern Shore of Virginia.

The Service did not propose opening the Refuge to sport fishing when the CCP was approved because, as United States Navigable Waters, Magothy Bay is already open to the public for boating and fishing, including the open waters within the boundaries of the Refuge. However, in accordance with the priorities of the Service, we are now proposing to administratively open three areas of the Refuge shoreline to sport fishing; fishing would be allowed from an existing dock and a mainland shoreline

accessible by road, and on the Skidmore Island beach that is accessible only by boat (Figure 1). All of three access points are within the Magothy Bay area. The shallow water depths in the Magothy Bay (1 foot to 6 feet at low tide) limit the type of boats that can be used in this area to motorized and non-motorized shallow draft vessels. While fishing would be allowed from the shoreline it is not expected to add additional boating pressure as the Refuge boat ramp parking is currently fixed at a maximum capacity of 75 vehicle spaces with no intention of expansion.

### **Description of the Action Area**

The action area is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50 CFR 402.02) (i.e., where listed species may experience effects: contact with disposed material, loss of habitat, increased turbidity and noise, increased vessel traffic).

The Eastern Shore of Virginia NWR lies on the southern tip of the Delmarva Peninsula (Figure 1). The peninsula is bordered on the east by Magothy Bay and the Atlantic Ocean and on the west by the Chesapeake Bay. The Refuge is composed of a contiguous block of land located at the southern tip of the peninsula, several smaller parcels scattered north of the main refuge, and a barrier island. The peninsula is part of the Virginia barrier island classified as a “Wetland of International Importance” under the RAMSAR Convention. Located in Northampton County, Virginia, the refuge is in a rural area where development trends are on the rise. Habitat types on Eastern Shore of Virginia NWR include forests, shrub/scrub, grasslands, and salt marsh.

Waters surrounding the Eastern Shore of Virginia Refuge are already popular fishing locations via a boat and support a diverse array of fish species. The most frequently caught species in Magothy Bay are striped bass, summer flounder, red drum, speckled trout, croaker, sharks, rays and skates, which are available throughout the year but most abundant April thru November.

### **NMFS Listed Species in the Action Area**

There are five federally threatened or endangered sea turtles (Green sea turtle - *Chelonia mydas*; Hawksbill sea turtle - *Eretmochelys imbricata*; Kemp's Ridley sea turtle - *Lepidochelys kempii*; Leatherback sea turtle - *Dermochelys coriacea*; and Loggerhead sea turtle - *Caretta caretta*) and one federally endangered fish species, the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) that occur within Magothy bay at various times of the year (<https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27>, accessed December 8, 2020).

### **Sea Turtles**

While sea turtles occur year-round off the southeastern United States, they are generally present in marine and estuarine waters in the Greater Atlantic Region (GAR) from April through November. As water temperatures warm in the spring, sea turtles begin to migrate to nearshore waters and up the U.S. Atlantic coast, occurring in Virginia as early as April/May and in the Gulf of Maine in June. The trend is reversed in the fall with some animals remaining in the GAR until late fall. Outside of these times, sea turtle presence in waters in the GAR is considered unlikely, although juvenile sea turtles routinely strand on beaches within the GAR during colder months (i.e., from October to January) as a result of cold-stunning. Nesting is extremely limited in the GAR. Typically, juveniles and, to a lesser extent, adults are present in the GAR.

### Atlantic Sturgeon

Atlantic sturgeon are long-lived (approximately 60 years), late maturing, estuarine dependent, anadromous fish. They are relatively large fish, even amongst sturgeon species. Atlantic sturgeon are bottom feeders that suck food into a ventrally-located protruding mouth. Four barbels in front of the mouth assist the sturgeon in locating prey. Diets of adult and migrant sub-adult Atlantic sturgeon include mollusks, gastropods, amphipods, annelids, decapods, isopods, and fish such as sand lance. Juvenile Atlantic sturgeon feed on aquatic insects, insect larvae, and other invertebrates.

Atlantic sturgeon originating from the New York Bight, Chesapeake Bay, South Atlantic, and Carolina DPSs are listed as endangered, while the Gulf of Maine DPS is listed as threatened. The marine range of all five DPSs extends along the Atlantic coast from Canada to Cape Canaveral, Florida. Based on the best available information, Atlantic sturgeon originating from any of the five DPSs could occur in the Magothy Bay; however, it is likely that the majority of Atlantic sturgeon in the action area would be from the Chesapeake Bay DPS. Available data from the National Marine Fisheries Service (NMFS) indicate that adult and sub-adult life stages may be present in the action area for the project.

Atlantic sturgeon spawn in their natal river, with spawning migrations generally occurring during February-March in southern systems, April-May in mid-Atlantic systems, and May-July in Canadian systems. Recent evidence indicates a second spawning event in the fall (mid- to late September) in the James River and likely other rivers with sturgeon populations in Virginia, such as the Magothy Bay system. Young remain in the river/estuary until approximately age 2 before migrating to the open ocean as sub-adults. After emigration from the natal river/estuary, sub-adults and adult Atlantic sturgeon travel within the marine environment, in waters up to approximately 164 feet in depth, using coastal bays, sounds, and marine waters. While no studies exist on the depth preferences of Atlantic sturgeon, because of similar observed habitat requirements and biology between shortnose and Atlantic sturgeon, most feel this observation is accurate for both species. Based on the best available information, Atlantic sturgeon originating from any of the five DPSs could occur in the Magothy Bay to search for foraging habitat. Additionally, the distribution of Atlantic sturgeon, from any DPS, is strongly associated with prey availability, and as a result, Atlantic sturgeon may occur where suitable forage (e.g. benthic invertebrates such as mollusks and crustaceans) and appropriate habitat conditions (e.g. areas of submerged aquatic vegetation (SAV)) are present.

### **Effects Determinations**

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02).

Opening a portion of the Refuge to sport fishing is not expected to have any effect on the current level of fishing in Magothy Bay; therefore, in accordance with the regulatory definition of “effect of the action,” the Service has concluded that fishing effort is not a consequence because it would occur regardless of the proposed action. However, fishing at any level in this area has the potential to impact Atlantic sturgeon and sea turtles from entanglement in or ingestion of discarded fishing line or fish hooks and through accidental capture of these species. However, the Service already takes steps to minimize the potential for impacts to sea turtles, including periodic boat patrols conducted by Refuge law

enforcement officers and State conservation officers within the open waters around the Refuge. Further, to minimize the potential for adverse effects related to discarded monofilament fishing line, we have installed signage and a monofilament fishing line recycling container at the existing boat ramp facility to address the dangers of monofilament fishing line to sea turtles, birds and other wildlife. A sign giving a contact number for the 24 hour emergency Hotline of the Virginia Aquarium and Marine Science Center Stranding Response Program will be posted at accessible areas. If in the improbable event a nontarget species is accidentally caught, a knowledgeable person can assist the Angler.

Due to the opening of shoreline fishing on Skidmore Island beach that is accessible by boat from a boat ramp on Refuge property, a potential effect of this project to the Atlantic sturgeon and sea turtles is the risk of interactions with boats. This potential effect is described in further detail below.

#### Vessel interactions

The project is located at the southern tip of the Delmarva Peninsula in a relatively undeveloped portion of Virginia within the Eastern Shore of Virginia NWR. Waters surrounding the Eastern Shore of Virginia Refuge are already popular for boat-based fishing.

Vessels travel to the Refuge from marinas, boat ramps, and private docks located primarily on the Eastern Shore of Virginia. We have considered the likelihood that an increase in vessel traffic associated with the project increases the risk of interactions between listed species and vessels in the project area, compared to baseline conditions. In our analysis we considered three elements: (1) the existing baseline conditions, (2) the action and what it adds to existing baseline conditions, and (3) new baseline conditions (the existing baseline conditions and the action together).

We have determined that vessel traffic added to baseline conditions as a result of the opening of the Refuge to sport fishing is not likely to adversely affect ESA-listed species for the following reasons. The waters around the Refuge are already a popular site where sport fishing and recreational vessels travel on a regular basis. While fishing will now be allowed from the shoreline it is not expected to add additional pressure as the current boat ramp parking is currently fixed at a maximum capacity of 75 vehicle spaces with no intention of expansion. In addition, the shallow water depths in the Magothy Bay (1 foot to 6 feet at low tide) limit the type of boats that can be used in this area to motorized and non-motorized shallow draft vessels and all of the access points are within the Magothy Bay area.

Adding vessels to the existing baseline will not significantly increase the risk that any vessel in the area will strike an individual, or will increase it to such a small extent that the effect of the action (i.e., any increase in risk of a strike caused by the project) cannot be meaningfully measured or detected. While the baseline risk of a vessel strike around the Eastern Shore of Virginia NWR is unknown, the increase in traffic associated with the proposed project is extremely small. As a result of opening the Refuge to sport fishing, a minimal number of small, shallow draft vessels will be added to the baseline; further limited by the area available on the Refuge's only boat ramp at Wise Point. As such, any increased risk of a vessel strike caused by the project will be too small to be meaningfully measured or detected. As a result, the effect of the action on the increased risk of a vessel strike in the action area is insignificant.

## **Conclusions**

Based on the analysis of the proposed action, any effects to ESA listed species will be insignificant or discountable, and therefore we have determined that the proposed action, “may affect, but is not likely to adversely affect” any listed species or critical habitat under NMFS' jurisdiction. This affects determination is predicated on the use of best scientific and commercial data readily available for use by the Service to complete its effects analysis. We request NMFS concurrence with our determination for the proposed opening of a portion of the Eastern Shore of Virginia NWR to sport fishing.

If you would like additional information regarding the proposed opening of a portion of the Refuge to sport fishing, please contact me at [Robert\\_Leffel@fws.gov](mailto:Robert_Leffel@fws.gov).

Sincerely,

Robert J. Leffel  
Deputy Refuge Manager Chincoteague NWR Complex

cc.: Stacey Lowe – Regional Chief - Hunting and Fishing, Interior Region 1

## Eastern Shore of Virginia NWR Proposed Fishing Access

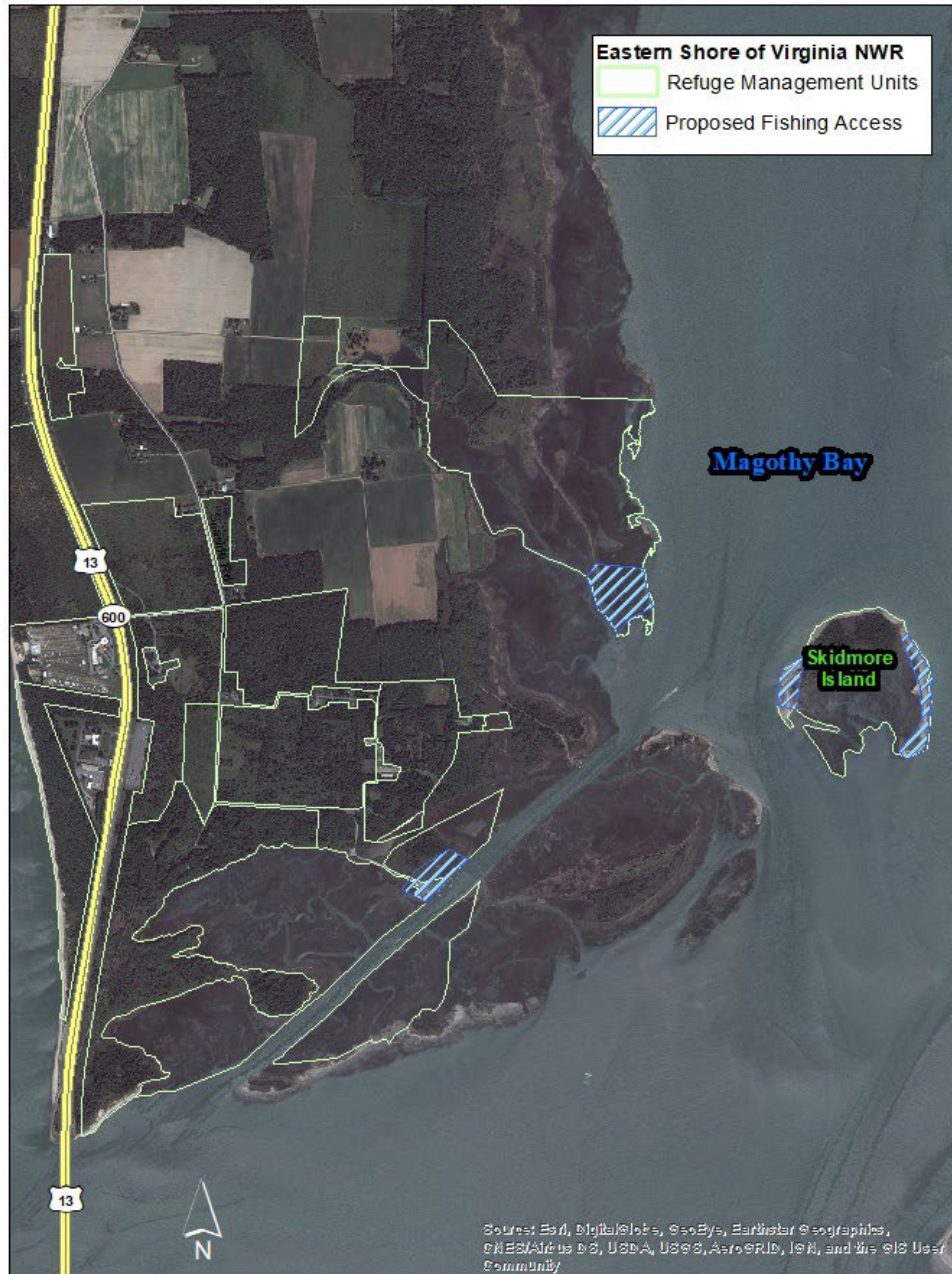


Figure 1. Eastern Shore of Virginia National Wildlife Refuge boundary and proposed fishing access locations.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694 Fax: (804) 693-9032

<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:

September 24, 2020

Consultation Code: 05E2VA00-2020-SLI-6345

Event Code: 05E2VA00-2020-E-17547

Project Name: Hunting on Fisherman Island NWR

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Virginia Ecological Services Field Office**

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

## Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a></p>	<p>Proposed Threatened</p>
<p>Piping Plover <i>Charadrius melodus</i></p> <p>Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a></p>	<p>Threatened</p>
<p>Red Knot <i>Calidris canutus rufa</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a></p>	<p>Threatened</p>
<p>Roseate Tern <i>Sterna dougallii dougallii</i></p> <p>Population: Northeast U.S. nesting population</p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a></p>	<p>Endangered</p>

## Reptiles

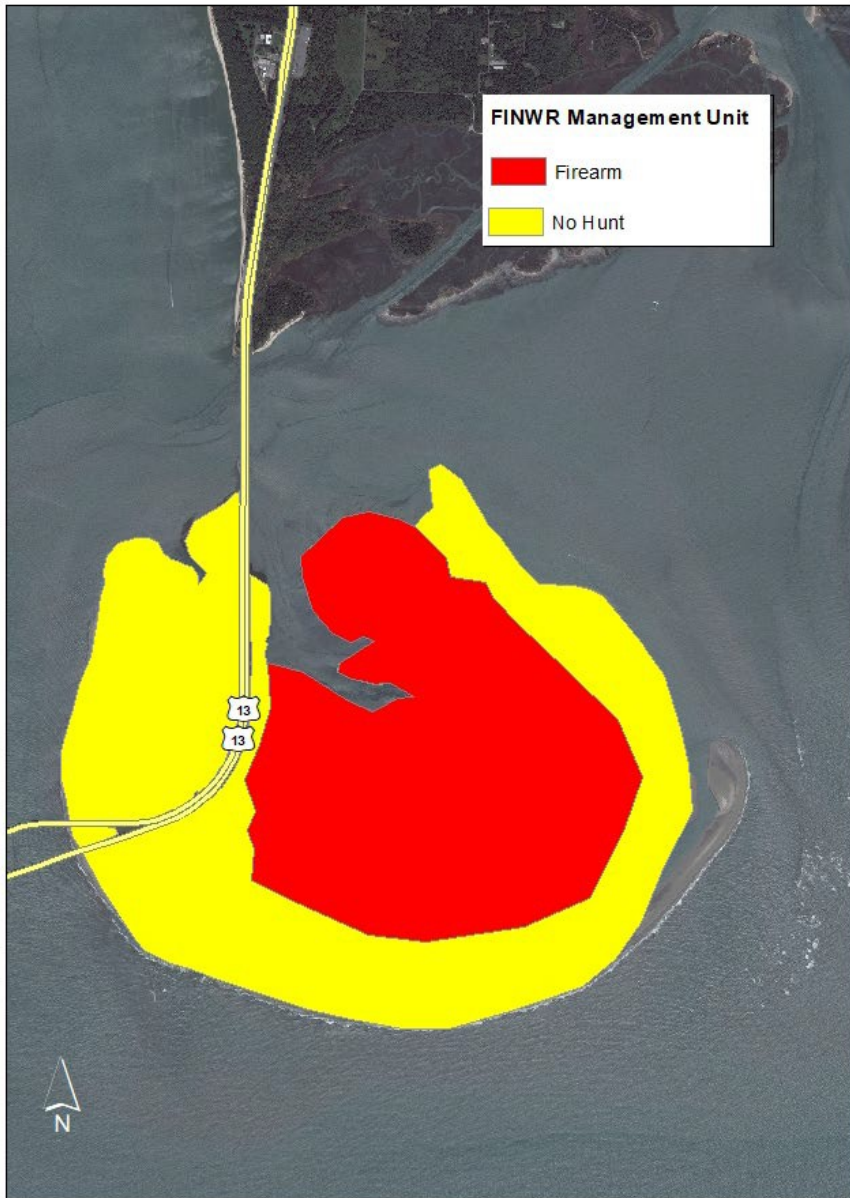
NAME	STATUS
<p>Green Sea Turtle <i>Chelonia mydas</i></p> <p>Population: North Atlantic DPS</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a></p>	<p>Threatened</p>
<p>Hawksbill Sea Turtle <i>Eretmochelys imbricata</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a></p>	<p>Endangered</p>
<p>Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i></p> <p>There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/5523">https://ecos.fws.gov/ecp/species/5523</a></p>	<p>Endangered</p>
<p>Leatherback Sea Turtle <i>Dermochelys coriacea</i></p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a></p>	<p>Endangered</p>
<p>Loggerhead Sea Turtle <i>Caretta caretta</i></p> <p>Population: Northwest Atlantic Ocean DPS</p> <p>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a></p>	<p>Threatened</p>

## Hunting on Fisherman Island NWR

**Dates:** September 1 through February 28 annually

**Description:** Open Fisherman Island NWR to migratory bird hunting (boat access only) annually in salt marshes on the eastern side of Fisherman Island.

**Fisherman Island NWR Proposed Hunt Plan Map**



## Endangered Species Act (ESA) Section 7 Determination Table

Project Name: Hunting on Fisherman Island NWR

Date: 9/24/20

Consultation Code:

Species / Resource Name	Habitat/Species Presence in Action Area	Sources of Info	ESA Section 7 Determination	Project Elements that Support Determination, and Potential Effects of the Proposed Action
<i>Insert name of species or resource as listed on Official Species List.</i>	<i>Indicate if suitable habitat and species are present in the Action Area (see examples in Step 5).</i>	<i>Explain what info suitable habitat/species presence is based on.</i>	<i>Using reasoning and decision tables in Step 5, select determination for each species (e.g. no effect, not likely to adversely affect, or likely to adversely affect).</i>	<i>Explain which project elements may impact the habitat or individuals of each species any Avoidance and Minimization Measures being implemented.</i>
Northern long-eared bat	Yes	VDWR bat biologist, species habitat information in IPaC	Not likely to adversely affect. Received verification letter under ESA Section 4(d) rule through IPaC	Project occurs during typical hibernation period and during daylight hours. Project not likely to disturb species or habitat.  Noise disturbance from shooting could occur if bats are present in the project area, but low impacts expected since NLEB habitat in and around project area is scarce to none.
Piping plover	Yes	Refuge biologist	Not likely to adversely effect	Disturbance from noise is possible, but low impacts are expected since most piping plovers have migrated from the area during the project timeline and are typically on beaches. Hunting on the refuge will only occur from September 1 to February 28 and hunting is only permitted from boats.
Red knot	Yes	VDWR coastal biologist, Motus data	Not likely to adversely effect	Disturbance from noise, but low impacts expected since any red knots present would be on exposed flats or beaches. Most salt marsh on FINWR is not accessible by boat at low tide.

<b>Species / Resource Name</b>	<b>Habitat/Species Presence in Action Area</b>	<b>Sources of Info</b>	<b>ESA Section 7 Determination</b>	<b>Project Elements that Support Determination, and Potential Effects of the Proposed Action</b>
Roseate tern	Yes	USFWS Migratory Bird biologist	Not likely to adversely effect	Potential noise disturbance from shooting, but low impacts expected since access to hunting/fishing areas will be limited.
Black rail	Yes	Refuge biologist	Not likely to adversely effect	Possibly present during the winter and would be subjected to noise disturbance. Low impacts expected as areas hunted consist of low marsh.
Loggerhead sea turtle Kemp's Ridley sea turtle Green sea turtle Leatherback sea turtle Hawksbill sea turtle	No	Refuge biologist, VDWR coastal biologist	No effect	Hunting will be restricted to salt marsh where sea turtles would not be present.



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061

### Self-Certification Letter

Project Name: Hunting on Fisherman Island National Wildlife Refuge

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website [http://www.fws.gov/northeast/virginiafield/endspecies/project\\_reviews.html](http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html). If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

A handwritten signature in blue ink that reads "Cynthia A. Schulz". The signature is written in a cursive style and is positioned above the printed name.

Cindy Schulz  
Field Supervisor  
Virginia Ecological Services

Enclosures - project review package



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

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Gloucester, VA 23061-4410

Phone: (804) 693-6694 Fax: (804) 693-9032

<http://www.fws.gov/northeast/virginiafield/>



#### In Reply Refer To:

Consultation Code: 05E2VA00-2020-TA-6345

Event Code: 05E2VA00-2020-E-17550

Project Name: Hunting on Fisherman Island NWR

Subject: Verification letter for the 'Hunting on Fisherman Island NWR' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Pamela Denmon:

The U.S. Fish and Wildlife Service (Service) received on September 24, 2020 your effects determination for the 'Hunting on Fisherman Island NWR' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"<sup>[1]</sup> prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Black Rail, *Laterallus jamaicensis ssp. jamaicensis* (Proposed Threatened)
- Green Sea Turtle, *Chelonia mydas* (Threatened)
- Hawksbill Sea Turtle, *Eretmochelys imbricata* (Endangered)
- Kemp's Ridley Sea Turtle, *Lepidochelys kempii* (Endangered)
- Leatherback Sea Turtle, *Dermochelys coriacea* (Endangered)
- Loggerhead Sea Turtle, *Caretta caretta* (Threatened)
- Piping Plover, *Charadrius melodus* (Threatened)
- Red Knot, *Calidris canutus rufa* (Threatened)
- Roseate Tern, *Sterna dougallii dougallii* (Endangered)

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

## Appendix F

### Summary of Public Comments and Service Responses on the Draft Hunting and Fishing Plan and Environmental Assessment for Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges

July 2021

#### Introduction

In April 2021, the U.S. Fish and Wildlife Service (Service, we, our) completed the Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges (ESV NWR, FSH NWR, refuges) draft Hunting and Fishing Plan (plan) and Environmental Assessment (EA). The plan outlines proposed expansions to hunting and fishing opportunities on both refuges, including the expansion of more huntable area and new species.

We released the draft plan, Compatibility Determinations (CD) for hunting and fishing, and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge website. No meetings were held due to COVID-19 public gathering safety guidance.

We evaluated all comments we received during the comment period. This document summarizes the substantive comments we received and provides our responses to them. After carefully reviewing all comments, the following changes to the draft plan will be made:

*Table F-1. Final proposed changes to the Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges Hunting and Fishing Plan*

Hunt Unit	Draft Plan	Final Plan
<b>ESV Archery Only</b>	Open to archery for white-tailed deer, turkey, nuisance species (groundhog, European starling, English sparrow, pigeon), furbearers (raccoon, opossum, fox, and coyote), and upland game (rabbit, squirrel, and quail)	Open to archery for white-tailed deer, turkey, and furbearers
<b>Bull Tract</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow)	No change; will consider future requirement for non-toxic ammunition for white-tailed deer
<b>Dixon Tract</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds	No change; will consider future requirement for non-toxic ammunition for white-tailed deer

<b>Hunt Unit</b>	<b>Draft Plan</b>	<b>Final Plan</b>
<b>Latimer Tract</b>	Open to archery for white-tailed deer, turkey, nuisance species, furbearers, and upland game	No Hunt Unit
<b>Raccoon and Skidmore Islands</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds	Open to firearms for migratory birds
<b>GATR</b>	Open to coincide with WMA for white-tailed deer, turkey, waterfowl, and woodcock	No change; will consider future requirement for non-toxic ammunition for white-tailed deer
<b>Fisherman Island</b>	Open firearms from September 1 – February 28 for migratory birds	No change. In the future will consider a shortened hunt season or a permit system if negative impacts are observed
<b>Fishing Areas</b>	Year-round per state regulations on:  Skidmore Island beaches  Bull Tract  ESV Wise Point Boat Ramp	No change except for a phased opening at the ESV Wise Point Boat Dock

### Summary of Comments Received

During the comment period, we received 27 letters through email from individuals and on behalf of various organizations. In the discussion below, we address every substantive comment received during the comment period. Comments were organized by subject. Directly beneath each subject heading, there is a list of unique letter numbers that correspond to individual submitted comments.

We address and respond to substantive comments, which are those that suggest our analysis is flawed in a specific way (e.g., challenge the accuracy of information presented; challenge the adequacy, methodology, or assumptions of the environmental or social analysis and supporting rationale; present new information relevant to the analysis; present reasonable alternatives, including mitigation, other than those presented in the document).

Our discussion usually does not include detailed responses to comments we determined to be non-substantive, such as comments that solely support or object to our statements without providing reasoning that meet the criteria for a substantive comment; comments that do not pertain to the project area or proposal; or typographical corrections. We grouped similar comments together and organized them by subject in the discussion below:

- General Comments on the Hunt Plan
  - General overall support for proposed hunting and fishing expansion
  - General opposition for proposed hunting and fishing expansion

- Hunt Administration
  - Public engagement inadequate
  - Concurrent hunts during deer season
  - Balance of public uses
  - Opposed to changes except for deer hunting
  - Number of hunters
  - Available hunt opportunities elsewhere
  - Environmental Assessment and/or Compatibility Determination do not analyze all impacts
  - Proposed other changes
  - Use of lead fishing tackle
  
- Biological
  - Noticeably bird decreasing populations
  - Hunting birds would disturb migrations and habitats/resources
  - Bird predator hunting
  - Misidentification concerns
  - Environmental Assessment and/or Compatibility Determination do not analyze all impacts
  
- Safety
  - Safety concerns

The full versions of the Hunting and Fishing Plan, CD, and EA are available online at:  
[https://www.fws.gov/refuge/eastern\\_shore\\_of\\_virginia/](https://www.fws.gov/refuge/eastern_shore_of_virginia/)

### **General Comments on the Hunt Plan**

#### **General support for proposed hunting and fishing expansion**

The Service received several comments in support of the plan. Local residents, hunters, and anglers supported the hunting and fishing expansion.

*Letters: 1, 2, 12, 13, 16, 21, 22*

*Response:* We appreciate the support and remain interested in providing a variety of hunting opportunities for the public, which is supported by the National Wildlife Refuge System's (Refuge System) priority public uses policy. Sections 5(c) and (d) of the National Wildlife Refuge System Improvement Act (Improvement Act) states "compatible wildlife-dependent recreational uses are the priority general public uses of the Refuge System and shall receive priority consideration in planning and management; and when the Secretary [of the Interior] determines that a proposed wildlife-dependent recreational use is a compatible use within a refuge, that activity should be facilitated, subject to such restrictions or regulations as may be necessary, reasonable, and appropriate." Hunting is one tool used to manage and maintain wildlife populations at a level compatible with the environment while providing wildlife-dependent recreational opportunities and permitting the use of a valuable renewable resource. The refuge works closely with the Virginia Department of

Wildlife Resources (VDWR) to manage hunting opportunities based on the data they collect throughout the year for various game species. We defer to them on hunting regulations that manage for sustainable populations of game species. Secretarial Order 3356 also directs “greater collaboration with state, tribes, and territorial partners” which encourages better alignment of refuge-specific regulations with State regulations.

### **General opposition for proposed hunting and fishing expansion**

Commenters expressed general opposition to hunting or specifically migratory bird hunting. In some cases, commenters stated that hunting was antithetical to the purposes of a “refuge”, which, in their opinion, should serve as an inviolate sanctuary for all wildlife. *Letters: 3, 4, 5, 6, 7, 8, 9, 11, 14, 15, 17, 18, 19, 20, 23, 24, 25*

*Response:* The Improvement Act stipulates that hunting (along with fishing, wildlife observation, photography, environmental education, and interpretation), if found to be compatible, is a legitimate and priority general public use of a refuge and should be facilitated. The Service has adopted policies and regulations implementing the requirements of the Improvement Act that refuge managers comply with when considering hunting programs.

We allow hunting on refuge lands only if such activity has been determined compatible with the established purpose(s) of the refuge and the mission of the Refuge System as required by the Improvement Act. Hunting of resident and migratory wildlife species on refuges generally occurs consistent with State regulations, including seasons and bag limits. Secretarial Order 3356 also directs “greater collaboration with state, tribes, and territorial partners” which encourages better alignment of refuge-specific regulations with State regulations. Refuge-specific hunting regulations can be more restrictive (but not more liberal) than State regulations and often are more restrictive in order to help meet specific refuge objectives. These objectives include resident and migratory wildlife population and habitat objectives, minimizing disturbance impacts to wildlife, maintaining high-quality opportunities for hunting and other wildlife-dependent recreation, eliminating or minimizing conflicts with other public uses and/or refuge management activities, and protecting public safety.

The word “refuge” includes the idea of providing a haven of safety for wildlife, and as such, hunting might seem an inconsistent use of the Refuge System. However, the Improvement Act stipulates that hunting, if found compatible, is a legitimate and priority general public use of a refuge which should be facilitated.

On refuges designated as an inviolate sanctuary for migratory birds, hunting can be allowed, provided that hunting of migratory gamebirds cannot exceed 40 percent of the land base at any one time unless shown to be beneficial to the populations. Other species can be hunted throughout the area as determined compatible. The proposed plan meets this requirement.

Furthermore, we manage refuges to support healthy wildlife populations that in many

cases produce harvestable surpluses that are a renewable resource. As practiced on refuges, hunting and fishing do not pose a threat to wildlife populations. It is important to note that taking certain individual animals through hunting does not necessarily reduce a population overall, as hunting can simply replace other types of mortality, including disease, starvation, and road collisions. In some cases, however, we use hunting as a management tool with the explicit goal of reducing a population. Therefore, facilitating hunting opportunities is an important aspect of the Service's roles and responsibilities as outlined in the legislation establishing the Refuge System, and the Service will continue to facilitate these opportunities where compatible with the purpose of the specific refuge.

### **Hunt Administration Comments on the Hunt Plan**

#### **Public engagement inadequate**

We received a comment stating public notice was insufficient due to a lack of reaching out and/or consulting with stakeholders. *Letter: 24*

*Response:* We work with a variety of partners, such as the VDWR, sportsmen's groups, and wildlife-related organizations to understand their concerns and issues. This coordination, in addition to input received during the public comment period, helped inform our final hunting and fishing package for the refuges. Service staff routinely interact with visitors that include bird watchers, nature photographers, hikers, and many more.

The refuge maintains a mailing list for news release purposes to local newspapers, radio, and websites. In addition, information about the plan was posted on the refuge websites. While we sent our press release to news organizations, they are under no obligation to print or report our information.

While public scoping meetings are not required for hunting and fishing management plans, traditional public meetings during pandemic conditions were not feasible. However, it is our common practice to allow 30 days for public review and comment of a NEPA document or compatibility determination. Our public comment period began on April 9 and ended on July 6, a total of 88 days.

#### **Concurrent hunts during deer season**

Commenters expressed opposition to having other concurrent hunts during the deer season as it could lead to overcrowding, safety concerns, and a less successful hunt. *Letters: 2, 10*

*Response:* We recognize the concern and desire for a quality deer hunt on ESV NWR, which has been provided since 1993. As detailed in our table of final changes to the plan, the majority of ESV NWR will be open to deer hunting in the archery only area. The hunting of furbearers will be the only other hunting occurring at the same time within the archery unit.

#### **Balance of public uses**

Commenters expressed concern with user conflict between hunters and other non-consumptive

users (i.e., birdwatchers, hikers, photographers) on the refuge. Commenters felt that hunting was a higher priority than other recreation opportunities and that access for these activities would be limited due to disturbance. A few commenters noted that there was not an adequate explanation of mitigation efforts that would be taken if there were observed user conflicts, and that maps failed to display where multiple uses would be occurring. There was also concern that the expanded hunting opportunities would negatively impact ecotourism in the local area as the refuge is a birding hotspot. *Letters: 3, 4, 9, 17, 19, 20, 24, 25, 26, 27*

*Response:* Congress, through the Administration Act, as amended, envisioned that hunting, fishing, wildlife observation and photography, and environmental education and interpretation would all be treated as priority public uses of the Refuge System. Therefore, the Service facilitates all of these uses on refuges, as long as they are found compatible with the purposes of the specific refuge and the mission of the Refuge System. We appreciate the widespread interest in using the refuge for non-consumptive recreational uses and provide many opportunities for such use. The refuge will be open to hunting from September 1 to February 28 (6 months), allowing the remainder of the year to be solely for non-consumptive recreational opportunities. Additionally, we offer guided tours of Fisherman Island from October to February for any interested visitor.

Efforts have been taken in the final plan to minimize conflicts between user groups during the hunting season. The final plan changes the Latimer tract, which parallels the bike trail, to a No Hunting Zone. Other areas of the refuge that have walking trails (such as the Butterfly Trail, Marsh Overlook and Bunker Trail) are archery only for deer, furbearers, and turkey further limiting disturbance to other recreational opportunities. The interaction between hunters and non-hunters will be further limited by a 100-foot setback from any No Hunt zone, building, road, and trail. The annual refuge hunt brochure, which all hunters will be required to sign and carry with them, will include a map of hunt units, no hunting zones, and trails.

There was specific concern of conflicts occurring at the Wise Point Boat Ramp due to an expected increase in use and a lack of explanation on the mitigation efforts that would be taken. Currently, the pier at the Boat Ramp is for commercial use only. The final plan proposes to open the pier to recreational fishing once the docking of commercial boats is phased out through the current permitting system. This will eliminate conflict between commercial watermen and recreational anglers.

### **Opposed to changes except for deer hunting**

Some commenters expressed they were opposed to the proposed changes in the plan except for the continuation or expansion of deer hunting. Many noted that reduction in deer populations would be a benefit to migratory bird species due to habitat degradation. *Letters: 5, 7, 8, 18, 25*

*Response:* We appreciate the support for the continuation and expansion of deer hunting. One of the primary goals of the ESV NWR's Comprehensive Conservation Plan (2004) is to increase the availability of forage and cover habitat for neotropical and temperate migrant birds and monarch butterflies. Heavily browsed forest understory and shrub vegetation leaves less food and cover for migratory birds, a

resource that the refuge is focused on protecting. A controlled refuge hunt will help keep the deer population at a level that will reduce impacts to migratory bird habitat. Concerns with expansion of other hunting opportunities is addressed in the response to *General opposition for proposed hunting and fishing expansion*.

### **Number of hunters**

We received comments expressing concern with the potential number of hunters on the refuge with the proposed changes. They noted that the plan stated hunter numbers would be regulated by the number of available parking spaces, but no additional information was provided on how estimates were determined. *Letters: 10, 26, 27*

*Response:* The plan states that hunter numbers will be regulated by the number of available parking spaces and that hunters must park in designated areas. There will be no reserved parking for hunters and parking availability will be “first come, first served” as it is to all other refuge visitors. Designated parking areas will be displayed on the annual hunt brochure that hunters will be required to sign and carry with them.

### **Available hunt opportunities elsewhere**

Commenters were opposed to the expanded hunting opportunities because the plan did not consider the availability of other hunting areas in the Eastern Shore of Virginia. It was noted that State Wildlife Management Areas are available in the surrounding area and that the VDWR is acquiring 8,500 acres of land on the Eastern Shore that will be managed for recreational opportunities including hunting. *Letters: 18, 26*

*Response:* We appreciate the opportunity to work with our partners to provide hunting and fishing opportunities across the Eastern Shore. We acknowledge the availability of hunting and fishing opportunities elsewhere but maintain that the opportunity exists to expand access at both refuges in a compatible manner. As detailed in the response to *General opposition for proposed hunting and fishing expansion*, The Improvement Act stipulates that hunting (along with fishing, wildlife observation, photography, environmental education, and interpretation), if found to be compatible, is a legitimate and priority general public use of a refuge and should be facilitated. Furthermore, Secretarial Order 3356 directs the Service to enhance and expand public access to lands and waters on national wildlife refuges for hunting, fishing, and other forms of outdoor recreation. Our hunting programs are consistent with State regulations and, where necessary, use more stringent refuge-specific regulations to ensure that hunting and fishing are carried out in a safe, responsible manner.

### **Proposed other changes**

Commenters proposed other, or modifications to, the changes proposed in the plan. Examples of proposed options from commenters include a lottery or quota hunt for turkey and waterfowl after the conclusion of the deer season, extended recreational opportunities on Fisherman Island, and to allow hunters to use temporary blinds that must be removed at the end of the hunt day. *Letters: 10, 16, 27*

*Response:* We appreciate the additional proposed changes received by the public. We

will consider a permit system or a reduction in hunt days for waterfowl hunting on Fisherman Island NWR in the future if we observe negative impacts. The spring turkey hunt will be managed by a partner organization and will be a special hunt, such as youth or apprentice hunter. Further opportunities were considered for Fisherman Island NWR and were not likely to be found compatible. The Chesapeake Bay Bridge Tunnel (CBBT) passes over Fisherman Island, but it does not safely allow for access to the island or parking. While open to migratory bird hunting, it is by boat access only and is in open water/marsh habitat. Hunting must be conducted from a boat and therefore we will not allow the use of temporary blinds outside of the boat. The beach habitat on Fisherman Island is critical for nesting and migrating shorebirds and waterbirds (e.g., terns, black skimmers) and recreational opportunities are therefore not compatible with the refuge purpose in these areas.

### **Use of lead fishing tackle**

We received a comment that suggested the Service require the use of non-lead tackle for fishing on or near the refuge given the high use of fishing areas by migratory waterbirds. *Letter: 27*

*Response:* The Service acknowledges the potential negative impacts that may be caused as the result of accidental ingestion of lead ammunition and fishing tackle by non-target species such as birds or fish. The Service does not have jurisdiction over the waters near the refuge (i.e., areas that are below mean-low water). However, we will encourage the use of non-lead tackle for fishing that occurs on the shore of the refuge and consider requiring non-lead alternatives in the future. Use of non-toxic ammunition for hunting that occurs for all species (with the exception of white-tailed deer) will be required upon implementation of this plan. In addition, requirement for use of non-toxic ammunition will be considered for white-tailed deer in the future.

### **Biological Comments on the Hunt Plan**

#### **Noticeably decreasing bird populations**

Several commenters were opposed to any bird hunting due to the decreasing populations of many bird species, both game and nongame. Commenters noted that American woodcock and Northern bobwhite are listed in the refuge's Habitat Management Plan as a resource of concern and/or as a VDWR's Species of Greatest Conservation Need. Commenters also questioned the current population status and the effects of hunting the turkey population. *Letters: 3, 5, 11, 12, 19, 20, 23, 24, 25*

*Response:* As detailed in our response to *General opposition to proposed hunting and fishing expansion*, we manage refuges to support healthy wildlife populations.

Facilitating hunting opportunities is an important aspect of the Service's roles and responsibilities as outlined in the legislation establishing the Refuge System, and the Service will continue to facilitate these opportunities where compatible with the purpose of the specific refuge.

However, changes were made to the final plan to mitigate some possible disturbance to species of special concern. The ESV NWR archery only unit will be open to deer, furbearer, and a mentored spring wild turkey hunt, but will not be open to nuisance

species or upland game. The spring wild turkey hunt will be administered by a partner organization, such as VDWR, and will be a special hunt, such as youth or apprentice hunters only. This will allow a sustainable harvest during limited dates to avoid disturbance to breeding songbirds. We will continue to work with partners to monitor game and nongame species, including VDWR's Species of Greatest Conservation Need. In the future, we will consider a permit system or a reduction in hunt days if negative impacts are observed. Additionally, refuge managers are authorized to suspend or alter a hunt program at any time if it appears the hunt may be causing unacceptable impacts to refuge values or resources.

### **Hunting birds would disturb migrations and habitats/resources**

We received comments expressing opposition to any bird hunting because it could disturb migrations and bird habitat and resources for both game and nongame species. It was noted that the Eastern Shore of Virginia is a funnel for fall migratory birds and that ESV NWR provides critical stopover habitat. *Letters: 4, 6, 7, 8, 9, 11, 12, 17, 18, 19, 20, 24, 25*

*Response:* As detailed in the response to *Noticeably decreasing bird populations*, changes were made to the final plan to mitigate possible disturbance to migrating birds and habitats/resources. Hunting is a legitimate and priority public use on refuges, when found compatible, and therefore is supported in this plan.

### **Bird predator hunting**

We received comments that were supportive of allowing hunting of species known to be bird and nest predators (i.e., raccoon, fox, coyote, crow) but were opposed to the hunting of birds. *Letters: 6, 7, 9, 14, 15, 20*

*Response:* We appreciate the support for certain aspects of our hunting and fishing plan. Predation on shorebird nests is a management concern, especially on Fisherman Island. A controlled refuge hunt of these species (i.e., raccoon, fox, coyote, and crow) could help reduce the impacts to nesting shorebirds as ESV NWR is likely serving as a source to Fisherman Island predator populations. Please see our response to *Noticeably decreasing bird populations* for comments opposed to bird hunting.

### **Misidentification concerns**

Several commenters were opposed to nuisance species hunts and bird hunts because hunters could have difficulty determining if a bird is a huntable species or an at-risk species. *Letters: 9, 18, 20, 24*

*Response:* We recognize the concern with misidentification of nuisance species, specifically European starling and English sparrow, and the final plan limits hunting of these species to the Dixon and Bull tracts (267 acres). We do not expect large numbers of hunters specifically hunting these species. Hunters are responsible for following State and Refuge regulations. It is ultimately the responsibility of the hunter, as with any refuge visitor, to know and obey the regulations, this includes the identification of game species that are legal to hunt.

### **Environmental Assessment and/or Compatibility Determination do not analyze all impacts**

The Service received comments that the plan lacks adequate analysis of how the proposed activities are compatible with the refuges' purpose, specifically as it relates to migratory bird hunting. Commenters also stated that the Compatibility Determinations (CD) and Environmental Assessment (EA) did not fully analyze the impacts of expanded hunting and fishing to game and nongame species. *Letters: 18, 24, 25, 26, 27*

*Response:* The decision to allow hunting on a refuge is not a quick or simple process. It is full of deliberation and discussion, including review of all available data to determine the relative health of a population before we allow it to be hunted. We completed a CD and EA for ESV NWR and FSH NWR, in compliance with NEPA, to evaluate the impacts of opening or expanding hunting and fishing opportunities. The purpose of an EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI). We determined that no significant impacts would occur from any of the proposed actions and that they are compatible with the refuges.

The two refuges are part of a national system; many decisions are made based on Refuge System mandates and practices. We want to reiterate that hunting is a priority public use of the Refuge System, as stipulated in the Administration Act. When found to be compatible, hunting opportunities should be provided to the public on the refuge. Development of the Hunting and Fishing Plan was based on previous input from hunters and State partners. Species seasons that have been directly requested by hunters and state partners were primarily considered in this plan. In order to balance all priority public uses and refuge resources, some seasons are limited in time and/or geographical location to manage conflicts with other users and to minimize habitat disturbances.

As we developed the plan, we used the “sound professional judgment” of the refuge manager, biologists, and other staff in making inherently complex management decisions to ensure that each proposed action complies with Service mandates. We incorporated field experience, knowledge of refuge resources, considerations of the refuge's role within an ecosystem, applicable laws, and best available science in making our decisions. Service biologists and wildlife professionals, in consultation with the State, often determine the optimal number of each game animal that should reside in an ecosystem and then utilize hunt parameters (e.g., bag limits, sex ratios) based on those analyses. We carefully considered how the proposed hunt fits with the refuge goals, objectives, and strategies before allowing the hunt. As we monitor and evaluate the hunting program into the future, other species seasons may be considered.

In the EA, we analyze and predict the foreseeable impacts of implementing the hunting program in each of the alternatives. When detailed information may be deficient or unavailable, we base our comparisons on professional judgment and experience. We usually identify potential impacts within a long-range timeframe (i.e., 15 years); beyond that timeframe they become more speculative. Please keep in mind the relatively small total land mass of the hunting area of the refuges in comparison with the entire Delmarva Peninsula, Atlantic Flyway or the breeding ranges of the many birds and wildlife that use

it. We recognize that the refuges are not isolated ecologically from the land around it; however, we may have overstated positive or negative impacts with our predictions in that larger geographic context. Nevertheless, the actions we propose conform with the Comprehensive Conservation Plan and other regional landscape plans, and provide positive, incremental contributions to those larger landscape goals.

On refuges designated as an inviolate sanctuary for migratory birds, hunting can be allowed, provided that hunting of migratory gamebirds cannot exceed 40 percent of the land base at any one time unless shown to be beneficial to the populations. Other species can be hunted throughout the area as determined compatible. The proposed plan meets this requirement.

The final plan incorporates changes that further elaborate on decision-making processes and mitigation efforts should negative impacts be observed to refuge visitors or resources. We believe these changes, outlined in Table F-1, mitigates concerns related to impacts to game and nongame species.

### **Safety Comments on the Hunt Plan**

#### **Safety concerns**

The Service received comments regarding concerns for the safety of hunters and other refuge users. Commenters were concerned that there could be an overcrowding of hunters or that spatial and temporal overlap of refuge recreational uses could create safety issues. *Letters: 10, 15, 24, 25, 26, 27*

*Response:* We expect all our visitors and user groups, including hunters and anglers, to adhere to set rules and regulations. We emphasize that ensuring the safety of refuge visitors and resources is a top priority at both refuges. We will work to ensure safe and enjoyable recreational opportunities for all recreational users. Refuge staff will continue to work with law enforcement officers from partnering natural resource agencies. FWS, VDWR, and Virginia Marine Resource Commission (VMRC) work together to conduct patrols, safeguard hunters and visitors, and protect both game and nongame species. The final plan includes safety setbacks of 100 feet from No Hunt zones, buildings, roads, and trails. The Latimer tract will be designated as a No Hunt zone to further limit conflicts with the bike trail. Areas of the refuge that have walking trails (such as the Butterfly trail, marsh overlook and bunker trail) are archery only units. The firearms units (Dixon tract, Racoon Island, Skidmore Island, Fisherman Island) do not have any walking trails with the exception of the Bull tract. At the Bull tract efforts to enhance safety include the no hunting setback of 100 feet from the trail. The annual refuge hunt brochure, which all hunters will be required to sign and carry with them, will include a map of hunt units, no hunting zones, and trails.

### Commenter Key

1. William Paulette
2. Bonnie Sprouse
3. Ruthie Kranz-Carl
4. Pedro L. Baez
5. Myriam Stitt  
(Eastern Shore Bird Club member, Fisherman Island volunteer, master naturalist)
6. Joseph Valentine
7. Marisa Le Forge
8. Lorraine Fechtig (Eastern Shore Bird Club member)
9. Ken Goldsmith
10. Josh Johnson
11. John Roberts
12. Joseph Scoresby
13. Jeff Breuer
14. John Hogan
15. Helen Bongiovanni
16. Grant Harter (Natural Resources Specialist;  
NAVFAC MIDPLANT Planning and Conservation Branch)
17. Henry Armistead (Regional Editor of American Birds)
18. Harold Laskowski (former Wildlife Biologist)
19. Donna Campbell
20. Anthony Picardi (President of Eastern Shore Bird Club)
21. Jack Wood
22. John Wood
23. Valerie Pedersen
24. Roberta Kellam
25. Sue Rice
26. The Nature Conservancy -Jill Bieri
27. Virginia Department of Wildlife Resources - Rebecca Gwynn

## FINDING OF NO SIGNIFICANT IMPACT

### ENVIRONMENTAL ASSESSMENT FOR HUNTING AND FISHING ON EASTERN SHORE OF VIRGINIA AND FISHERMAN ISLAND NATIONAL WILDLIFE REFUGES

The U.S. Fish and Wildlife Service (Service) proposes to open and/or expand hunting and/or fishing opportunities at Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges (NWRs) in accordance with each refuge's Comprehensive Conservation Plan (CCP). At Eastern Shore of Virginia NWR, the proposed action would occur on 1,043 acres of the refuge and would include big game, upland game, furbearers, migratory game birds, and nuisance species. Eastern Shore of Virginia NWR would also open to recreational fishing. At Fisherman Island NWR the proposed action would occur on 758 acres of the refuge and would be limited to migratory game bird hunting only.

#### **Selected Action**

##### **Alternative B—Proposed Action Alternative, with Modifications**

Under this alternative, the Service will expand the hunting program at Eastern Shore of Virginia NWR for big game, upland game, and migratory game birds. We will also open Eastern Shore of Virginia NWR to fishing for the first time, and open Fisherman Island NWR to migratory game bird hunting for the first time. These actions will provide additional wildlife-dependent recreational opportunities, improve efficiency and management of the refuge's hunting program, and better align with State programs. In addition to the new openings, we will make the following changes as part of an update to the existing hunting plan:

1. *Species changes*: At Eastern Shore of Virginia NWR we will add turkey, upland game (rabbit, squirrel, quail), furbearers (raccoon, opossum, fox, coyote), nuisance species (groundhog, European starling, English sparrow, pigeon), and migratory bird (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) to the current hunting program, which is only white-tailed deer. At Fisherman Island NWR we will open to migratory bird (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow) for the first time.
2. *Hunttable acreage*: The current white-tailed deer hunt at Eastern Shore of Virginia NWR occurs on 250 acres, and we propose to allow big and upland game hunting on 1,043 acres, and migratory game bird hunting on 383 acres. On Fisherman Island NWR, we proposed to allow migratory bird hunting on 758 acres.
3. *Method of take changes*: The current hunt allows archery and a 1-week firearms (shotgun with buckshot only) for white-tailed deer. Proposed changes would follow State regulations and seasons allowing for use of archery, shotgun, muzzleloader, and rifle (upland game only) in designated areas. Non-toxic ammunition would be required for turkey, upland game, furbearers, and nuisance species in the firearms zone.
4. *Season/date changes*: Hunting on Eastern Shore NWR would occur from September 1

to February 28, and on Fisherman Island NWR from September 1 to February 28. This is an overall increase of hunting days from 93 days to 151 days.

6. *Permit Fees:* No Service Permit Fees. All hunters will be required to read and sign a refuge hunt brochure prior to hunting on the refuge.

Additional description and details on the hunting and fishing program, including areas to be opened, species to be taken, and conduct of the program, can be found in the 2021 Hunting and Fishing Plan. To ensure compatibility with refuge purposes and the mission of the National Wildlife Refuge System (Refuge System), hunting and fishing must be conducted in accordance with State and Federal regulations, as supplemented by refuge-specific regulations (50 CFR 32.65), and information sheets/brochures. However, the refuge manager may, upon annual review of the program, take the necessary steps to impose further restrictions, recommend that the refuge be closed to hunting or fishing, or further liberalize regulations up to the limits of the State. We would restrict hunting or fishing if it became incompatible with other priority refuge programs or endangered refuge resources or public safety.

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

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

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

## **Other Alternatives Considered and Analyzed**

### **Alternative A—No Action Alternative**

Under the no action alternative, no expansion or reduction of hunting and fishing access would occur and the program would be conducted as it is currently. This alternative would continue Eastern Shore of Virginia's current white-tailed deer hunting program, which allows designated areas of the refuge to be hunted under the guidance that includes the 2004 CCP and 1993 Hunt Plan. Fishing would not be permitted at Eastern Shore of Virginia NWR under this alternative. No hunting or fishing would be permitted at Fisherman Island NWR. This alternative has the least short-term impacts to physical and biological resources; however, long-term impacts on habitat quality could be adverse with greater deer browsing. This alternative was not selected because it would not fulfill the Service's mandate under the NWRSA and Secretarial Order 3356 to expand compatible priority uses as well as the proposed action, or meet the purpose and need for the action as well as the selected alternative.

### **Summary of Effects of the Selected Action**

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

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

**Table G-1. Summary of Potential Effects to Resources of the Selected Action**

<b>Affected Environment</b>	<b>Potential Effects of the Selected Action</b>
White-tailed deer	Negligible, short-term adverse impacts. Deer hunting on the refuge has been occurring since 1993 and annual harvest numbers on the refuge remain relatively high (e.g., 2018: 55 deer harvested; 2019: 72 deer harvested). We anticipate a small increase in the number of deer harvested annually, but this will not meaningfully affect the current overpopulation of deer in the county. We anticipate approximately 30 new hunters would access the refuge as a result of the new opportunities. Deer may avoid hunting areas due to increased pressure, but this will not create negative impacts to the population.
Wild turkey	Negligible, short-term adverse impacts. Spring turkey hunting will be allowed and initially targeted to hunts for

Affected Environment	Potential Effects of the Selected Action
	<p>youth and apprentice hunters to assist the State with hunter recruitment and retention efforts, and this hunt will require the use of non-toxic shot. These hunts will occur on all firearm and archery hunt units of the refuge, with the exception of Raccoon and Skidmore Islands. Big game hunting will not be permitted on Sundays per State law.</p> <p>Opening to turkey hunting for the first time would result in new impacts to this species, including greater disturbance, changes to wildlife behavior, changes to population dynamics, injury, and direct mortality. While the refuge does expect to observe some localized impacts, the hunting program would not result in major negative changes to the turkey population Statewide or regional turkey populations.</p>
<p>Upland game (coyote, fox, quail, rabbit, squirrel, raccoon, opossum and nuisance species - groundhog, European starling, English sparrow, and pigeon)</p>	<p>Negligible to minor, short-term adverse impacts. Upland game hunting is often less utilized than hunting for turkey, deer, and other game species in the State. Potential impacts from this new use could include greater disturbance to habitat and landscape, changes in wildlife behavior, changes in species distribution, and temporary reductions in local populations. Use of non-toxic shot will be required in all firearms units for turkey, migratory game bird, and upland game hunting, as well as nuisance species. All impacts to these species would be localized to the refuge area and are not expected to result in long-term negative impacts. In the case of nocturnal species, impacts would be lessened as hunting is only permitted during the day.</p> <p>The majority of land use surrounding the refuge lands consists of agriculture and residential areas where populations of these species proliferate on the broader surrounding landscape. Any impacts will be short-term and minor and will mostly include changes in habitat use by individuals. In addition, hunting furbearers may have a positive on nesting migratory birds.</p>

Affected Environment	Potential Effects of the Selected Action
Migratory game birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow)	<p>Negligible to minor, short-term adverse impacts. Opening 40 percent of the marshes to waterfowl hunting will have some short-term disturbance to the waterfowl resting and feeding in the area. Marsh areas are prone to disturbance and increased foot traffic to access hunting sites will result in trampling of sensitive marsh plants in frequently used areas (Lomnický, Herlihy, and Kaufmann 2019). To mitigate disturbance to marsh vegetation, migratory bird hunting will be by boat only at Fisherman Island NWR. There will be few long-term impacts to waterfowl populations, since most of the marsh area on the Eastern Shore is owned by the State and is already open to migratory bird hunting.</p> <p>We anticipate these populations will experience additional harvest levels but will only have minor impacts on the overall populations. These populations are managed at the flyway level and harvest levels are derived from these estimates in close coordination between states and the Service to ensure long-term persistence of viable populations (USFWS 2019). Presence of additional people in proximity to resting and feeding areas may cause disturbance to some migratory species utilizing the island as a stopover site and may alter use of some areas within the marsh on the refuge (Bartlett 1987; Dooley 2010; Miller et al. 2001). At Fisherman Island NWR, if negative impacts are observed, a permit system or reduction in hunting days will be considered.</p>
Fish	<p>Negligible to minor short-term adverse impacts to fish and aquatic species. Fishing access will be limited and is not expected to result in significant or adverse impacts to wildlife, habitats, or refuge visitors. Regular human use of pathways and shoreline access can alter or eliminate certain native plant communities and cause soil erosion (Lewin et al. 2006). Fish populations on the refuge are seasonally plentiful and are present in numbers sufficient to sustain population levels for priority refuge objectives other than fishing. There have not been biological concerns of unacceptable levels of predation and competition for habitat from recreational fish species. We do not anticipate that projected fishing pressure will affect the refuge's fish population as a whole. Anglers must abide by the State's seasons, catch limits, and regulations to protect the State's fish populations. The refuge's fishing pressure is projected</p>

Affected Environment	Potential Effects of the Selected Action
	to be sustainable. Other fishing opportunities exist nearby in the Chesapeake Bay and adjacent Delmarva Peninsula areas.
Non-target species	Negligible to minor short-term adverse impacts of non-target wildlife species may occur. Many common bird species will be in areas adjacent to hunting, in both upland and wetland areas, and they may relocate to other areas of the refuge during hunting. While not open to hunting or fishing, other wildlife at either refuge may experience disturbance, avoidance of areas, habitat damage, or injury as a result of the proposed actions. However, these impacts would be minimal because the refuges would limit hunting seasons and provide no hunting areas that will disperse the impacts. Hunting would not be permitted on Sunday for big and upland game and would not be permitted at night for any species. Hunting is less likely to adversely affect these species given the time of year the activities take place (September 1 through February 28) and where the uses occur on the refuge. At Fisherman Island NWR, impacts to aquatic species would be minimal as hunting is from boats only, thereby reducing the impacts to shoreline habitats and non-target wildlife.
Threatened and endangered species and other special status species	For more detail, see the completed Intra-Service Section 7 Evaluation (Appendix E). Hunting is not likely to adversely affect these species given the time of year the activities take place (September 1 through February 28) and where the uses occur on the refuge. The hunting and fishing expansions would likely have negligible negative impacts on threatened or endangered species.
Habitat and Vegetation	Negligible to minor short- or long-term impacts. Waterfowl hunting could result in trampling of wetland vegetation, alteration of drainage patterns, and creation of trails. There could be increased seed transport of invasive plant species and more impacts to salt marsh. Upland game hunting could also create impacts, as game hunters would likely traverse a larger area of the refuge in pursuit of game. However, these impacts would be diminished, as vegetation may be dormant or entering dormancy during the hunting seasons, and migratory bird hunting will be by boat only at Fisherman Island NWR. Additionally, opening new acres of the refuge spreads these impacts out, resulting in less observable impacts overall. Hunting could indirectly create a positive

Affected Environment	Potential Effects of the Selected Action
	effect on vegetation through controlling the white-tailed deer population.
Visitor Use and Experience	<p>Negligible impacts to other public uses. With the expanded hunting program at the Eastern Shore of Virginia NWR, the likelihood for conflicts between hunters and conflicts with non-consumptive users increases. Public outreach, zoning, and restrictions in some locations have been proposed to reduce conflicts among the different user groups. The interaction between hunters and non-hunters will be further limited by a 100-foot setback from any No Hunt zone, building, road, and trail. The annual refuge hunt brochure, which all hunters will be required to sign and carry with them, will include a map of hunt units, no hunting zones, and trails. If conflicts arise, mitigation efforts can be implemented to ensure that the proposed use will not have significant impacts to other user groups.</p> <p>The Wise Point boat ramp has historically been accessed for recreational saltwater fishing, so impacts are anticipated to remain the same. Opening recreational fishing on a portion of the dock will increase congestion at the boat ramp and may cause some short-term conflicts with local commercial watermen when launching their boats.</p>
Cultural Resources	No adverse impacts. Increasing hunting and fishing access on the refuges would not result in any negative impacts to cultural resources.
Refuge Management and Operations	Negligible short-term and long-term impacts. While slightly more hunters and anglers visitors are expected to use the refuges, no observable impacts to infrastructure or facilities would be anticipated.
Socioeconomics and Environmental Justice	Negligible short-term and long-term benefits. Expanding hunting and fishing programs could slightly enrich the local economy by attracting additional refuge visitors to the area, but the additional economic impact would likely be negligible. Minority or low-income communities would not be disproportionately affected by any impacts from this proposed action or any of the alternatives.

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

1. In the context of local and State hunting and fishing programs, the selected action will only result in a tiny fraction of the estimated populations and harvest. The Service works closely with the State to ensure that additional species harvested on a refuge are within the limits set by each state to ensure healthy populations of the species for present and future generations of Americans.
2. The Refuge System uses an adaptive management approach to all wildlife management on refuges, monitoring and re-evaluating hunting and fishing opportunities on the refuge on an annual basis to ensure that the program continues to contribute to the biodiversity and ecosystem health of the refuge, and that the impacts from these opportunities do not add up to significant impacts in combination with the environmental trends and planned actions on and near the refuge
3. The adverse effects of the selected action on air, water, soil, habitat, wildlife, aesthetic/visual resources, and wilderness values are expected to be non-existent, minor and/or short-term. The benefits to long-term ecosystem health from the selected action, in conjunction with other existing refuge programs, will far outweigh any of the short-term adverse impacts discussed in the EA and document. The action will result in beneficial impacts to the human environment, including the biodiversity and ecological integrity of the refuge, as well as the wildlife-dependent recreational opportunities and socioeconomics of the local economy, with only negligible adverse impacts to the human environment as discussed above.
4. The refuge-specific regulations detailed in 50 CFR are measures that will reduce or avoid impacts. Hunting and fishing regulations will be enforced by Federal and State law enforcement officers. Providing information through various forums will ensure the public is aware of applicable laws and policies.
5. The selected action, along with the proposed mitigation measures, will ensure that there is low danger to the health and safety of refuge staff, visitors, and hunters and anglers themselves.
6. The action is not in an ecologically sensitive area.
7. The action is not likely to adversely affect any threatened or endangered species; and will have no effect to federally designated critical habitat.
8. The action will not impact any cultural or historical resources.
9. The action will not impact any wilderness areas.
10. There is no scientific controversy over the impacts of this action, and the impacts of the proposed action are relatively certain.
11. The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 because hunters and anglers

must use established access points that will not be located near sensitive habitats.

Additionally, the following stipulations are necessary to ensure compatibility:

- Hunters must have in possession a signed refuge hunt brochure.
- At Eastern Shore of Virginia NWR, hunting for any species will be in accordance with State dates and limited between September 1 to February 28 (except for the spring turkey State-managed hunt). At Fisherman Island NWR, hunting will occur between September 1 and February 28.
- Use of non-toxic ammunition for migratory game birds, upland game, furbearers, nuisance species and turkey will be required in all firearms units.
- Night hunting will not be allowed. Hunting hours will occur in accordance with State regulations. We allow hunters to access the refuge 2 hours prior to sunrise and must exit the refuge no later than 2 hours after sunset.
- Use of dogs is permitted in firearm units only for the purpose of migratory game bird and upland game hunting.
- Hunting for migratory waterbirds (waterfowl, rail, snipe, gallinule/moorhen and coot) on Fisherman Island NWR will be by boat only to limit access to sensitive marsh habitat to foot traffic disturbance. Temporary and permanent blinds outside of the boat will not be permitted.
- Saltwater fishing will occur only from the shoreline of Bull tract (access by foot trail) and Skidmore Island (access by boat).
- Fishing will be phased in to occur from the Wise Point Boat Dock in areas designated for public access (commercial access to the dock will remain until privileges expire from all current permit holders).

Furthermore, the refuge would clearly post information on the hunting season at the refuge headquarters, on the website, and on signs throughout the refuge. The interaction between hunters and non-hunters will be further limited by a 100-foot setback from any No Hunt zone, building, road, and trail. Maps will be provided for hunters to include hunt boundaries, buildings, trails, and parking areas to ensure hunters are aware of safety zone requirements.

These measures to mitigate and/or minimize adverse impacts have been incorporated into the proposal. The proposal is compatible with the purposes of the refuges and the mission of the Refuge System (see the Compatibility Determinations, Appendix A, Appendix B and Appendix C, in the Hunting and Fishing Plan).

## **Public Review**

The plan has been thoroughly coordinated with all interested and/or affected parties. Refuge staff coordinated with State agency staff in preparation of the Hunting and Fishing Plan, Compatibility Determinations, and EA, and incorporated their comments into the documents. We released the draft plan and EA for public review and comment from April 9 through July 6, 2021, a total of 88 days. We distributed a press release to news organizations and alerted visitors to the plan's availability on the refuge websites, trailheads, and refuge kiosks. No public meetings were held due to COVID-19 public gathering safety guidance.

We received 27 public comment letters. Public comments supporting the proposal explained that they appreciate the new opportunities. Public comments opposing the proposal described how it is contradictory to the Refuge System mission, and would compromise stability of the wildlife on the refuge. Questioning of the justification of the hunts, dissatisfaction about the refuge ignoring the desires of the majority and other refuge users, and various complaints about specific potential negative impacts to refuge species were also discussed in the comments opposing the plan. For more detail, see Appendix F (Public Comments and Responses).

Based on comments received during the public review period, and further coordination with partners, some modifications were incorporated into the final plan and decision documents. Table G-2 highlights the differences, by hunt unit, between the draft and final Hunting and Fishing Plan.

**Table G-2. Summarized Changes between Draft and Final Hunting and Fishing Plan**

<b>Hunt Unit</b>	<b>Draft Plan</b>	<b>Final Plan</b>
<b>ESV Archery Only</b>	Open to archery for white-tailed deer, turkey, nuisance species (groundhog, European starling, English sparrow, pigeon), furbearers (raccoon, opossum, fox, and coyote), and upland game (rabbit, squirrel, and quail)	Open to archery for white-tailed deer, turkey, and furbearers
<b>Bull Tract</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds (waterfowl, rail, snipe, gallinule/moorhen, coot, woodcock, dove, and crow)	No change; will consider future requirement for non-toxic ammunition for white-tailed deer
<b>Dixon Tract</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds	No change; will consider future requirement for non-toxic ammunition for white-tailed deer
<b>Latimer Tract</b>	Open to archery for white-tailed deer, turkey, nuisance species, furbearers, and upland game	No Hunt Unit

<b>Hunt Unit</b>	<b>Draft Plan</b>	<b>Final Plan</b>
<b>Raccoon and Skidmore Islands</b>	Open to archery and firearms for white-tailed deer, turkey, nuisance species, furbearers, upland game, and migratory birds	Open to firearms for migratory birds
<b>GATR</b>	Open to coincide with WMA for white-tailed deer, turkey, waterfowl, and woodcock	No change; will consider future requirement for non-toxic ammunition for white-tailed deer
<b>Fisherman Island</b>	Open firearms from September 1 – February 28 for migratory birds	No change. In the future will consider a shortened hunt season or a permit system if negative impacts are observed
<b>Fishing Areas</b>	Year-round per state regulations on:  Skidmore Island beaches  Bull Tract  ESV Wise Point Boat Ramp	No change except for a phased opening at the ESV Wise Point Boat Dock

### **Determination**

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

The Service has decided to select the proposed action as described in the EA and modified in this document, and implement the Hunting and Fishing Plan for Eastern Shore of Virginia NWR and Fisherman Island NWR upon publication of the final 2021-2022 Station-Specific Hunting and Sport Fishing Regulations. This action is compatible with the purposes of the refuges and the mission of the Refuge System, and consistent with applicable laws and policies. See attached Compatibility Determinations (Appendix A, Appendix B and Appendix C).

\_\_\_\_\_  
Regional Chief  
National Wildlife Refuge System

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Date