U.S. Fish & Wildlife Service

Seatuck National Wildlife Refuge

White-tailed Deer Hunt Plan

Credit: Ryan Hagerty

July 2020

Appendix A. Compatibility Determination

Appendix B. Environmental Assessment

Appendix C. Intra-Service Section 7 Evaluation

Appendix D. Finding of No Significant Impact

Estimated Lead Agency Total Costs Associated with Developing and Producing the EA (per ERM 10-12): $8,422

Seatuck National Wildlife Refuge
White-tailed Deer Hunt Plan

July 2020

U.S. Fish and Wildlife Service

Long Island National Wildlife Refuge Complex
340 Smith Road
Shirley, NY 11967

Submitted By:
Refuge Manager

Signature _____ Date 7-8-2020

Concurrence:
Refuge Supervisor

Signature _____ Date 7-10-2020

Approved:
Regional Chief
National Wildlife Refuge System

Signature _____ Date 7/29/2020

Table of Contents

I. Introduction **0**
II. Statement of Objectives **2**
III. Description of Hunting Program **3**
A. Areas to be Opened to Hunting 3
B. Species to be Taken, Hunting Periods, Hunting Access 4
C. Hunter Permit Requirements (if applicable) 4
D. Consultation and Coordination with the State 4
E. Law Enforcement 5
F. Funding and Staffing Requirements 5
IV. Conduct of the Hunting Program **6**
A. Hunter Permit Application, Selection, and/or Registration Procedures (if applicable) ... 6
B. Refuge-Specific Hunting Regulations 7
C. Relevant State Regulations 7
V. Public Engagement **7**
A. Outreach for Announcing and Publicizing the Hunting Program 7
B. Anticipated Public Reaction to the Hunting Program 7
C. How Hunters Will Be Informed of Relevant Rules and Regulations 8
VI. Compatibility Determination **8**
References **8**

List of Tables

Table 1. White-tailed deer abundance estimates at Seatuck NWR 3
Table 2. Estimated Annual Costs of the White-tailed Deer Hunt at Seatuck NWR 5

List of Figures

Figure 1. Map of Seatuck National Wildlife Refuge 10

List of Appendices

Appendix A - Compatibility Determination A-1
Appendix B - Environmental Assessment B-1
Appendix C - Intra-Service Section 7 Evaluation C-1
Appendix D - Finding of No Significant Impact D-1

Seatuck National Wildlife Refuge
White-tailed Deer Hunt 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 (NWRSAA) of 1966, as amended by the Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations (CFR) and Fish and Wildlife Service Manual.

Seatuck National Wildlife Refuge (NWR, refuge) was established in 1968 pursuant to the authority of the Migratory Bird Conservation Act of 1929 "for use as an inviolate sanctuary, or for other management purposes for migratory birds" 16 U.S.C. §715d. The refuge was acquired through a donation from the Peters family.

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

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

The NWRSAA 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 U.S. Fish and Wildlife Service (Service) to provide for wildlife-dependent recreation opportunities, including hunting, when they are compatible with the purposes for which the refuge was established and the mission of the Refuge System.

Seatuck NWR is located in the town of Islip on the south shore of Long Island. The refuge consists of 209 acres bordering the Great South Bay, and is separated from the Atlantic Ocean by Fire Island. Suffolk County Department of Parks, Recreation, and Conservation owns the property to the west; suburban development lies to the north; Champlin Creek lies to the east; and Great South Bay lies to the south.

The primary purpose of the refuge is to provide habitat for wintering waterfowl and migrating shorebirds. More than 200 bird species have been documented on the refuge. Seatuck NWR is approximately 50 percent wetlands and 50 percent upland. The wetlands are primarily tidal salt marsh, freshwater wetlands, and ponds. The uplands include warm-season grasslands, old fields, shrublands, and woodlands.

Seatuck NWR will be opened for the first time to public deer hunting. The deer population on the refuge has been managed intermittently with culls since 2001, and by obtaining New York State-issued deer damage management permits. The refuge has approximately 100 acres of upland habitat for white-tailed deer (Figure 1). The refuge will be open intermittently in 1-week sessions for deer hunting during the New York State (NYS, State) archery season, between October 1 to January 31. To avoid potential impacts to northern long-eared bats on the refuge, we would start deer hunting on or after November 1. We will administer a lottery-issued permit hunt to accommodate up to four hunters per hunt day for each hunt session.

II. Statement of Objectives

The objectives of a white-tailed deer hunting program on Seatuck NWR are to:

- Develop a hunting program that is in alignment with refuge habitat management objectives: reduce the deer population, improve habitat conditions, benefit Federal trust species such as migratory birds and threatened and endangered species;

- Provide public hunting access as a wildlife-dependent recreational opportunity;

- Implement a hunting program that is administratively efficient and manageable with

existing staff and funding levels;

- Contribute to NYS deer management efforts, which includes reducing negative impacts caused by deer; and

- Conduct the hunt in a manner safe for hunters, refuge neighbors and refuge staff.

III. Description of Hunting Program

A. Areas to be Opened to Hunting

Approximately 100 acres of Seatuck NWR provides upland habitat for white-tailed deer (Figure 1). These available habitats include forests, shrublands, and old fields/grasslands. Specific closures and regulations will be listed in the annual refuge hunting regulations.

Seatuck NWR has not previously been open to public deer hunting. In addition, Refuge staff have observed a general increase in deer abundance through staff deer surveys (Table 1). In addition, the New York State Department of Environmental Conservation (NYSDEC) has been getting complaints about overabundant deer and the associated impacts at Seatuck NWR.

Table 1: White-tailed deer abundance estimates from deer drives (2000 to 2005) and camera surveys (2011 to 2012) at Seatuck NWR.

Date of Survey	Type of Survey	Deer Abundance Estimate
2000	Deer drive	33 (110 deer/mi^2)
2001	Deer drive	31 (103 deer/mi^2)
2002	Deer drive	36 (120 deer/mi^2)
2003	Deer drive	43 (143 deer/mi^2)
2004	Deer drive	39 (130 deer/mi^2)
2005	Deer drive	64 (213 deer/mi^2)
2011	Trail camera	74 (225 deer/mi^2)
2012	Trail camera	75 (230 deer/mi^2)

Seatuck NWR proposes adopting NYS hunting regulations for the refuge areas open for deer hunting, with some additional refuge-specific regulations to minimize conflicts with other refuge objectives. The Service assessed hunting and sport fishing opportunities and regulations using the Service's Hunt/Fish Opportunity Tool (SHOT). Information is this report can be used to promote regulatory alignment for hunting, alignment of Service regulations between stations, and new or expanded hunting and sport fishing opportunities on Service lands and water. The

Service assessed regulatory alignment of hunting regulations with general state regulations based on species open, season dates, method of take, and bag limits. Hunting assessments included a hunt-unit level analysis of these factors. Additional factors assessed included alignment to State regulations, general public access, limits on the number of people who can hunt, and how permits are issued; including drawings, fees, and demographics such as youth and people with disabilities. The hunting program will be reviewed annually.

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

All hunts will comply with applicable Federal regulations as published annually in the CFR, as well as State regulations, as published annually by the NYSDEC, unless otherwise noted. Seatuck NWR is located within Wildlife Management Unit 1C (Suffolk County).

White-tailed Deer – Deer may be hunted on Seatuck NWR. The take of white-tailed deer will be in accordance with State seasons. The refuge, with NYSDEC consultation, will determine bag limits. Antlerless deer will be targeted, with the goal of addressing the overabundance of deer. The hunt will coincide with the NYSDEC archery hunt season, usually between October to January, with a start date likely on November 1 to avoid potential impacts to northern long-eared bats. Accommodations for disabled hunters will also be made available.

C. Hunter Permit Requirements

Hunters will be required to have a NYSDEC hunting license, as well as a refuge-specific permit. Refuge-specific regulations will be outlined in the hunt permit application and hunter orientation materials. Hunters will be selected by lottery and these hunts will take place within the applicable State hunting seasons. A limited number of permits will be issued so that the refuge can facilitate hunting activities in a safe, enjoyable manner for hunters, while also managing impacts to the refuge's natural resources.

D. Consultation and Coordination with the State

Refuge staff invited NYSDEC to our annual deer hunt planning meeting on June 17, 2019, and one NYSDEC conservation officer attended. The Refuge Manager and wildlife biologist also met with NYSDEC biologists on August 27, 2019, to discuss current and potential deer management including the development of this Hunt Plan. During the August meeting and site visits at Seatuck and Wertheim NWRs, we discussed ways to align refuge hunting regulations and deer population management goals, where possible, with the State. NYSDEC offered to check deer harvested from the refuge at their Ridge Hunter Check Station.

The Long Island NWR Complex and NYSDEC will consult and coordinate on the Hunt Plan. Refuge hunter participation and harvest data is collected by NYSDEC. We also will work together with the NYSDEC to patrol Seatuck NWR to ensure safe, enjoyable hunting opportunities.

E. Law Enforcement

Enforcement of refuge violations normally associated with the management of a refuge is the responsibility of commissioned Federal Wildlife Officers (FWOs). Other officers, special agents, State environmental conservation officers and the local police department may assist the Long Island NWR Complex FWO.

The following methods will be used to enforce hunting regulations:

- Seatuck NWR boundaries will be clearly posted with refuge boundary signs;
- The refuge will provide each hunter with a hunt brochure;
- Refuge hunt regulations and information will be posted on the Seatuck NWR website: https://www.fws.gov/refuge/seatuck/ and at the Refuge Complex Headquarters/Visitor Center; and
- Federal and State wildlife officers will regularly patrol the refuge, and hunters may be checked for compliance with Federal and State laws, as well as refuge-specific regulations pertaining to the hunt.

F. Funding and Staffing Requirements

The initial hunt administration costs for Seatuck NWR are an estimated $16,000 including administration, law enforcement, signage, equipment, infrastructure, etc. We expect the annual recurring costs to be less than the initial startup costs. Long Island NWR Complex funds will be used to conduct hunts, since there is no funding specifically allocated for hunts. Funds collected through hunter application fees will help offset costs to the refuge. Refuge staff will collaborate with the NYSDEC for assistance with law enforcement patrols and collecting data from harvested deer. We anticipate that funding will be sufficient to continue the hunting program at Seatuck NWR in the future.

Table 2: Estimated Annual Costs of the White-tailed Deer Hunt at Seatuck NWR.

Item	Cost
Administrative (printing/processing applications and permits)	$3,000
Law Enforcement	$5,000
Signage, Maps, Brochures, Equipment	$3,000
Infrastructure (parking, roads, fences, gates)	$5,000
Total Estimated Costs	$16,000*

** The annual recurring costs will be less than the initial startup costs.*

IV. Conduct of the Hunting Program

The hunting program at Seatuck NWR consists of public archery-only hunting of white-tailed deer, and special hunts, as determined by the Refuge Manager.

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

A. Hunter Permit Application, Selection, and/or Registration Procedures (if applicable)

All persons interested in hunting on the refuge must possess a valid New York State hunting license and the necessary deer tags for archery hunting. All hunters must also complete a hunt application form and submit a non-refundable application fee to the refuge. We anticipate that the fee will be the same as Wertheim NWR ($15), which is part of the same refuge complex. Hunters will be selected by a random lottery drawing. Upon the lottery drawing, all selected and non-selected hunters will be notified by mail.

B. Refuge-Specific Hunting Regulations

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

- A limited number of permits will be issued for deer hunting at Seatuck through a pre-season drawing. Permits are non-transferable.

- Hunters may enter the refuge no earlier than 1 hour before the beginning of legal shooting hours and must exit the refuge no later than 1 hour after the end of legal shooting hours.

- Motor vehicles are restricted to designated roads and parking areas. Do not block gates and roadways with vehicles. The use of All-terrain vehicles, dirt bikes, or other non-licensed vehicles is prohibited.

- Pets are not permitted on the refuge at any time.

- The Refuge System's blue goose symbol is used to mark the refuge boundaries. The "Area Beyond This Sign Closed," is a refuge sign that can only be ignored during designated hunt days.

- All deer and harvested on the refuge must be reported according to NYSDEC harvest requirements within 7 days by phone, online, mobile app or at the Ridge Hunter Check Station

- Each hunter may only use one portable tree stand or ground blind, and it must be removed at the end of each hunting session.

- The Refuge Manager has the authority to extend or close hunting opportunities on the refuge within the established hunting seasons of NYS, while ensuring compatibility. The refuge will monitor, evaluate, and make necessary adaptations to the hunting program to ensure that the refuge is meeting resource management objectives and continuing to offer quality experiences.

C. Relevant State Regulations

Hunters are responsible for knowing and complying with all applicable NYSDEC hunting regulations.

V. Public Engagement

A. Outreach for Announcing and Publicizing the Hunting Program

The refuge maintains a mailing list, for news release purposes, to local newspapers and websites. Special announcements and articles may be released in conjunction with hunting seasons. In addition, information about the annual hunt will be available at Long Island NWR Complex headquarters and on the refuge website. The White-tailed Deer Hunt Plan was thoroughly coordinated with all interested and/or affected parties. Parties contacted included NYSDEC. We notified the public through local venues, the refuge website, and refuge social media. A 30-day comment period on the draft documents began on March 23, 2020. Due to the unprecedented pandemic response, the comment period was extended an additional 15 days, to May 7, for a total period of 45 days.

B. Anticipated Public Reaction to the Hunting Program

Hunting is consistent with the Long Island NWR Complex Comprehensive Conservation Plan (CCP), and has been allowed on Wertheim NWR since 2005. However, some negative public reaction to deer hunting at Seatuck NWR by some groups or individuals could be expected. A total of five people submitted comments during the public review period for the two refuges of the Long Island NWR Complex (Seatuck NWR and Wertheim NWR) that published hunt plans. All of the commenters were supportive of the new or expanded hunting opportunities. In the future, response to any demonstrations or protests will be coordinated with regional Service officials, and if necessary, State and local law enforcement officials.

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

The refuge will prepare an annual news release announcing the availability of permit applications and provide a summary of the hunting program for that year. The public will be informed of refuge hunting regulations and seasons through news releases to local and widely distributed media outlets, as well as through the Refuge Hunting Regulations Permit. Hunt days will also be posted at the Long Island NWR Complex Headquarters, as well as on the refuge website: https://www.fws.gov/refuge/seatuck/. The Refuge Manager may also choose to announce the hunt to refuge neighbors and other interested parties. The refuge's contact information (address and phone number) will be included in the New York hunting brochures. An annual program update will be filed each year outlining any changes in the current hunt program, and rules and regulations will be published in the *Federal Register*.

VI. Compatibility Determination

Hunting and all associated program activities proposed in this plan are compatible with the purposes of the refuge. See attached Compatibility Determination for hunting on Seatuck NWR.

VII. References

Alverson, W.W., D.M. Waller, and S.L. Solheim. 1988. Forests too deer: edge effects in northern Wisconsin. Conservation Biology 2:348-358.

Augustine, D.J. and P.A. Jordan. 1998. Predictors of white-tailed deer grazing intensity in fragmented deciduous forests. Journal of Wildlife Management 62:1076-1085.

Behrend, D.F., G.F. Mattfeld, W.C. Tierson and J.E. Wiley III. 1970. Deer density control for comprehensive forest management. Journal of Forestry 68:695-700.

Bernatas, S.B. 2004. White-tailed deer survey for Brookhaven National Laboratory, Wertheim National Wildlife Refuge, and Rocky Point Wilderness Area, Long Island, New York. Vision Air Research, Inc. Boise, ID

Brown, S.E. and G.R. Parker. 1997. Impact of white-tailed deer on forest communities within Brown County State Park, Indiana. Proceedings of the Indiana Academy of Sciences. 106:39-51.

Casey, D. and D. Hein. 1983. Effects of heavy browsing on a bird community in deciduous forest. Journal of Wildlife Management 47:829-836.

Cypher, B.L. and E.A. Cypher. 1988. Ecology and Management of White-tailed Deer in Northeastern Coastal Habitats: A Synthesis of the Literature Pertinent to National Wildlife Refuges from Maine to Virginia. USFWS Biological Report 88(15).

DeCalesta, D.S. 1994. Effects of white-tailed deer on songbirds within managed forests in

Pennsylvania. Journal of Wildlife Management 58:711-718.

Healy, W.M., D.S. DeCalesta, and S.L. Stout. 1997. A research perspective on white-tailed deer overabundance in the northeastern United States. Wildlife Society Bulletin 25:259-263.

McCullough, D.R. 1982. The theory and management of Odocoileus populations. Biology and Management of the Cervidae. Wemmer, C. (ed.) 1987:535-549. Res. Symp. Natl. Zoo. Park.

McCullough, D.R.1997. Irruptive behavior in ungulates. Pages 69-93 in W.J. McShea, H.B. Underwood, and J.H. Rappole, eds., The Science of Overabundance: Deer Ecology and Population Management. Smithsonian Institution Press, Washington, DC.

McShea, W.J. and J.H. Rappole. 1992. White-tailed deer as keystone species within forested habitats of Virginia. Virginia Journal of Science 43:177-186.

Miller, L.A., B.E. Johns, D.J. Elias, and G.J. Killian. 1999. Oral Vaccination of white-tailed deer using a Recombinant Bacillus Calmette-Guerin Vaccine expressing the Borrelia burgdorferi outer surface protein A: Prospects for Immunocontraception. American Journal of Reproductive Immunizology 41:279-285.

The New York State Department of Environmental Conservation. 2011. Management Plan for White-Tailed Deer in New York State, 2012-2016. 59pp.

Porter, W.F.1991. White-tailed deer in eastern ecosystems: implications for management and research in National Parks. Natural Resources Report NPS/NRSSUNY/NRR-91/05.

Russell, F.L. and N.L. Fowler. 1999. Rarity of oak saplings in savannas and woodlands of the eastern Edwards Plateau, TX. Southwestern Naturalist 44:31-41.

Tilghman, N.G. 1989. Impacts of white-tailed deer on forest regeneration in northwestern Pennsylvania. Journal of Wildlife Management 53:524-532.

U.S. Fish and Wildlife Service. 1992. Station Management Plan - Long Island, NY National Wildlife Refuges. Unpublished Report 64pp.

U.S. Fish and Wildlife Service. Comprehensive Conservation Plan. 2006. Long Island National Wildlife Refuge Complex.

Warren, R.J. 1998. Deer Population Management Through Hunting and Alternative Means of Control. Http://www.arec.umd.edu/policy/Deer-Managment-in-Maryland/warren.html.

Woolf, A. and J.D. Harder. 1979. Population dynamics of a captive white-tailed deer herd with emphasis on reproduction and mortality. Wildlife Monographs 67:53 pp.

Figure 1. Map of Seatuck National Wildlife Refuge

Compatibility Determination

USE: White-tailed Deer Hunting

REFUGE NAME: Seatuck National Wildlife Refuge

DATE ESTABLISHED: 1968

ESTABLISHING AND ACQUISITION AUTHORITY(IES):

- Migratory Bird Conservation Act of 1929 16 U.S.C. §715d.

REFUGE PURPOSE(S):

- "for use as an inviolate sanctuary, or for any other management purposes, for migratory birds."

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

"The mission of the National Wildlife Refuge System (Refuge System) is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resource and their habitats within the United States for the benefit of present and future generations of Americans" (Refuge System Improvement Act of 1997, Public Law 105-57 - 16 U.S.C. 668dd-668ee, Refuge System Administration Act of 1966).

DESCRIPTION OF USE:

a) What is the use? Is the use a priority public use?
The use is archery hunting of white-tailed deer. Hunting was legislatively mandated as one of six priority public uses by the Refuge System Administration Act of 1966, as amended by the Refuge System Improvement Act of 1997 (Public Law 105-57), and reinforced as a priority use by Department of the Interior Secretarial Order 3356 (September 15, 2017).

b) Where would the use be conducted?
Of the 209 acres that make up Seatuck NWR, approximately 100 acres of upland habitat will be open for hunting white-tailed deer, as seen in Figure 1 of the White-tailed Deer Hunt Plan. These available upland habitats include forests, shrublands, and old fields/grasslands.

c) When would the use be conducted?
Hunting would take place within the open hunting seasons established by the New York Department of Environmental Conservation (NYSDEC). The refuge will be open intermittently in 1-week sessions for deer hunting during the New York State (NYS, State) archery season, usually between October 1 to January 31. To avoid potential impacts to northern long-eared bats on the refuge, we would start deer hunting on or after November 1.

d) How would the use be conducted?
All hunts will comply with applicable Federal regulations as published annually in the Code of Federal Regulations (CFR), as well as State regulations published annually by the NYSDEC, unless otherwise noted. Hunters will be required to have a NYSDEC Hunting License, as well as a refuge-specific permit. Hunters will be selected by lottery and these hunts will take place within the applicable State hunting seasons. A limited number of permits (up to 4 per day) will be issued so that the refuge can facilitate hunting activities in a safe, enjoyable manner for hunters and neighbors, while also managing impacts to the natural resources.

All hunters must also complete a hunt application form and submit a non-refundable application fee to the refuge. Hunters will be selected by a random lottery drawing. Upon the lottery drawing, all selected and non-selected hunters will be notified by mail.

- A limited number of permits will be issued for deer hunting at Seatuck through a pre-season drawing. Permits are non-transferable.

- Hunters may enter the refuge no earlier than 1 hour before the beginning of legal shooting hours and must exit the refuge no later than 1 hour after the end of legal shooting hours.

- Motor vehicles are restricted to designated roads and parking areas. Do not block gates and roadways with vehicles. The use of All-terrain vehicles, dirt bikes, or other non-licensed vehicles is prohibited.

- All deer harvested on the refuge must be reported according to NYSDEC harvest requirements within 7 days by phone, online, mobile app or at the Ridge Hunter Check Station

- Each hunter may only use one portable tree stand or ground blind, and it must be removed at the end of each hunting session.

- The Refuge Manager has the authority to extend or close hunting opportunities on the refuge within the established hunting seasons of NYS, while ensuring compatibility. The refuge will monitor, evaluate, and make necessary adaptations to the hunting program to ensure that the refuge is meeting resource management objectives and continuing to offer quality experiences.

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

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

AVAILABILITY OF RESOURCES:

The initial hunt administration cost for Seatuck NWR is an estimated $16,000 (Table 1-A) which includes administration, law enforcement, signage, equipment, and infrastructure. We expect the annual recurring costs to be less than the initial startup costs. Long Island NWR Complex funds will be used to conduct hunts, since there is no funding specifically allocated for hunts. Funds collected through hunter application fees will be available to help offset costs to the refuge. Refuge staff will collaborate with the NYSDEC for assistance with law enforcement patrols and collecting data from harvested deer. It is anticipated that funding will be sufficient to continue the hunting program at Seatuck NWR in the future.

Table 1-A. Estimated Annual Costs of the White-tailed Deer Hunt at Seatuck NWR.

Item	Cost
Administrative (printing/processing applications and permits)	$3,000
Law Enforcement	$5,000
Signage, Maps, Brochures, Equipment	$3,000
Infrastructure (parking, roads, fences, gates)	$5,000
Total Estimated Costs	$16,000*

** The annual recurring costs will be less than the initial startup costs.*

ANTICIPATED IMPACTS OF THE USE:

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

Vegetation

The presence of hunters could negatively impact vegetation through trampling and small branch trimming. This impact is expected to be minimal, however, based on anticipated levels of use,

and because hunting will occur during the dormant season when vegetation is least vulnerable. Hunting could also create a positive, indirect effect on vegetation by reducing the white-tailed deer population.

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

Other Wildlife
If left unmanaged, the deer herd will increase at the expense of other wildlife species, a condition contrary to the refuge's mandate to manage for migratory birds, including forest-dependent birds. By allowing the herd to continue to overpopulate, a more pronounced browse line will develop on existing vegetation. This will further reduce food and cover for nearly all species that depend on the layer of vegetation within roughly 6 feet of the ground. Ground and shrub-nesting birds, and small mammals that use surface vegetation for food and cover will be adversely affected. As mentioned in the section above, however, if deer populations are kept at a sustainable level through regulated hunting, then healthy habitats can be maintained that are healthy not only for the deer, but for other wildlife as well.

The deer hunting season in New York usually begins around October 1. The federally threatened northern long-eared bat has been documented on the refuge through acoustic bat surveys conducted from 2014 to 2017. Northern long-eared bats may still be present on the refuge as they migrate to winter hibernaculum, and there could be potential for hunter tree stands to disturb bat roost sites. The general time frame for bat hibernation is November 1 to March 31. Therefore, the refuge will allow deer hunting November 1 to January 31 to reduce impacts to northern long-eared bat.

Visitors and Users
Since Seatuck NWR is closed to the public except by special use permit access, and since fishing is allowed from boats only in refuge-controlled waters of the Great South Bay, there will be minimal (if any) impact on other visitors to the refuge.

PUBLIC REVIEW AND COMMENT:

This Compatibility Determination (CD) is part of the Seatuck NWR White-tailed Deer Hunt Plan and the accompanying Environmental Assessment (EA). The plan was coordinated with all interested and/or affected parties, including NYSDEC staff. We notified the public through local venues, the refuge website, and refuge social media. A 30-day comment period on the draft

documents began on March 23, 2020. Due to the unprecedented pandemic response, the comment period was extended an additional 15 days, to May 7, for a total period of 45 days.

A total of five people submitted comments during the public review period for the two refuges of the Long Island NWR Complex (Seatuck NWR and Wertheim NWR) that published hunt plans. All of the commenters were supportive of the new or expanded hunting opportunities. No substantive changes were made to the plan based on comments.

DETERMINATION (CHECK ONE BELOW):

___ Use is Not Compatible

_X_ Use is Compatible with the Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

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

- This use must be conducted in accordance with State and Federal regulations, and special refuge regulations published in the Refuge Hunting Regulations and Public Use Regulations brochures.

- This use is subject to modification if monitoring by refuge personnel or other authorized personnel finds unanticipated negative impacts to natural communities, wildlife species, or other refuge user groups.

- Hunters may enter the refuge no earlier than 1 hour before the beginning of legal shooting hours and must exit the refuge no later than 1 hour after the end of legal shooting hours.

- Motor vehicles are restricted to designated roads and parking areas. Do not block gates and roadways with vehicles. The use of All-terrain vehicles, dirt bikes, or other non-licensed vehicles is prohibited.

- All deer harvested on the refuge must be reported according to NYSDEC harvest requirements within 7 days by phone, online, mobile app or at the Ridge Hunter Check Station

- Each hunter may only use one portable deer tree stand. Tree stands must be removed from the hunt unit at the end of each hunt session.

JUSTIFICATION:

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

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

Stipulations ensure that the use remains compatible and provide management flexibility should detrimental impacts develop. Allowing this use also furthers the mission of the Refuge System by providing a wildlife-dependent recreational use for the benefit of the American public while conserving fish, wildlife, and plant resources on the refuge. This activity will not materially interfere with or detract from the mission of the Refuge System or the purpose for which the refuge was established.

SIGNATURE:
Refuge Manager

Michelle Potter
(Signature)

9-8-2020
(Date)

CONCURRENCE:
Regional Chief

Scott B. Kahn
(Signature)

7/29/2020
(Date)

MANDATORY 15 YEAR RE-EVALUATION DATE: 7/29/2035
(Date)

Environmental Assessment for White-tailed Deer Hunting at Seatuck National Wildlife Refuge

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

Proposed Action

The Service is proposing to allow hunting opportunities for white-tailed deer (*Odocoileus virginianus*) on Seatuck National Wildlife Refuge (NWR, refuge). Of the 209 acres that make up Seatuck NWR, approximately 100 acres of upland habitat will be open for archery-only hunting, as seen in Figure 1 of the White-tailed Deer Hunt Plan. The refuge will be open intermittently in 1-week sessions for deer hunting during the New York State (NYS, State) archery season, from October 1 to January 31. To avoid potential impacts to northern long-eared bats on the refuge, we would likely start deer hunting on November 1. We will administer a lottery-issued permit hunt to accommodate up to four hunters per hunt day for each hunt session.

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 (NWRSAA) 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.

Seatuck NWR was established in 1968 pursuant to the authority of the Migratory Bird Conservation Act of 1929 "for use as an inviolate sanctuary, or for other management purposes for migratory birds" 16 U.S.C. §715d. Seatuck NWR is managed by the Service as part Refuge System. The mission of the Refuge System, as outlined by the NWRSAA as amended by the Refuge System Improvement Act (16 U.S.C. 668dd et seq.), is to:

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

The NWRSAA 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.

Purpose and Need for the Proposed Action

The purpose of this proposed action is to provide compatible wildlife-dependent recreational opportunities and to regulate the white-tailed deer population at Seatuck NWR. The need of the proposed action is to meet the Service's priorities and mandates as outlined by the NWRSAA 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)).

The employment of hunting as a method to help reduce the over-abundant deer population on the refuge will help to protect wildlife habitat and the fauna, species diversity, and plant communities associated with Seatuck NWR. The need of this proposed action is to reduce deer densities on the refuge so as not to exceed 20 to 30 deer per square mile (USFWS 2006). High-density herds (i.e., greater than 30 deer/mi^2) have been associated with damage to habitats, economic impacts and tick-borne disease transmission (Woolf and Harder 1979, Cypher and Cypher 1988). As outlined in the Long Island NWR Complex Comprehensive Conservation Plan (CCP), hunting will improve conditions for ground-nesting birds, promote forest

regeneration and increase vegetation diversity. The refuge expects the management of white-tailed deer to positively affect refuge neighbors and the general public through a reduction in financial loss to residential properties, as well as improved health and safety resulting from reduced incidences of vehicle collisions with deer. It is also hoped that a reduction in deer density would, at least in a localized area, limit the spread of deer ticks, which transmit Lyme disease.

National wildlife refuges, including Seatuck NWR, conduct hunting programs within the framework of Federal, State and refuge regulations. Hunters on the refuge are expected to be ethical and respectful of other hunters, non-consumptive users, wildlife species and the environment while on refuge lands.

Objectives of a white-tailed deer hunting program on Seatuck NWR would:

- Develop a hunting program that is in alignment with refuge habitat management objectives (reduce the deer population, improve habitat conditions, benefit Federal trust species);
- Provide the public with wildlife-dependent recreational opportunities and increase access for hunters;
- Implement a hunting program that is administratively efficient and manageable with existing staff and funding levels;
- Contribute to NYS deer management efforts, which includes reducing negative impacts caused by deer; and
- Conduct the hunt in a manner safe for hunters, other refuge users, neighbors and refuge staff.

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. The proposed action will also promote one of the 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. To address the needs stated above, the purpose of the proposed action will bring the refuge into compliance with management guidance detailed in the orders, policy, and Federal law to "recognize compatible wildlife-dependent recreational uses as the priority general uses of the Refuge System" and "ensure that opportunities are provided within the Refuge System for compatible wildlife-dependent recreational uses." 16 U.S.C. 668dd (a)(4).

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

Alternatives Considered

No Action Alternative (Current Management)

Under the No Action Alternative, current management direction will continue. The refuge will remain closed to deer hunting, and implementation of this alternative will not facilitate a wildlife-dependent priority use that has been found to be compatible with the purposes of the refuge and the Refuge System mission. No action will be taken to control deer problems, and the deer herd size will not be reduced sufficiently to protect vegetation and habitat for all wildlife. The deer population will be self-regulated by natural means (diseases and starvation), as well as by collisions with vehicles. Without natural predators or some active management to control deer populations, deer density will exceed the capacity of the refuge to sustain them. As deer populations increase, natural vegetation will decline in composition, structure, and density (Tilghman 1989, Warren 1991, Coffey et al. 1997). Only when deer densities decline substantially because of disease and starvation, will vegetation rebound. However, because of the excessive browsing that will have already occurred, vegetation composition and species diversity may not recover to a good condition (Coffey et al. 1997). This alternative allows deer to dominate the upland habitats, influencing wildlife species diversity, and habitat richness for all species. This alternative does not address human health, safety, and economic concerns relating to deer interactions in the surrounding community, including damage to landscaping and lawns, deer-vehicle collisions, or the spread of Lyme disease.

Proposed Action Alternative (Regulated Deer Hunt)

Under the Proposed Action Alternative, the Service will allow archery-only white-tailed deer hunting, following State regulations where compatible, but with specific restrictions on use of refuge lands, harvest methods, and hunter density as determined on a yearly basis by the Service. The refuge has prepared a hunt plan, which is summarized in this EA as the Proposed Action Alternative. Hunters will be required to obtain a permit from the refuge to hunt, and pay a permit application fee. Season dates (usually October 1 to January 31), weapons, and the permit process may be modified to maintain a balance between public safety, priority public uses, and wildlife management goals.

The initial hunt administration costs for Seatuck NWR will be approximately $16,000. These costs include administration, law enforcement, signage, equipment, infrastructure, and other miscellaneous expenses. We expect the annual recurring costs to be less than the initial startup costs, likely around $11,000.

All deer hunting units will be open with dates established on an annual basis, and concurrent with the State seasons. If refuge staff determine that the CCP management goals and the hunt plan objectives are not being met, then hunting dates, seasons, and hunter density will be modified. All hunting will be open in accordance with State and Federal regulations. Refuge-specific regulations will be published in the *Federal Register,* annually as part of the Refuge-Specific Hunting and Sport Fishing Regulations.

This proposed action alternative offers increased opportunity for public hunting and fulfills the Service's mandate under the Refuge System Improvement Act of 1997. The Service has determined that the hunt plan is compatible with the purposes of Seatuck NWR and the mission of the Refuge System.

Mitigation Measures to Avoid Conflicts

At a minimum, we commit that any action will:

1. Prior to implementation, be subject to intra-agency consultation to ensure all requirements of the Endangered Species Act are fulfilled;

2. Ensure cultural resources be protected consistent with Section 106 of the National Historic Preservation Act; and,

3. Be designed in such a way to protect public safety.

Additional measures will be taken to avoid conflict with other management objectives. These include, but are not limited to:

- Conducting the hunt when northern long-eared bat have migrated to their winter hibernacula, likely on November 1;

- Primarily hunt on refuge upland habitat to reduce disturbance to wintering waterfowl, and to avoid conflicts with saltmarsh restoration maintenance that may be done from November to March or April; and

- Post signs to notify neighbors and the general public that a deer hunt is in progress.

Affected Environment

The refuge consists of approximately 209 acres in Suffolk County, New York. Seatuck NWR is approximately 50 percent wetlands and 50 percent uplands. The wetlands are primarily tidal salt marsh, freshwater wetlands, and ponds. The uplands include warm-season grasslands, old fields, shrublands, and woodlands. The proposed action will occur on 100 acres of uplands in the fields, grasslands, shrublands, and woodlands. A map of the general area and proposed hunting areas can be seen in Figure 1 of the White-tailed Deer Hunt Plan.

For more information regarding the affected environment, please see chapter 3 of the Long Island NWR Complex Comprehensive Conservation Plan (USFWS 2006), which can be found here: https://www.fws.gov/refuge/Seatuck/what_we_do/conservation.html.

Environmental Consequences of the Action

This section analyzes the environmental consequences of the action on each affected resource, including direct and indirect effects. This EA focuses primarily on analyses of the environmental consequences on a resource when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Resources that will not be more than negligibly impacted by the action have been dismissed from further analyses. The refuge's CD for hunting also has a summary of potential impacts associated with hunting, and is available in Appendix A of the Hunt Plan.

Impact Types

Direct impacts are those which are caused by the action and occur at the same time and place.

Indirect impacts are those which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect impacts may include those resulting from actions with both beneficial and detrimental impacts; even if on balance, the agency believes that the impact will be beneficial.

TABLE 1-B. AFFECTED NATURAL RESOURCES AND ANTICIPATED IMPACTS

AFFECTED RESOURCE	ANTICPATED DIRECT AND INDIRECT IMPACTS
White-tailed Deer White-tailed deer populations have been increasing since the mid-1980s due to suburbanization of the area surrounding the refuge. Based on deer abundance estimates from deer drives conducted from 2000 to 2005, and camera surveys conducted from 2011 to 2012, the deer population has been increasing. The results of a 2012 survey estimated that there were 75 deer on the refuge, which is a population density of 230 deer/mi^2. High-density herds (i.e., greater than 30 deer/mi^2) have been associated with damage to habitats (e.g., lack of forest regeneration and loss of woody understories), economic impacts (e.g., timber resources, ornamental plantings, agricultural damage, and vehicle collisions), and tick-borne disease transmission (Woolf and Harder 1979, Cypher and Cypher 1988). The deer population at the refuge has been managed intermittently with culls since 2001, and by obtaining NYS-issued deer damage management permits. An average of 12 deer/year have been removed through culling. Due to	**No Action** Failure to reduce the deer herd to levels within the carrying capacity of Seatuck NWR may have serious impacts on the deer herd and their habitat. If the deer population goes unmanaged, forage becomes less available. If this occurs, more deer are expected to exhibit a poorer physical condition, with a greater proportion of deer anticipated to die from starvation. When existing both at high-density and poor physical condition, deer are more susceptible to diseases like epizootic hemorrhagic disease, as well as various parasites. **Proposed Action** Achieving parity between deer densities and the habitat's carrying capacity is expected to improve the overall health of the deer population; deer are expected to attain greater body weights, show fewer signs of disease, and succumb less often to starvation. With a staggering of hunt days during the archery season, implementation of a hunting program is not expected to encourage deer to leave the refuge in a greater number; hunting tends not to cause deer to leave their normal home ranges, but instead shifts the deer into areas with more adequate cover (Kufeld et al. 1988). Direct impacts to the deer population will include the annual harvest of an estimated 15 to 20 deer/year over the next few years. Afterwards, the deer population will be maintained at a density less than or equal to 10 deer, through an annual harvest. Attainment of this harvest rate will result in reducing the deer population to a level more consistent with the carrying capacity of the habitat

staff reductions and other priorities, culls have not been conducted on the refuge since 2016. Seatuck NWR is located in NYSDEC Wildlife Management Unit 1C. In 2018, an estimated 227,787 deer were harvested in the State of New York. (NYSDEC 2018).	(i.e., less than 25 deer/mi^2) (Woolf and Harder 1979, Cypher and Cypher 1988). Consequently, the deer population will exhibit a more balanced sex ratio, will be more resistant to disease, and individual animals will maintain a high level of physical condition.
Other Wildlife and Aquatic Species Seatuck NWR supports a large diversity of wildlife species. With its diverse mix of upland and wetland habitat types, Seatuck NWR hosts more than 200 bird species, and serves as an oasis in a heavily developed urban area. A variety of mammals, fish, amphibians, and reptiles are also found on the refuge.	**No Action** If left unmanaged, the deer herd will increase at the expense of other wildlife species, a condition contrary to the refuge's mandate to manage for migratory birds, including forest-dependent birds. By allowing the herd to continue to overpopulate, a more pronounced browse line will develop. This will further reduce food and cover for nearly all species that depend on the layer of vegetation within roughly 6 feet of the ground. Ground and shrub nesting birds, and small mammals that use surface vegetation for food and cover will be adversely affected. **Proposed Action** Increased vegetative density and diversity resulting from decreased white-tailed deer populations will provide the structure necessary to benefit ground-nesting birds, as well as reptiles, amphibians, and small mammals. Disturbance to non-migratory wildlife will increase on the refuge with the presence of hunters. However, this will be mitigated by allowing hunting in the fall and winter months when wildlife occurrence and activity is lowest. Additional mitigation will come from having at least 100 acres, or 48 percent of the refuge closed to hunting, including a 150-foot no-hunt zone around the refuge boundaries.
Threatened and Endangered Species and Other Special Status Species Roseate tern (*Sterna dougallii*) and sandplain gerardia (*Agalinis acuta*) are listed as endangered under the Endangered Species Act of 1973. Piping plover (*Charadrius melodus*), red knot	**No Action** Seatuck is currently closed to the public. However, the biological impacts of retaining a high density deer herd include the continual negative impacts from deer on the refuge's vegetation (i.e., lack of forest regeneration and loss of woody understories), and the associated reduction in habitat quality of the refuge for a variety of wildlife species, including species of special management concern.

(*Calidris canutus*), and northern long-eared bat (*Myotis septentrionalis*) are listed as threatened. Roseate tern, red knot and piping plover may use the refuge beach and salt marsh habitats in the spring and summer, but they are not consistently present and not observed in large numbers. Northern long-eared bat have been documented on the refuge through acoustic bat surveys conducted from 2014 to 2017. NYS designated threatened and endangered species which occur at Seatuck NWR include the bald eagle, northern harrier, short-eared owl, common tern, least bittern, least tern, black rail, peregrine falcon, and pied-bill grebe. Other rare species or species of special concern (USFWS Migratory Nongame Birds or NYS) may also occur on Seatuck NWR.	**Proposed Action** The deer hunting season usually begins around October 1. Northern long-eared bat may still be present on the refuge as they migrate to winter hibernaculum. There is the potential for hunter tree stands to disturb bat roost sites. The general time frame for bat hibernation is November 1 to March 31. Therefore, the refuge will allow deer hunting from November 1 to January 31 to reduce impacts to northern long-eared bat. Piping plover, red knot, and roseate tern will not be affected since these species primarily use the refuge in the spring and summer, and are typically found in beach and saltmarsh habitats. An ESA Section 7 evaluation is being conducted for piping plover, red knot, roseate tern, and northern long-eared bat (Appendix C). Disturbance to species of special management concern may come from the presence of hunters on the refuge. However, this will be mitigated by the timeframe for archery hunting occurring from November to January, when wildlife occurrence and activity is lowest. Additional mitigation will come from having at least 100 acres, or 48 percent of the refuge closed to hunting including a 150-foot no-hunt zone around the refuge boundaries. An additional positive benefit of the hunting program is that increased vegetative density and diversity resulting from decreased white-tailed deer populations will improve refuge habitats.
Vegetation (including vegetation of special management concern) Vegetation varies throughout the refuge. Deer hunting will be permitted primarily in upland areas. The upland habitats at Seatuck NWR are equally divided among mixed-oak woodland, red maple stands, upland shrub, and grasslands (USFWS 2006). The grasslands are about equally divided between cool season and warm season grassland types. Pine barren habitat is also present. The vegetation types of Long Island have been categorized into	**No Action** The current overpopulation of deer is degrading forest and upland habitats as a result of overbrowsing. The biological impacts of retaining a high-density deer herd include the continual negative impacts from deer on the refuge's vegetation (i.e., lack of forest regeneration and loss of woody understories), and the associated reduction in habitat quality of the refuge for a variety of wildlife species. Although affected grassland vegetation may regenerate, species composition may be permanently altered (Porter 1991). **Proposed Action** Some minor effects to vegetation from trampling is expected due to the increased number of users on the refuge. However, hunting will occur during the dormant season when vegetation is least vulnerable.

a variety of classification schemes. Vegetation at Seatuck NWR is classified by Bailey (1995) as Eastern Broadleaf Forest (Oceanic) Province. Barbour and Billings (1988) placed Long Island in their ecological coastal grouping, which includes the northernmost portion of the southeastern coastal plain. The authors specifically refer to the vegetation of Long Island as the northern Pine Barrens.	The reduction of deer densities would allow forest vegetation to recover from the effects of overbrowsing. A decline in deer browsing will allow development of an herbaceous layer and woody understory representative of a diverse and balanced ecosystem.

TABLE 2-B. AFFECTED VISITOR USE AND EXPERIENCE AND ANTICIPATED IMPACTS

AFFECTED RESOURCE	ANTICPATED DIRECT AND INDIRECT IMPACTS
Seatuck NWR is closed to the public except by special use permit access. Fishing occurs from boats only, in refuge-controlled waters of the Great South Bay. Areas administratively closed to hunting will be posted with "No Hunting Zone" or "Area Beyond This Sign Closed" signs. These closed areas will also be illustrated in the refuge hunting brochure map. Signs will also be posted at key access points notifying surrounding neighbors that hunts are in progress on the refuge.	**No Action** In the absence of increased deer management strategies, negative interactions between humans and deer will continue as a greater number of deer roam freely in residential neighborhoods, foraging for food no longer available on the refuge. The increased presence of deer in neighborhoods will likely increase damage to private landscaping and gardens. The increased movement of deer off-refuge will also potentially increase the incidence of deer-vehicle collisions, as well as the possibility of vehicle occupants sustaining bodily injuries. **Proposed Action** Hunting, along with the five other priority public uses, is consistent with the primary public uses identified in the Refuge Improvement Act of 1997. Over several years, a reduction in the refuge deer density is anticipated to have localized effects within the adjacent community. The presence of fewer deer is expected to limit their overall occurrence on residential properties, resulting in less damage to landscaping, fewer deer to transport Lyme disease-bearing ticks and fewer deer-vehicle collisions.

TABLE 3-B. AFFECTED CULTURAL RESOURCES AND ANTICIPATED IMPACTS

AFFECTED RESOURCE	ANTICPATED DIRECT AND INDIRECT IMPACTS
The L-shaped Barn at Seatuck NWR is designated as historic on the National Register of Historic Places. The Lovering House, a residence that is currently unoccupied is also present on the refuge. In addition, Seatuck NWR contains some small cemeteries and remnants of old farm equipment.	**No Action** No adverse impacts will occur under this alternative since use is not allowed within the vicinity of the L-Barn, Lovering House, or other known cultural resources. **Proposed Action** The known cultural resources on the refuge will be protected within safety zones during the hunting season. Prior to any ground-disturbing activities, the refuge will consult the State Historic Preservation Office, affected tribes, and conduct a cultural resources survey in accordance with Section 106 of the National Historic Preservation Act.

TABLE 4-B. AFFECTED REFUGE MANAGEMENT AND OPERATIONS AND ANTICIPATED IMPACTS

AFFECTED RESOURCE	ANTICPATED DIRECT AND INDIRECT IMPACTS
Operation of a hunting program requires the time and efforts of Service personnel to establish regulations, determine boundaries and limitations, communicate with hunters, maintain a law enforcement presence, and maintain infrastructure necessary for access. Infrastructure associated with the hunt program is minimal. Parking areas and roads to hunt locations are the only hunting-specific infrastructure. Staff requirements for offering this use is minimal. Staff are needed for administrative duties, such as communicating with the public,	**No Action** No adverse impacts will occur under this alternative. **Proposed Action** The refuge will be open to hunting, but there will be no new infrastructure for this use. However, parking areas, roads, fences, and gates may require additional maintenance for access and safety. The limited number of hunters using the refuge is expected to have minimal impact. The estimated costs to implement the initial hunt at Seatuck NWR is $16,000. This includes administration, law enforcement, signage, equipment, infrastructure, etc. We expect the annual recurring costs to be less at $11,000. The refuge will recuperate some funds from the sale of deer hunt permits.

printing and processing materials, collecting applications, and issuing permits. Refuge law enforcement is needed to ensure compliance with State and refuge regulations. This activity is within the staffing capabilities of the refuge.	

TABLE 5-B. AFFECTED SOCIOECONOMICS AND ANTICIPATED IMPACTS

AFFECTED ENVIRONMENT	ANTICPATED DIRECT AND INDIRECT IMPACTS
Local Economies Seatuck NWR is located in the Town of Islip, in western Suffolk County. The population of Suffolk County was 1,481,093 as of 2018 (https://www.ny.gov/counties/suffolk). Suffolk County is the easternmost county in NYS, and the fourth most populated county in the State.	**Environmental Consequences Common to All Alternatives** No influence expected. The proposed action is expected to have minor impact to the local economy, with a limited number of hunters using the refuge (up to 4 per day, intermittently between November 1 and January 31).
Environmental Justice Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all Federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.	**Environmental Consequences Common to All Alternatives** The Service has not identified any potential high and adverse environmental or human health impacts from this proposed action or any of the alternatives. The Service has identified no minority or low-income communities with the impact area. Minority or low-income communities will not be disproportionately affected by any impacts from the proposed action or any of the alternatives.

Cumulative Impact Analysis

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

For more information on the national cumulative impacts of the Service's hunting and fishing program on the Refuge System, see "*U.S. Fish and Wildlife Service, Cumulative Impacts Report 2020-2021 National Wildlife Refuge and National Fish Hatchery Proposed Hunting and Sport Fishing Openings (2020)*".

TABLE 6-B. ANTICIPATED CUMULATIVE IMPACTS OF THE PROPOSED ACTION AND ANY ALTERNATIVES

Past, Present, and Reasonably Foreseeable Activity Impacting Affected Environment	Descriptions of Anticipated Cumulative Impacts
Hunting There is a long history of hunting on Long Island. Hunting occurs on public and private lands within NYSDEC Wildlife Management Unit 1C, in which Seatuck NWR is located. Wertheim NWR, part of the same Refuge Complex, also conducts a hunting program.	Seatuck NWR coordinates with NYSDEC. The refuge hunting program will be conducted within the framework of State and Federal regulations. NYSDEC sets hunting frameworks based on species populations and monitored harvests. The proposed hunting program rules will be the same as, or more restrictive than, hunting regulations in the State. By maintaining hunting regulations that are the same as or more restrictive than the State, we can ensure that we are maintaining seasons that are supportive of management on a more regional basis. Such an approach also provides consistency with large-scale population status and objectives. Hunters in WMU 1C harvested 3,407 deer during the 2018-2019 season. An estimated 227,787 deer were harvested in the State of New York in 2018 (NYSDEC 2018).
Climate Change Ecological stressors are expected to affect a variety of natural processes and associated resources into the future. The most substantial concern at the refuge is sea level rise and the impact this has on marsh elevation. Sea level rise has already begun causing marsh migration, marsh inundation, and	While the effects of climate change on ecological systems is not fully understood, deer abundances are predicted to increase because of greater survival and reproductive rates associated with warmer winters. However, there is also evidence that some infectious viral diseases and parasite (e.g., ticks) infestations could also increase in frequency and severity. Consequently, the full effects of climate change on deer is not fully understood (Hushaw et al. 2016). Under the proposed alternative, the refuge would use an adaptive management approach for its hunt

increased mortality in forests adjacent to salt marshes. These habitat changes may dramatically reduce the amount and quality of forest for resident wildlife and salt marsh for migratory birds. As a result, wildlife may be forced into reduced amounts of available habitat.	program. Reviewing the hunt program annually and revising it annually (if necessary) will allow the Service to mitigate, if possible, the cumulative impacts of climate change on hunted wildlife. The Service's hunt program can be adjusted to ensure that it does not contribute further to the cumulative impacts of climate change on resident wildlife.

Summary of Impacts

No Action Alternative
There would be no additional cost to the refuge under this alternative. There would be no change to current public use and wildlife management programs on the refuge under this alternative. Habitat conditions could continue to be negatively impacted by the white-tailed deer population. The refuge would not provide new hunting and access opportunities. This alternative has the least direct impacts on physical and biological resources; however, long-term impacts on habitat quality would be adverse if the deer population continues to increase. In addition, it would not fulfill the Service's mandate under the NWRSAA and Secretarial Order 3356.

Proposed Action Alternative
This alternative is the Service's proposed action because it offers the best opportunity for public hunting that would result in minimal impact on physical and biological resources, while meeting the Service's mandates under the NWRSAA and Secretarial Order 3356.

The opening of archery deer hunting is predicted to have no detrimental effects to local and regional wildlife populations. The percentage of deer likely to be taken on the refuge, though possibly additive to existing hunt harvests, would only be a tiny fraction of the estimated regional populations. To assess the impacts of this program, populations will continue to be monitored in collaboration with State biologists. This monitoring will allow the refuge to adaptively manage through the hunting program, altering refuge permit numbers and season structure as needed. This alternative is preferred because it will provide high quality public hunting opportunities, with minimal impacts on physical and biological resources, and meet Service mandates under the NWRSAA. The Service believes that proposed hunting program on Seatuck NWR is not expected to have any significant impact to wildlife, other uses, or refuge administration.

List of Sources, Agencies and Persons Consulted

State Coordination

National wildlife refuges, including Seatuck NWR, conduct hunting programs within the framework of State, Federal, and refuge regulations. The Service's North Atlantic-Appalachian Regional Office shared information with the State on the proposed changes for Seatuck NWR. This EA, associated with the draft Hunt Plan, has not yet been reviewed by NYSDEC.

Refuge staff invited NYSDEC to our annual deer hunt planning meeting on June 17, 2019. The Refuge Manager and wildlife biologist also met with four NYSDEC biologists on August 27, 2019, to discuss current and potential deer management including the development of this Hunt Plan. During the August meeting and site visits at Seatuck and Wertheim NWRs, we discussed ways to align refuge hunting regulations and deer population management goals, where possible, with State management goals. NYSDEC also offered to check in deer harvested from the refuge at their Ridge Hunter Check Station.

Public Outreach

Public notifications of the EA, Hunt Plan, and Compatibility Determination will be made available to the public through local venues, the refuge website, and social media notices, as well as notification in the Federal Register (as part of other expansions and openings on national wildlife refuges). There will be a 30-day public comment period.

List of Preparers

- Michelle Potter – Project Leader
- Monica Williams – Wildlife Biologist
- Ann Marie Chapman – Visitor Services Manager
- Cindy Beemiller – Wildlife Refuge Specialist
- Caleb Robitaille – Regional Office Visitor Services Assistant

Determination

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

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

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

Preparer Signature: _____ Date: _____

Name/Title/Organization: _____

_____

Reviewer Signature: _____ Date: _____

Name/Title: _____

References

Barbour, M.G. and W.D. Billings. 1988. North American Terrestrial Vegetation. Cambridge University Press.

Cypher, B.L. and E.A. Cypher. 1988. Ecology and Management of White-tailed Deer in Northeastern Coastal Habitats: A Synthesis of the Literature Pertinent to National Wildlife Refuges from Maine to Virginia. USFWS Biological Report 88(15).

Hushaw, J., S. Balch, and E. Walberg. 2016. Climate Change and Wildlife: Part II, Species Highlights. Manomet Climate Smart Land Network Bulletin. Online at: https://www.manomet.org/wp-content/uploads/old-files/Wildlife_Bulletin_PartII%5b1%5d.pdf

New York State Department of Environmental Conservation. 2018. White-tailed Deer Harvest Summary, 2018. 49pp.

Olsvig, L.S., J.F. Cryan, and R.H. Whittaker. 1979. Vegetational gradients of the pine plains and barrens of Long Island, New York. IN Pine Barrens ecosystem and landscape. Rutgers University Press, NJ.

Porter, W.F.1991. White-tailed deer in eastern ecosystems: implications for management and research in National Parks. Natural Resources Report NPS/NRSSUNY/NRR-91/05.

U.S. Fish and Wildlife Service. Comprehensive Conservation Plan. 2006. Long Island National Wildlife Refuge Complex.

Woolf, A. and J.D. Harder. 1979. Population dynamics of a captive white-tailed deer herd with emphasis on reproduction and mortality. Wildlife Monographs 67:53 pp.

OTHER APPLICABLE STATUTES, EXECUTIVE ORDERS & 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)

- Executive Order 13007 – Indian Sacred Sites, 61 Fed. Reg. 26771 (1996)

Fish and Wildlife

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

Natural Resources

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

Water Resources

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

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person: Monica Williams
Telephone Number: 631-286-0485, ext. 2154
Date: December 18, 2019

I. Region: North Atlantic-Appalachian Interior Region 1

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

III. Pertinent Species and Habitat

A. Listed species potentially present within the action area:

1) Roseate tern (*Sterna dougallii*)

2) Sandplain gerardia (*Agalinis acuta*)

3) Piping plover (*Charadrius melodus*)

4) Red knot (*Calidris canutus*)

5) Northern long-eared bat (*Myotis septentrionalis*)

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

None

C. Candidate species within the action area:

None

IV. Geographical area or station name and action:

Seatuck NWR and Wertheim NWR recreational hunting plans.

V. Location:

A. **Ecoregion Number and Name:** The North Atlantic Coastal Ecoregion

B. **County and State:** Seatuck NWR is located in Islip NY, Suffolk County. Wertheim NWR is located in Shirley NY, Suffolk County.

C. **Section township and range (or latitude and longitude):** Seatuck NWR is located

at 40.717573, -73.207033. Wertheim NWR is located at 40.717573, -73.207033.

D. **The Refuge headquarters is located at:** Long Island National Wildlife Refuge Complex headquarters is located at Wertheim NWR.

E. **Distance (miles) and direction to nearest town:** Seatuck NWR is located within the Town of Islip. Wertheim NWR is located within the Town of Brookhaven.

F. **Species/habitat occurrence:**

1) Roseate tern (*Sterna dougallii*)

2) Sandplain gerardia (*Agalinis acuta*)

3) Piping plover (*Charadrius melodus*)

4) Red knot (*Calidris canutus*)

5) Northern long-eared bat (*Myotis septentrionalis*)

VI. Description of Proposed Action:

The proposed action is to implement hunting plans for Seatuck NWR and Wertheim NWR in Suffolk County, New York during the 2020/2021 New York State hunting seasons. Seatuck NWR proposes to open for the first time to public deer hunting. The refuge is 209 acres, which includes approximately 100 acres of upland habitat (warm-season grasslands, old fields, shrublands, and forest) available for deer hunting. The refuge will be open for hunting during the NYSDEC archery season, October through January. To avoid potential impacts to northern long-eared bats on the refuge, we would start deer hunting on November 1 or after. Hunting will be allowed on the refuge intermittently for up to 90 days.

Wertheim NWR proposes to expand the existing deer hunt program. The refuge is 2,688 acres, which includes 1,390 acres of white-tailed deer habitat (forest, shrublands, herbaceous old fields/grasslands, marsh, and open water). We propose to expand the current archery hunt from 7 days up to 90 days during the NYSDEC archery season, October through January. Hunting on the refuge will occur intermittently during 1- week sessions throughout the season.

Wertheim also proposes to open for turkey hunting. The fall turkey season is the last 2 weeks of November and spring turkey hunting is one 2-day weekend hunt in April, with a focus on youth hunters. Approximately 773 acres of upland habitat (forest, shrublands, and herbaceous old fields/grasslands) is available for turkey hunting on the refuge. These new hunting activities will go into effect during the 2020/2021 season.

VII. Determination of effects:

A. Explanation of effects on species in item III:

The hunting areas consist of habitats that is also used by northern long-eared bat. Bats may still be present on the refuges when the deer hunt archery season starts in October, but the remaining majority of the hunting season occurs after bats have left the refuge for their winter hibernaculum. Bats may also start to arrive on Long Island prior to the spring turkey season in April. Hunter tree stands may disturb bat roost sites.

Seatuck NWR: Roseate tern, red knot, and piping plover may use refuge beach and salt marsh habitats, but are uncommon. They are not consistently present and not observed in large numbers. Seatuck NWR was a potential transplant site for sandplain gerardia, because of its soil type and associated grassland plants. However, the transplant in 2001 was not successful in establishing a sandplain gerardia population at Seatuck NWR.

Wertheim NWR: Roseate tern and red knot may be present, but are uncommon and rarely observed on the refuge.

Northern long-eared bat (*Myotis septentrionalis*; MYSE) have been documented at both refuges using acoustic detectors. Acoustic monitoring was conducted from 2012 to 2017 at Seatuck NWR (Figure 1) and Wertheim NWR (Figure 2). Auto-analysis of acoustic data conducted indicate MYSE presence at Seatuck NWR and Wertheim NWR. MYSE presence was also confirmed at Wertheim NWR through mist netting in 2012, 2015, and 2016. In 2016, radio telemetry was used to locate a maternity roost at Wertheim.

B. Explanation of actions to be implemented to reduce adverse effects:

The general timeline for bat hibernation is November 1 to March 31. Therefore, the refuge can permit deer hunting November 1 to January 31 to reduce impacts to MYSE. Also, due to the short duration of the 2-day spring turkey hunt at Wertheim NWR in April, disturbance to MYSE is likely to occur on a rare basis.

As previously mentioned, roseate tern, piping plover, and red knot are not consistently present on the refuges and are not observed in large numbers. In addition, we do not expect any impacts to these species when hunting occurs since they generally migrate to the southeast coast, Gulf Coast, Central and South America. Hunting also primarily occurs in upland habitats where these species are not present.

Sandplain gerardia has not been found at Seatuck NWR since the unsuccessful transplant in 2001.

VI. Effect determination and response requested:

A. Listed species/ critical habitats:

Determination	Response requested
No Effect	
Piping Plover, Red Knot, Roseate Tern, Sandplain Gerardia	**Concurrence X**
Is Not Likely to Adversely Effect:	
Northern long-eared bat	**Concurrence X**
Is Likely to Adversely Effect:	
Species:_____	Concurrence_____

B. Proposed species/ critical habitats:

Determination	Response requested
No Effect	
Species:_____	Concurrence_____
Is Not Likely to Adversely Effect:	
Species: NLEB	Concurrence ✓
Is Likely to Adversely [jeopardize/modify habitat] Effect:	
Species:_____	Concurrence_____

VII. Reviewing ESO Evaluation:

A. Concurrence ✓ Nonconcurrence_____

B. Formal Consultation Required_____

C. Conference Required_____

D. Remarks [Attach additional pages as needed]:

[signature] / USFO 1/17/2020

Signature [Title/Office of ESO Field Supervisor] Date

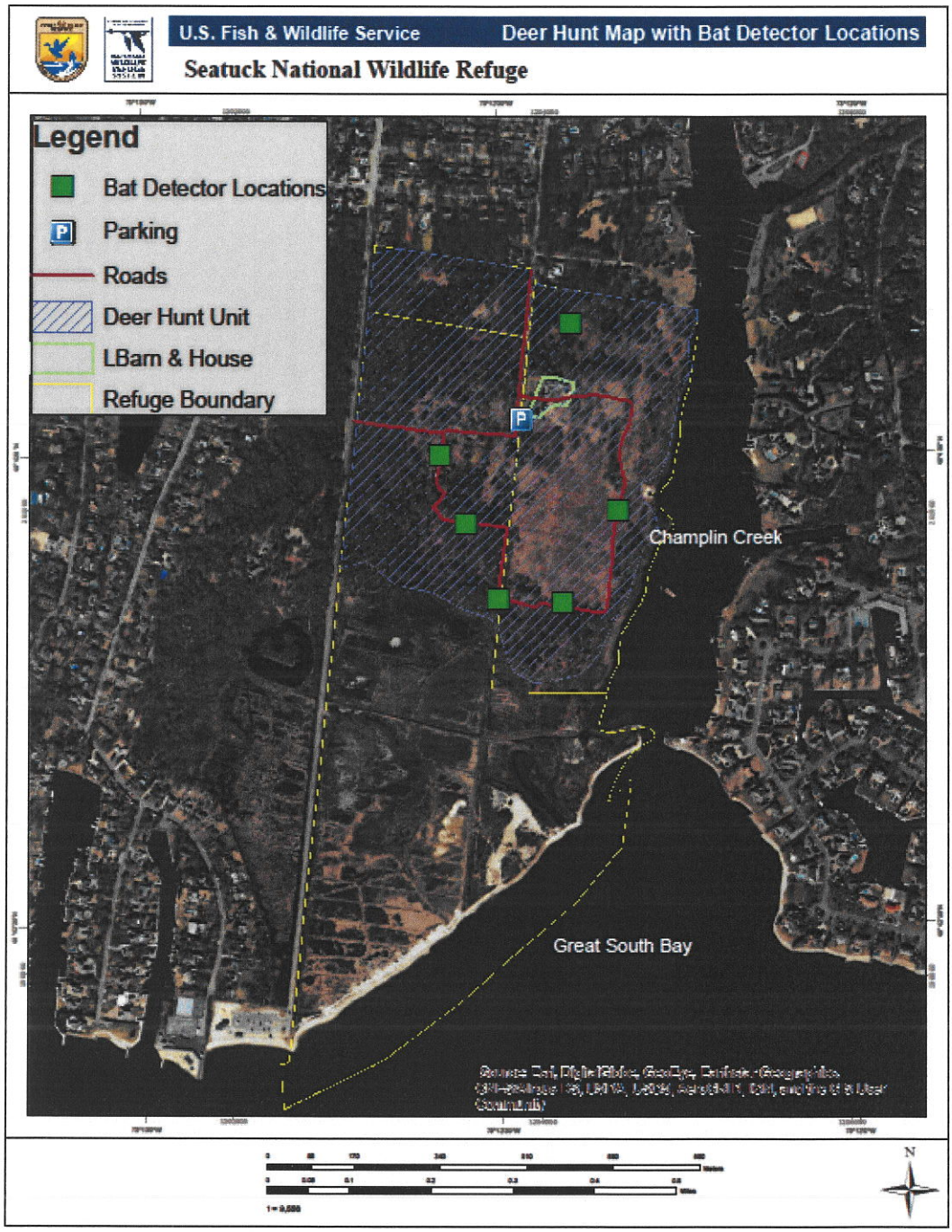

Figure 1C. Bat Study Locations at Seatuck NWR

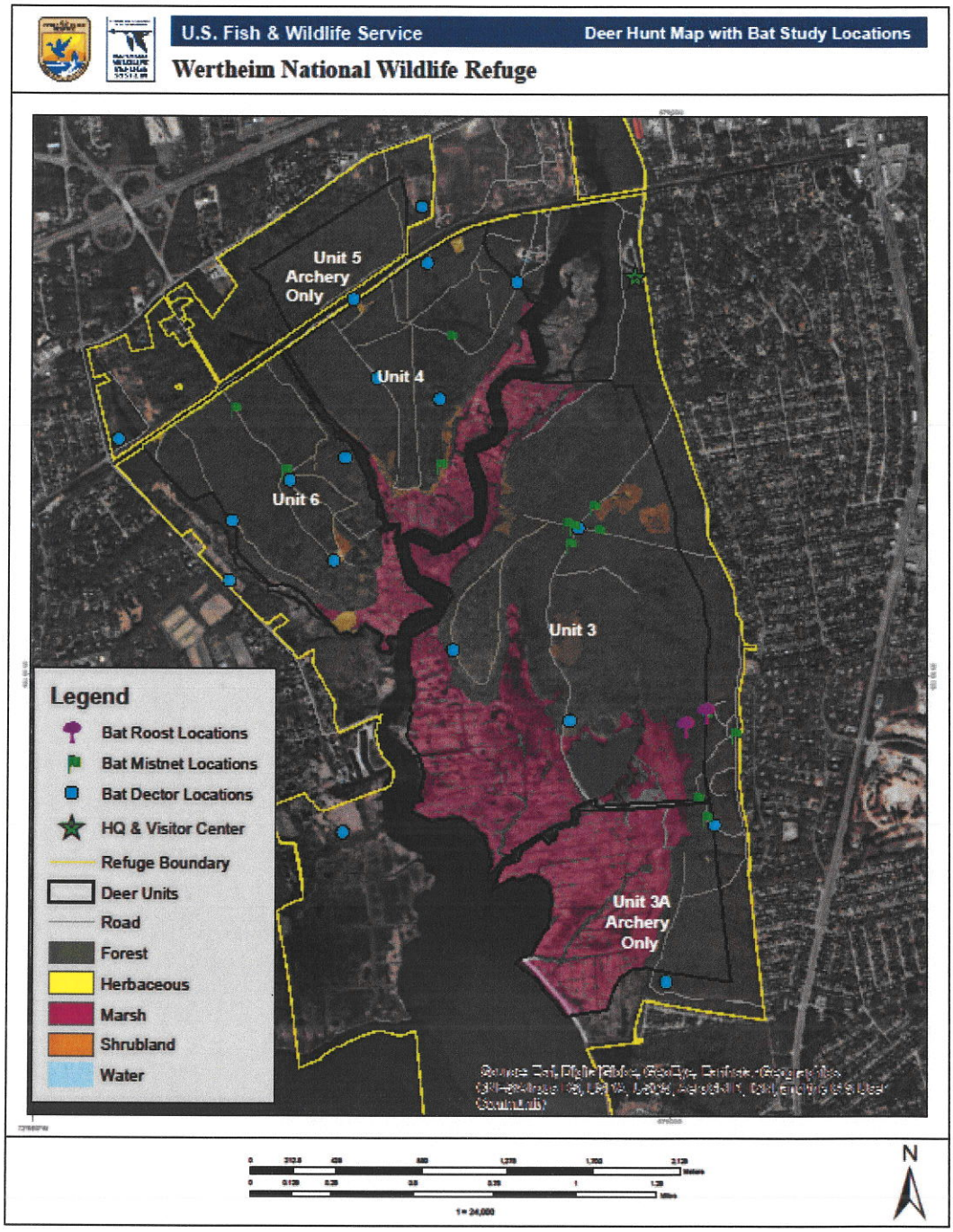

Figure 2C. Bat Study Locations at Wertheim NWR

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT for WHITE-TAILED DEER HUNT SEATUCK NATIONAL WILDLIFE REFUGE SUFFOLK COUNTY, NEW YORK

The U.S. Fish and Wildlife Service (Service) proposes to open Seatuck National Wildlife Refuge (NWR, refuge) for archery hunting of white-tailed deer, in accordance with the refuge's White-Tailed Deer Hunt Plan. This plan seeks to allow hunting opportunities for white-tailed deer (*Odocoileus virginianus*) in accordance with the refuge's Comprehensive Conservation Plan (CCP), which was finalized in 2006.

Selected Action

Proposed Action Alternative

Of the 209 acres that make up Seatuck NWR, approximately 100 acres of upland habitat will be open for hunting white-tailed deer under this alternative. The refuge will be open intermittently in 1-week sessions for deer hunting during the New York State (NYS, State) archery season, usually between October 1 to January 31, with a start date likely on November 1 to avoid potential impacts to northern long-eared bats. Accommodations for disabled hunters will also be made available.

The refuge, with New York State Department of Environmental Conservation (NYSDEC) consultation, will determine bag limits. Antlerless deer will be targeted, with the goal of addressing the overabundance of deer. Hunters will be selected by lottery and these hunts will take place within the applicable State hunting season. A limited number of permits (up to four per day) will be issued so that the refuge can facilitate hunting activities in a safe, enjoyable manner for hunters and neighbors, while also managing impacts to the natural resources.

There are no unresolved conflicts about the proposed action with respect to the alternative uses of available resources, because the minor changes proposed by this action are not expected to have negative impacts to the ecological, aesthetic, historic, cultural, economic, social, or health aspects of the refuge and surrounding communities. Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310(b)).

This alternative was selected over other alternatives because it increases high quality public hunting opportunities, with minimal impacts on physical and biological resources, and meets Service mandates under the National Wildlife Refuge System Administration Act (NWRSAA) of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997. The allowance of deer hunting is predicted to have no detrimental effects to local and regional wildlife populations. To access the impacts of this program, populations will continue to be monitored in collaboration with State biologists. This monitoring will allow the refuge to adaptively manage through the hunting program, altering the refuge's permit numbers and season structure as needed. The Service believes that the hunting program on Seatuck NWR will

not have any significant impact to wildlife, other uses, or refuge administration. This alternative will best meet the purpose and need, refuge objectives, and Service mandates.

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

Other Alternatives Considered and Analyzed

No Action Alternative

There would be no change to current public use and wildlife management programs on the refuge under this alternative. The refuge will remain closed to deer hunting, and implementation of this alternative will not facilitate a wildlife-dependent priority use that has been found to be compatible with the purposes of the refuge and the Refuge System mission. Habitat conditions could continue to be negatively impacted by the white-tailed deer population. This alternative has the least direct impacts on physical and biological resources; however, long-term impacts on habitat quality would be adverse if the deer population continues to increase. This alternative allows deer to dominate the upland habitats, influencing wildlife species diversity, and habitat richness for all species. This alternative does not address human health, safety, and economic concerns relating to deer interactions in the surrounding community, including damage to landscaping and lawns, deer-vehicle collisions, or the spread of Lyme disease. In addition, it would not fulfill the Service's mandate under the NWRSAA and Secretarial Order 3356.

Summary of Effects of the Selected Action

An Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act of 1969, as amended (NEPA) to provide a decision-making framework that: (1) explored a reasonable range of alternatives to meet project objectives; (2) evaluated potential issues and impacts to the refuge, resources and values; and (3) identified mitigation measures to lessen the degree or extent of these impacts. The EA evaluated the effects associated with the opening of deer hunting at Seatuck 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 impacts:

Affected Environment	Selected Action
White-tailed Deer	Minor, short-term adverse impacts to species. Long-term, the deer population will exhibit a more balanced sex ratio, will be

	more resistant to disease, and individual animals will maintain a higher level of physical condition.
Other Wildlife Species	Minor, short-term adverse impacts to non-other species. Disturbance to non-migratory wildlife would increase on the refuge due to the presence of sportsmen. Long-term, increased vegetative density and diversity resulting from decreased white-tailed deer populations will provide the structure necessary to benefit ground-nesting birds, as well as reptiles, amphibians, and small mammals.
Threatened and Endangered Species	Not likely to adversely affect threatened and endangered species. Disturbance to species of special management concern may come from the presence of hunters on the refuge. However, this will be mitigated by the timeframe for hunting between November and January, when wildlife occurrence and activity is lowest.
Vegetation	Minor, short-term impacts to vegetation. Minor long-term benefits to vegetation, as reduction of deer densities would allow forest vegetation to recover from the effects of overbrowsing.
Visitor Use and Experience	The refuge is closed to other uses currently. Thus, for the long-term, a reduction in the refuge deer density is anticipated to have localized effects within the adjacent community. The presence of fewer deer is expected to limit their overall occurrence on residential properties, resulting in less damage to landscaping, fewer deer to transport Lyme disease-bearing ticks and fewer deer-vehicle collisions.
Cultural Resources	No anticipated impacts, as known cultural resources on the refuge will be protected within safety zones during the hunting season.
Refuge Management & Operations	Minor, short-term and minor, long-term impacts to refuge management and operations. The refuge will be open to hunting, but there will be no new infrastructure for this use. However, parking areas, roads, fences, and gates may require additional maintenance for access and safety. The limited number of hunters using the refuge is expected to have minimal impact.
Socioeconomics	Minor, beneficial impacts, but limited by small number of daily hunters.
Environmental Justice	No impacts.

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. Measures to mitigate and/or minimize adverse impacts have been incorporated into the proposal:

1. The Refuge System uses an adaptive management approach to all wildlife management on refuges. This approach involves monitoring and re-evaluating the hunting opportunities on the refuge on a regular basis to ensure that the hunting programs continue to contribute to the biodiversity and ecosystem health of the refuge and theseopportunities do not contribute to any cumulative impacts to habitat or wildlife.

2. The refuge-specific regulations detailed in 50 CFR are measures under action that will reduce or avoid impacts. Hunting regulations will be enforced by refuge and State law enforcement officers. Providing hunting information through various forums will ensure the public is aware of applicable laws and policies.

3. The action is not in an ecologically sensitive area.

4. The action is not likely to adversely affect any threatened or endangered species; and will have no effect to federally designated critical habitat.

Additionally, stipulations are necessary to ensure compatibility:

- This use must be conducted in accordance with State and Federal regulations, and special refuge regulations published in the Refuge Hunting Regulations and Public Use Regulations brochures.

- This use is subject to modification if monitoring by refuge personnel or other authorized personnel finds unanticipated negative impacts to natural communities, wildlife species, or other refuge user groups.

- Hunters may enter the refuge no earlier than 1 hour before the beginning of legal shooting hours and must exit the refuge no later than 1 hour after the end of legal shooting hours.

- Motor vehicles are restricted to designated roads and parking areas. Do not block gates and roadways with vehicles. The use of All-terrain vehicles, dirt bikes, or other non-licensed vehicles is prohibited.

- All deer harvested on the refuge must be reported according to NYSDEC harvest requirements within 7 days by phone, online, mobile app or at the Ridge Hunter Check Station

- Each hunter may only use one portable deer tree stand or ground blind. Tree stands must be removed at the end of each hunt session.

The proposal is compatible with the purpose of the refuge and the mission of the Refuge System (see the Compatibility Determination, Appendix A, in the Hunting Plan). Furthermore, the action is consistent with applicable laws and policies regarding the establishment of hunting on national wildlife refuges.

Public Review

The proposal has been thoroughly coordinated with all interested and/or affected parties. Parties contacted included NYSDEC. We notified the public through local venues, the refuge website, and refuge social media. A 30-day comment period on the draft documents began on March 23,

2020. Due to the unprecedented pandemic response, the comment period was extended an additional 15 days, to May 7, for a total period of 45 days.

A total of five people submitted comments during the public review period for the two refuges of the Long Island NWR Complex (Seatuck NWR and Wertheim NWR) that published hunt plans. All of the commenters were supportive of the new or expanded hunting opportunities. Most of the comments applied to the hunts at both refuges.

Comment: "The opportunity to expand more hunting days at Wertheim would be an excellent way to balance the herd size with the surrounding habitat. Also a great safe outlet for the Long Island Hunter..."

Comment: "...having review the 2020 Deer Hunt Plan I am in full support of increased days of hunting and additional property locations for hunting. As a Suffolk county and Brookhaven town resident who believes in sound deer management... Thank you for a good plan."

Comment: "I had the chance to participate in the Wertheim NWR hunt in 2019. This was my first out-of-state hunt in my life. The staff were incredibly supportive of the hunt and the DEC representatives I met were friendly and helpful."

> RESPONSE: We appreciate the support, and remain interested in providing a variety of hunting opportunities for the public, which is supported by the Refuge System priority public uses policy. Sections 5(c) and (d) of the Refuge System 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 NYSDEC to manage the deer herd based on data they collect throughout the year, and we consult with them on deer hunting regulations. Secretarial Order 3356 also directs "greater collaboration with state, tribes, and territorial partners" which encourages better alignment of refuge-specific regulations with State regulations.

Comment: Historically, hunting-related purchases have been funding our wildlife conservation model. From various studies, a top reason for people quitting hunting or not starting hunting is access. Either access to game or access to lands. We have these wonderful public lands in the United States and if the state and federal agencies agree that there is a huntable game population within a safely huntable property that land should be open to hunting. The reality on the ground on Long Island is that there are a lot of people and the population is not overly hunting friendly. I would love to see funds from the Pitman-Robertson Modernization Act to be used to educated local people on the importance of hunting in the North American wildlife conservation model.

> RESPONSE: In our nation's early years, there were few laws protecting fish and wildlife

and our wildlife resources took a heavy toll. Market hunters took fish and wildlife at will while habitat disappeared under plow and roads, resulting in devastating reductions in wildlife populations. Hunters, along with anglers, also were the driving force behind the North American Model of Wildlife Conservation, a set of wildlife management principles established more than a century ago that declare that wildlife belongs to everyone, not just the rich and privileged. Through the Federal Aid in Wildlife Restoration Act, more commonly known as the Pittman-Robertson Act, hunters fund a range of conservation programs. The act sends revenue from an excise tax on firearms, ammunition and other related equipment to state wildlife agencies to be used for wildlife conservation projects, hunter education and outdoor recreation access. Through Pittman-Robertson, sportsmen and women have contributed more than $14 billion to conservation since 1937. These annual payments to state fish and wildlife agencies have resulted in the recovery of deer, turkeys and many non-game species - with benefits to hunters and non-hunters alike. We will continue to reach out to hunters, anglers, and the public with information that will promote stewardship of our natural resources and increase public appreciation and support for the refuge.

No substantive changes were made to the plan based on the comments.

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 allow white-tailed deer hunting on Seatuck 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 B) and is available upon request to Long Island NWR Complex.

The Service has decided to select the proposed action as described in the EA, and implement the White-tailed Deer Hunt Plan for Seatuck NWR upon publication of the final 2020-2021 Station-Specific Hunting and Sport Fishing Regulations. This action is compatible with the purpose of the refuge and the mission of the Refuge System, and consistent with applicable laws and policies. See attached Compatibility Determination (Appendix A).

SHARON MARINO Digitally signed by SHARON MARINO
Date: 2020.07.01 12:54:56 -04'00'

Acting Regional Chief
National Wildlife Refuge System

Date