



U.S. Fish and Wildlife Service

Edwin B. Forsythe
National Wildlife Refuge
Recreational Fishing Plan
July 2020

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Estimated Lead Agency Total Costs
Associated with Developing and
Producing the EA (per ERM 10-12):
\$8,784

**Edwin B. Forsythe National Wildlife Refuge
Recreational Fishing Plan**

July 2020

U.S. Fish and Wildlife Service

Edwin B. Forsythe National Wildlife Refuge
800 Great Creek Road
Oceanville, NJ 08231

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EDWIN B. FORSYTHE NATIONAL WILDLIFE REFUGE RECREATIONAL FISHING PLAN

I. INTRODUCTION

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System), the purposes of an individual refuge, U.S. Fish and Wildlife Service (Service) policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife 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.

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

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

The act requires that refuges restore and maintain the integrity, diversity, and environmental health necessary to achieve this mission and the purposes established for each refuge.

The NWRSA mandates the Secretary of the Interior in administering the 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.

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 “...enhance recreational fishing, specifically regarding efforts to enhance and expand recreational fishing access”.

The Code of Federal Regulations (CFR), Title 50, Subchapter C, further details additional procedures related to fishing on a national wildlife refuge. The Refuge Recreation Act requires that funds be available for the development, operation, and maintenance of fishing programs. It is anticipated that inclusion of a fishing program will have a negligible impact on refuge financial resources.

Edwin B. Forsythe National Wildlife Refuge (NWR, refuge) is located in Atlantic, Burlington and Ocean Counties, New Jersey. In order to meet specific refuge and other broader Service directives, the following purposes were established for the Edwin B. Forsythe NWR:

- For lands acquired under the Migratory Bird Conservation Act (16 U.S.C. §715-715r), as amended, “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds....” (16 U.S.C. §715d).
- “...the development, advancement, management, conservation, and protection of fish and wildlife resources....” (16 U.S.C. §742f(a)(4), Fish and Wildlife Act of 1956).
- “...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations (regarding migratory birds)...” (16 U.S.C. §3901(b), 100 Stat. 3583 Emergency Wetlands Resources Act of 1986).
- “...to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.” (78 Stat. 890:16 U.S.C. 1121 (note), 1131-1136, Wilderness Act of 1964).

The refuge was created on May 22, 1984, by combining the former Brigantine and Barnegat NWRs (98 Stat. 207). The refuge was named in memory of the late conservationist Congressman from New Jersey, Edwin B. Forsythe, through a Congressional Joint Resolution (H.J. Res. 537).

Brigantine NWR was established on January 24, 1939, by the Migratory Bird Conservation Commission, under the authority of the Migratory Bird Conservation Act (16 U.S.C. 715d). Congress designated 6,603 acres of the Brigantine NWR as the Brigantine Wilderness (Wilderness Area) on January 3, 1975, (P.L. 93-632) to be managed under the Wilderness Act of 1964 (78 Stat. 890; 16 U.S.C. 1121 (note), 1131-1136).

Barnegat NWR was established on June 21, 1967, under the authority of the Migratory Bird Conservation Act (16 U.S.C. 715d).

The Reedy Creek Unit was established in 1991, under authority of the Emergency Wetlands Resources Act of 1968 (16 U.S.C. 3901 (b) 100 Stat.3583).

The refuge was created primarily to provide wintering habitat for American black ducks (*Anas rubripes*), Atlantic brant (*Branta bernicla*) and rails. It spans almost 50 miles of the New Jersey coastal estuaries, from the Metedeconk River in Ocean County to Reeds Bay in Atlantic County (Map 1). Over 48,000 acres of coastal beach/dune, salt marsh, freshwater wetlands, wetland forest, upland forest, pitch pine barrens, early successional habitats, and managed wetland impoundments comprise the refuge. The refuge is listed as a Wetlands of International Significance under the Ramsar Convention on Wetlands. The refuge's approved acquisition boundary encompasses 60,082 acres.

There is a long tradition of salt- and freshwater fishing, crabbing, and shellfishing in southern New Jersey. Fishing has occurred on the refuge nearly since its establishment. This plan amends existing fishing areas, access to fishing areas, and some regulations.

The refuge receives approximately 250,000 visitors each year. Although angler numbers are not tracked, we estimate about 27,000 fishing visits occur on the refuge each year. The State of New Jersey requires a license for freshwater fishing. Saltwater anglers are required to possess a valid New Jersey Saltwater Registration. The refuge does not require permits for fishing. Administration costs at the refuge are minimal as there are no permits to process. All fishing-related costs are currently paid for with station funds (generally, visitor services and law enforcement funds) and are minimal.

II. STATEMENT OF OBJECTIVES

The objectives of the Edwin B. Forsythe NWR recreational fishing program are to:

1. Provide the public with a quality recreational experience on refuge lands and increase opportunities and access for anglers;
2. Design a fishing program that is administratively efficient and manageable with existing staffing levels;
3. Implement a fishing program that is safe for all refuge users;
4. Provide fishing opportunities for youth and those that need assistance; and

5. Design a fishing program that is in alignment with refuge habitat management objectives.

The NWRSAA of 1966, as amended by the Refuge System Improvement Act of 1997, and the Refuge Recreation Act of 1962 authorize public fishing on refuges where the fishing program is compatible with the purposes for which the refuge was established. As part of this document, a compatibility determination was prepared and, assuming management decisions are based on sound biological principles, and user time and space restrictions are used to minimize wildlife disturbance, fishing is deemed compatible and a worthwhile recreational opportunity to provide for the public (Appendix A).

III. DESCRIPTION OF FISHING PROGRAM

A. Areas Opened to Fishing

Freshwater Fish

The only freshwater fishing area currently open is Lily Lake in Galloway Township, Atlantic County. The area at the Middle Branch Trailhead, Lacey Township, Ocean County (Maps 2 and 3) will be opened as a part of this plan. There are opportunities for bank fishing at both sites, and non-motorized boats (electric motors only) are permitted at both sites.

Saltwater Fish

Hundreds of miles of tidal streams throughout the refuge are known for an abundance of fishing opportunities. These are nearly all accessible by boat and combustion engines are permitted as they are considered waters of the State of New Jersey. Fishing from boats on the refuge-owned portion of the Loveladies Kayak area is available (no combustion engines permitted) (Map 4). We permit boat launching at Scotts Landing (Map 5). Land-based fishing is available from the refuge at Holgate Beach and Graveling Point (Maps 6 and 7). Sites where fishing is permitted, largely for bait fishing and crabbing are Cedar Run Dock Road and Parkertown Dock Road (Maps 8 and 9). Based on coordination with anglers, the following bank fishing sites are added: Mantoloking Fishing Trail (Map 10), deCamp Wildlife Trail (Map 11), Good Luck Point Area (Map 12) and Cedar Bonnet Island Trail (Map 13).

Blue Crab

The refuge provides access for crabbing at sites along Cedar Run Dock Road in Eagleswood Township; Parkertown Dock Road in Little Egg Harbor Township (both in Ocean County); and at Scotts Landing in Galloway Township, Atlantic County. Bait fishing also occurs at these locations.

Shellfish (clams, oysters, blue mussels, bay scallops)

Shellfish harvest is regulated by the State of New Jersey, who also determines equipment. Although no shellfish habitat occurs on the refuge, State regulated shellfishing areas may be accessed through refuge lands during daylight hours, Monday through Saturday with the exception being State-owned shellfishing grounds associated with Holgate peninsula, which

may be accessed via the Clamming Trail 24 hours Monday through Saturday, currently between September 1 to April 1 only.

B. Species to be Taken, Fishing Seasons, Fishing Access

Freshwater Fish

Species expected in freshwater environs such as Lily Lake and Middle Branch include largemouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*), bluegill (*Lepomis macrochirus*), pumpkinseed (*Lepomis gibbosus*), black crappie (*Pomoxis nigromaculatus*), yellow bullhead (*Ameiurus natalis*), yellow perch (*Perca flavescens*), and golden shiner (*Notemigonus crysoleucas*). New Jersey Department of Environmental Protection (NJDEP) Division of Fish and Wildlife (DFW) conducts two American eel (*Anguilla rostrata*) surveys annually to assess populations. One in Nacote Creek surveying glass eel abundance and one in Great Bay surveying adult eel abundance.

Lily Lake access from the lake's dam is through a trail leading from the Lily Lake road parking area. Bank fishing is permitted along the edge of the lake. Non-motorized (non-combustion only) boats are permitted in the lake and can be portaged via the trail to the lake edge at a gravel launch. Access at Middle Branch is from the Barnegat Branch Trail, which is a bike path maintained by Ocean County. Parking is available about 200 feet from the lake access point, where bank fishing and non-motorized boat launching can occur. Boats must be carried from the parking area at this time, but Ocean County plans to improve the site in the future.

Fishing in both of these freshwater locations occurs year-round. Due to safety concerns, no ice fishing is permitted. State regulations for fishing equipment and limits are followed. No stocking of non-native fish species will occur. Fishing is only permitted during regular refuge hours (legal sunrise to legal sunset).

Saltwater Fish

Recreationally and ecologically important species which occupy the regional marine waters include striped bass (*Marone saxatilis*), Atlantic menhaden (*Brevoortia tyrannus*), summer flounder (*Paralichthys dentatus*), weakfish (*Cynoscion regalis*), bluefish (*Pomatomus saltatrix*), black sea bass (*Centropristis striata*), American eel, and white perch (*Morone americana*). Species collected as baitfish include mummichog (*Fundulus heteroclitus*), Atlantic silverside (*Menidia menidia*), spot (*Leiostomus xanthurus*), and menhaden among others. In accordance with the Atlantic States Marine Fisheries Commission's Fishery Management Plans (FMPs) (<http://www.asmfc.org/fisheries-management/program-overview>) for these species, the State of New Jersey is required to demonstrate that harvest of a given species under the current management regime is sustainable (*i.e.*, will not diminish the potential future stock reproduction and recruitment). The State accomplishes this by conducting multiple fishery dependent and independent surveys throughout New Jersey marine waters.

Nearly all saltwater fishing opportunities are accessed via boat. Land-based fishing is available from the refuge at Holgate Beach and Graveling Point. Graveling Point is accessed

via a Little Egg Harbor Township-owned beach. Fishing at Holgate and Graveling Point is permitted 24 hours each day. Holgate is currently closed to all uses April 1 to August 31, with vehicular access closing March 15. New sites added to this plan include Mantoloking Fishing Trail, deCamp Wildlife Trail, Good Luck Point Area and Cedar Bonnet Island Trail. Access for the Mantoloking, Good Luck Point and Cedar Bonnet Island sites will be provided in the future by refuge staff.

Blue Crab

Blue crabs (*Callinectes sapidus*) support an important recreational fishery in New Jersey and throughout the mid-Atlantic region. Blue crabs range from Maine to Florida and around the entire coast of the Gulf of Mexico, although the fishery has been historically centered on the Chesapeake Bay. Because blue crabs are found in many states, they are managed by each state individually. The sites available for crabbing are open to the public during regular refuge hours (legal sunrise to legal sunset) and are easy to access from vehicles. State regulations for crabbing equipment and limits are followed at all refuge fishing locations.

Shellfish (clams, oysters, blue mussels, bay scallops)

Harvestable shellfish in New Jersey include hard clams (*Mercenaria mercenaria*), oysters (*Crassostrea virginica*), bay scallops (*Aequipecten irradians*) and blue mussels (*Mytilus edulis*) in the estuarine waters, while the marine waters off the New Jersey coast support surf clams (*Spisula solidissima*), ocean quahogs (*Artica islandica*) and sea scallop (*Placopecten magellanicus*) fisheries. Access to shellfishing grounds in State-owned waters along the western edge of the Holgate peninsula is provided to the public via the 0.4-mile-long Clamming Trail 24 hours each day, currently between September 1 and April 1. Landing boats are also permitted to access those sites at those times.

C. Fishing Permit Requirements

A valid New Jersey fishing license will be required to fish on the refuge. No refuge permit is required. All anglers must abide by State regulations and permitting requirements to fish on the refuge, which includes the saltwater registry, and licenses for freshwater fishing, crabbing and clamming. A Long Beach Township Beach Buggy Permit is required to access Holgate Beach as Township land must be crossed to access the refuge.

D. Consultation and Coordination with the State

Edwin B. Forsythe NWR and NJDFW staff work together to ensure safe and enjoyable recreational fishing opportunities. Law enforcement officers from both agencies work together to patrol, safeguarding anglers and other visitors. Refuge staff worked in close consultation with NJDFW staff in preparation of this plan and their comments have been incorporated into this document.

E. Law Enforcement

Enforcement of refuge violations associated with management of a national wildlife refuge is the responsibility of the refuge manager and commissioned Federal law enforcement officers.

Other fish and wildlife officers, special agents, State conservation officers, and the local Sheriff's Department occasionally assist the Edwin B. Forsythe NWR full-time Federal Wildlife Officer (FWO).

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

- Refuge boundaries are posted to the greatest extent possible.
- Maps of fishing locations are provided to the public.
- Edwin B. Forsythe NWR FWO and partners randomly check anglers for compliance with Federal and State laws, as well as refuge-specific regulations pertinent to fishing.
- Information is made available at the refuge Visitor Information Center, website and social media accounts.

Procedures for obtaining law enforcement assistance are based on legal jurisdiction, pending where the incident occurred. The Edwin B. Forsythe NWR FWO meets regularly with local law enforcement agencies in the three counties that contain refuge units to develop good working relationships and coordinate appropriate strategies.

F. Funding and Staff Requirements

Annual fishing administration costs for Edwin B. Forsythe NWR associated with implementing this plan, including salary, law enforcement, maintenance of sites, and communication with the public is approximately \$21,301, as shown below.

Item	Cost
Federal Wildlife Officer –education and enforcement	\$5,797
Maintenance Workers – site upkeep, litter removal, sign installation	\$1,240
Refuge Managers – program oversight	\$5,014
Visitor Services Manager – sign development, outreach to public, education about nontoxic tackle	\$3,750
Biologist – to provide information about lead concerns	\$1,500
Signs, parking lot maintenance	\$3,000
Projects to support used fishing line collection and lead outreach	\$1,000
Total to implement	\$21,301

All funds are derived from the refuge's annual base budget. Currently, we estimate about 27,000 fishing-related visits to the refuge each year, and expect an increase of about 5,000

visits annually. It is anticipated that funding would be sufficient to continue the fishing program at Edwin B. Forsythe NWR in the future.

IV. CONDUCT OF THE FISHING PROGRAM

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

Information on all fishing opportunities will be found and downloaded from the Edwin B. Forsythe NWR website: https://www.fws.gov/refuge/edwin_b_forsythe/. No registration with the refuge and no refuge permits are required to fish on the refuge. All anglers must abide by State regulations and permitting requirements to fish on the refuge, which includes the saltwater registry, and licenses for freshwater fishing, crabbing and clamming.

B. Refuge-Specific Fishing Regulations

Generally, fishing regulations on Edwin B. Forsythe NWR will follow NJDFW regulations except as noted below. General regulations pertaining to all national wildlife refuges are found in 50 CFR subchapter C.

Regulations and measures specific to Edwin B. Forsythe NWR include:

- Ice fishing is prohibited;

- Only non-motorized boats (including those with electric motors) are permitted on Lily Lake and Middle Branch; and

- The use of lead fishing tackle is prohibited. The lead ban for fishing tackle on Forsythe Refuge will be implemented over a 5-year phase-in period, allowing anglers time to adapt to the new regulations without diminishing fishing opportunities. The refuge will conduct education programs and provide information to assist a valuable transition period that benefits fish, wildlife, and people.

C. Relevant State Regulations

Fishing will be conducted according to New Jersey State regulations for game fish, baitfish and fishbait except as noted in refuge-specific regulations.

D. Other Refuge Rules and Regulations for Fishing

Additional fishing information that is provided on refuge fact sheets includes:

- Access and parking information is provided;

- Fishing is not permitted from the Wildlife Drive or in waters surrounding that site; and

- Fishing is not permitted from Great Creek Road.

V. PUBLIC ENGAGEMENT

A. Outreach for Announcing and Publicizing the Fishing Program

To inform the public of the fishing program and any updates, a news release will be submitted to media outlets along the New Jersey coast. Notices will be posted at the refuge office and visitor information center, the refuge website, and the refuge Facebook page. The plan has been thoroughly coordinated with all interested and/or affected parties.

On March 19, 2020, we distributed a press release to news organizations and alerted visitors about the availability of the draft fishing plan with a posting on the refuge visitor information center doors. The plan was available on the refuge website, and a press release was shared on Facebook with a link to the plan. No public meetings were held due to bans on public gatherings due to COVID-19. Upon request, the public comment period was extended from May 1 until June 8, 2020.

B. Anticipated Public Reaction to the Fishing Program

Fishing has been permitted on the Edwin B. Forsythe NWR for many years and the lands and waters comprising the refuge were known fishing grounds historically. We are supported by many people who are eager to engage in this long-standing conservation tradition. We expect extensive support for this plan. Fishing is an important economic, recreational and sustainable use of New Jersey's natural resources.

A total of 11 individuals or entities offered comments to the refuge on the draft fishing plan. Additionally, a meeting was held with members of the Jersey Coast Anglers Association on May 21, 2020, to explore expansion of land-based fishing opportunities for the public. Appendix E summarizes the substantive comments received on the proposal, and the Service responses.

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

Angler orientation of the refuge will be achieved by providing maps of the refuge and fact sheets at the visitor information center, and on the refuge website. The maps have refuge trails, public use areas, closed areas, and local roads clearly defined. A refuge web-based interactive map is available at <https://fws.maps.arcgis.com/apps/webappviewer/index.html?id=0dee8cd1f76d49aaabb25c40fb4a0755>. Anglers may address questions to refuge staff by calling, writing, e-mailing, or visiting.

VI. COMPATIBILITY DETERMINATION

Fishing activities proposed in this plan are compatible with the purposes of the refuge. See attached Appendix A - Recreational Fishing Compatibility Determination.

APPENDIX A
COMPATIBILITY DETERMINATION FOR EDWIN B. FORSYTHE NWR FISHING

COMPATIBILITY DETERMINATION

USE: Recreational Fishing

REFUGE NAME: Edwin B. Forsythe National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITIES:

Edwin B. Forsythe National Wildlife Refuge (NWR) was created on May 22, 1984, by combining the former Brigantine and Barnegat NWRs (98 Stat. 207). Brigantine NWR was established on January 24, 1939, by the Migratory Bird Conservation Commission, under the authority of the Migratory Bird Conservation Act (16 U.S.C. 715d) to preserve estuarine habitats important to the Atlantic Brant and to provide nesting habitats for American black ducks and rails. Barnegat NWR was established on June 21, 1967, under the authority of the Migratory Bird Conservation Act (16 U.S.C. 715d) to preserve estuarine feeding and resting habitat for ducks and brant.

PURPOSE(S) FOR WHICH ESTABLISHED:

For lands acquired under the Migratory Bird Conservation Act (16 U.S.C. section 715-715r) as amended, "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds" (16 U.S.C. 715d).

For lands acquired under the Fish and Wildlife Act of 1956 (16 U.S.C. sections 742(a)-754) as amended, "...for the development, advancement, management, conservation, and protection of fish and wildlife resources..." (16 U.S.C. 742 (a)(4)) "...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." (16 U.S.C. 742f(b)(1)).

For lands acquired under the Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b)) "...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions..." (16 U.S.C. 3901(b), 100 Stat. 3583).

For lands designated as parts of the National Wilderness Preservation System under P.L. 93-632, "...to secure for the American people of the present and future generations the benefits of an enduring resource of wilderness" (78 Stat. 890, 16 U.S.C. 1121 (note), 1131-1136).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

The mission of the National Wildlife Refuge System (Refuge System) is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System

Improvement Act of 1997, Public Law 105–57; 111 Stat. 1282).

DESCRIPTION OF USE:

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

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

(b) Where would the use be conducted?

Fishing would occur at Lily Lake, Middle Branch, Loveladies Kayak Area, Holgate, Graveling Point, Parker Run, Cedar Run Dock Road, Mantoloking Fishing Trail, deCamp Wildlife Trail, Good Luck Point Area and Cedar Bonnet Island Trail. The refuge provides access for crabbing at sites along Cedar Run Dock Road, Parkertown Dock Road, and at Scotts Landing. The refuge also provides access to State-regulated and State-owned shellfishing areas. Maps are located in Appendix B of the Recreational Fishing Plan accompanying this compatibility determination.

(c) When will the use be conducted?

The use will be conducted during the seasons specified in the fishing regulations established by the New Jersey Division of Fish and Wildlife (NJDFW) during open refuge hours.

Freshwater Fishing

Freshwater fishing at Lily Lake and Middle Branch will occur year-round during regular refuge hours (legal sunrise to legal sunset).

Saltwater Fishing.

Saltwater fishing on State waters is conducted during state seasons within refuge regular hours (legal sunrise to legal sunset).

Land-based saltwater fishing is available from the refuge at Holgate Beach and Graveling Point. Fishing at these locations is permitted 24 hours each day. Holgate Beach is currently closed to all uses from April 1 to August 31, with vehicular access closing on March 15. Fishing at the Mantoloking Fishing Trail, deCamp Wildlife Trail, Good Luck Point Area and Cedar Bonnet Island Trail will occur in the future as resources are available.

Blue Crab

The sites available for crabbing are open to the public during refuge regular hours (legal sunrise to legal sunset) during the State’s crabbing season from March 15 to November 30.

Shellfish (Clams, oysters, blue mussels, bay scallops)

State regulated shellfishing areas may be accessed through refuge lands during daylight hours, Monday through Saturday with the exception of Stated-owned shellfishing grounds associated with Holgate peninsula. This area may be accessed via the Clamming Trail 24 hours a day from Monday through Saturday between September 1 and April 1.

(d) How will the use be conducted?

Signage related to fishing access and regulations are proposed for all sites. Additionally, construction of a pier at Lily Lake is proposed.

Recreational fishing will be conducted according to NJDFW regulations, with some additional refuge-specific conditions to protect fish, wildlife, and habitat, and reduce potential conflicts among other public uses. A valid New Jersey fishing license will be required to fish freshwater areas and saltwater anglers are required to register with the state’s Saltwater Registry program. No additional refuge permit is required.

No fish of any species may be introduced onto the refuge without appropriate State and refuge permits, including baitfish and eggs. Unauthorized introductions of both non-native and native fish can disrupt aquatic ecosystems and destroy natural fisheries. Fishing for commercial purposes is prohibited.

We propose to prohibit the use of lead on the refuge for fishing. It is well-known that lead is a potent neurotoxin for both humans and wildlife. Prohibiting the use of lead tackle at Forsythe Refuge is consistent with the lead shot ban for waterfowl that inhabit the same pond, marsh and open water habitats where fishing will occur. This action is intended to reduce the unintentional introduction of a known neurotoxin into habitats used by people, diving ducks, loons, eagles, and other wildlife species sensitive to the effects of lead. The lead ban will be implemented over a 5-year phase-in period, allowing anglers time to adapt to the new regulations without diminishing fishing opportunities. The refuge will conduct education programs and provide information to assist a valuable transition period that benefits fish, wildlife, and people.

(e) Why is this use being proposed?

The use is being proposed by the refuge to promote one of the priority public uses of the Refuge System. Providing recreational fishing opportunities will promote stewardship of our natural resources and increase public appreciation and support for the refuge. In addition, this use is consistent with one of the refuge’s purposes for establishment.

AVAILABILITY OF RESOURCES:

The estimated cost to operate this fishing program is estimated to be \$21,301 annually.

Item	Cost
Fish and Wildlife Officer – education and enforcement	\$5,797
Maintenance Workers – site upkeep, litter removal, sign installation	\$1,240
Refuge Managers – program oversight	\$5,014
Visitor Services Manager – sign development, outreach to public	\$3,750
Biologist – information about lead concerns	\$1,500
Signs, parking lot maintenance	\$3,000
Projects to support used fishing line collection and lead outreach	\$1,000
Total to implement	\$21,301

The financial and staff resources necessary to provide and administer this use at its current level and at the proposed level are sufficient, and we expect the use to continue in the future subject to

availability of appropriated funds. Funds for the proposed Lily Lake fishing pier would likely come from sources outside of the refuge's annual budget.

ANTICIPATED IMPACTS OF USE:

Vegetation and Soil

Some erosion could occur when launching boats at Lily Lake as the site is not paved or fortified. The Cedar Run Dock Road and Graveling Point trails have established trails on the marsh that have been present for decades. To minimize impacts, and to discourage widening of existing trails and establishment of new trails by the public, signs will be posted to educate anglers. As visitors are seeking access to very specific and productive sites, impacts to trails are expected to be localized and minor. Existing trails will be used at Cedar Bonnet Island, Mantoloking Road, and deCamp Wildlife Trail. New trails and bridges would need to be constructed to expand the Good Luck Point Trail. Those impacts will be assessed at the time of project design and permitting with state and federal agencies.

Hydrology (Water Resources and Wetlands)

Paths used by anglers can affect the hydrology of an area by altering drainage patterns. Some anglers may walk off-trail to access a fishing area, thereby creating new trails and affecting drainage. We will discourage such actions via new signage.

Wildlife

Fish

Recreational fishing could potentially cause negative impacts to fish populations if it occurs at unsustainably high levels or is not managed properly. Potential impacts include direct mortality from harvest, catch and release injury, changes in age and size class distribution, changes in reproductive capacity and success, loss of genetic diversity, altered behavior, and changes in ecosystems and food webs (Lewin et al. 2006, Cline et al. 2007). Fishing generally removes individuals from a population at high levels and can lead to reduced population sizes and loss of genetic diversity. The loss of genetic diversity can ultimately reduce a population's fitness, resilience, and ability to adapt to environmental changes and stressors. The higher the fishing mortality, the greater these types of impacts will be (Lewin et al. 2006). The negative impacts of lead on people and wildlife is documented and clear (Golden et al., Grade et al.). To move towards reduction and future elimination of this threat on the refuge, we will be implementing a lead ban over a 5-year period to educate and work with anglers on non-toxic alternatives.

While fishing removes individuals from the population, we do not anticipate that projected fishing pressure will affect the coastal fish population as a whole. The NJDFW strives to ensure maintenance of healthy and diverse fish species populations. Anglers must abide by the State's seasons, catch limits, and regulations to protect the State's fish populations. The refuge's fishing pressure is projected to be sustainable.

Other Wildlife

Fishing has the potential to increase disturbance to other wildlife that use fishable waters, including waterfowl and wading birds. Human activity, including walking trails and boat use, has the potential to affect the behavior, distribution, and abundance of waterbirds due to

disturbance. Several studies have examined the effects of recreation on birds using habitats adjacent to trails and roads through wildlife refuges and coastal habitats in the eastern United States. Overall, the existing research demonstrates that disturbance from recreational activities has at least temporary effects on the behavior and movement of birds and other animals within a habitat or localized area. The findings that were reported in some studies are summarized below regarding visitor activity and response to disturbance.

Presence: Birds avoided places where people were present and when visitor activity was high (Burger 1981, Klein et al. 1995, Burger and Gochfeld 1998). Birds developed more slowly during periods of increased public use (Remacha et al. 2016). Mammalian use of trails in eastern forests was not impacted by hikers (Kays et al. 2017).

Trail Density: Bird nesting density decreased with increased trail density within a forested patch (Thompson 2015).

Approach Angle: Visitors directly approaching birds on foot caused more disturbance than visitors driving by in vehicles, stopping vehicles near birds, and stopping vehicles and getting out without approaching birds (Klein 1993). Direct approaches may also cause greater disturbance than tangential approaches to birds (such as along trails) (Burger and Gochfeld 1981, Knight and Cole 1991, Rodgers and Smith 1995, Rodgers and Smith 1997, Smith-Castro and Rodewalk 2010).

Noise: Noise caused by visitors resulted in increased levels of disturbance (Burger 1986, Klein 1993, Burger and Gochfeld 1998), though noise was not correlated with visitor group size (Burger and Gochfeld 1998).

Anglers will generally be walking along refuge trails or using non-motorized (or electric motors) boats. Given the habitat types near fishing areas and observation from staff, anglers would have minimal effect on nesting birds of conservation concern. No bird species of concern have been observed nesting in areas that anglers would utilize. We would close refuge areas, as needed, to fishing and boating if sensitive nest sites were ever to occur.

As addressed in the refuge's 2019 Compatibility Determination (CD) for Wildlife Observation, Wildlife Photography, Environmental Education and Interpretation, when the ditches surrounding the Wildlife Drive are flooded from high tide, boaters and jet skiers are known to use them. This use always flushes wildlife, especially the migratory birds the refuge is providing habitat for, and it also interferes with the wildlife observation experience of visitors. The refuge is working with the NJDEP Bureau of Tidelands to avoid these negative impacts to the resources we manage and is recommending closure of the waterway.

Federally Listed Species

A Section 7 analysis under the Endangered Species Act (ESA) of 1973, as amended was conducted in cooperation with the U.S. Fish and Wildlife Service's (Service) New Jersey Field Office. Species known to occur on the refuge include piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), American chaffseed (*Schwalbea americana*), Knieskern's beaked-rush (*Rhynchospora knieskernii*), seabeach amaranth (*Amaranthus pumilus*), sensitive joint-vetch

Appendix A – Compatibility Determination

(*Aeschynomene virginica*), swamp pink (*Helonias bullata*), northern long-eared bat (*Myotis septentrionalis*), and eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*). Piping plover, red and seabeach amaranth are the only species that occur in fishing areas.

Potential impacts to piping plovers includes disturbance from anglers prior to the April 1 full closure of Holgate as birds are arriving. Once the beach closes, no effects on plovers would occur other than pedestrians that violate the law and walk along the beach. Staff are generally present on the beach and can direct people to exit the area.

Seabeach amaranth grows along the dune edge and could be impacted by vehicles and trampling after the beach opens in September. Refuge staff fence areas where plants are found which reduces the potential for negative impacts to the plants.

Red knots use beach habitats and marsh mudflats and could be disturbed by pedestrians and vehicles when Holgate is still open, and by anglers in boats using tidal creeks to fish as they travel between locations. These disturbances are expected to be minimal and unlikely to adversely affect knots.

No adverse impacts are expected for American chaffseed, Knieskern's beaked-rush, northern long-eared bat, swamp pink, sensitive joint-vetch, and eastern black rail as those species do not occur in fishing areas.

Wilderness

The refuge contains three wilderness areas that comprise the Brigantine National Wilderness Area: Holgate, Little Beach Island and Motts Wilderness. No fishing access is proposed for Little Beach or Motts. Holgate is accessed by foot or vehicle (locally known as beach buggy). Access is available September 1 to March 31. Surf fishing is permitted along the front beach and foot traffic is permitted on the Clamming Trail to the back bay side of the site. The trail traverses wilderness and its establishment was reviewed and impacts evaluated previously. Impacts from trail development and use were considered to be negligible. Holgate access via vehicle is permitted along the front beach, but vehicles must stay below the mean high water (MHW) line, which is locally defined as the line between the wet and dry sand because MHW changes regularly. This permits access for fishing without negatively affecting wilderness areas managed by the refuge.

Visitors and Other Uses

The refuge is open to all six of the System's priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education and environmental interpretation). About 250,000 people visit the refuge each year: 21,000 to the Visitor Information Center; 100,000 to the Wildlife Drive; 58,000 on 6-foot trails; 2,500 hunters; and 27,000 anglers, among other users. Expanded fishing opportunities would positively contribute to appreciation and protection of fish and wildlife, both on and off the refuge. The beneficial impacts of providing this wildlife-dependent activity, with some modest increases, include helping meet the existing and future demands for outdoor recreation and education. Only negligible, short-term impacts to other user groups have occurred and are anticipated to occur in the future.

Economic

The refuge is located approximately 6 miles from Atlantic City, New Jersey, but it is located in Ocean, Burlington and Atlantic counties (1.3 million residents) (US Places.com 2019). The predominant land uses in the vicinity of the refuge are residential and commercial development. Local Chambers of Commerce consider the refuge one of the area's main attractions. The refuge averages about 250,000 visitors per year. Tourism and healthcare contribute the greatest amount of funding to the local economy. Other recreational opportunities are provided at State and local forests and parks. The Jersey Shore is an extremely popular summer destination for visitors from New York, Philadelphia, and Quebec. Total expenditures from refuge visitors were \$4.1 million with non-residents accounting for \$2.6 million or 64 percent of total expenditures in 2017. Expenditures on fishing activities accounted for about 21 percent of all expenditures (Caudill and Carver 2019). Fishing visitation has the ability to positively impact economics of the area.

Cumulative Impacts

Cumulative impacts on the environment result from incremental impacts of a proposed action when these are added to other past, present, and reasonably foreseeable future actions. While cumulative impacts may result from individually minor actions, they may, viewed as a whole, become substantial over time. The proposed fishing program is distributed across a 50-mile-long portion of the New Jersey coast. The majority of the fishing is saltwater, which is regulated and managed by the State of New Jersey and the Atlantic States Marine Fisheries Commission. Regulations at the two refuge freshwater sites is regulated by the State of New Jersey. Therefore, cumulative impacts from the proposal are expected to be minimal.

PUBLIC REVIEW AND COMMENT:

This CD is part of the Edwin B. Forsythe NWR Recreational Fishing Plan and the accompanying Environmental Assessment (EA). The plan has been thoroughly coordinated with all interested and/or affected parties. To prepare the plan and alternatives, refuge staff met with the NJDFW, and stakeholders from the Atlantic, Burlington and Ocean County Sportsmen Federations, South Jersey Bass Club Association, Absecon Saltwater Sportsmen, Ocean County Farm Bureau, and the general public.

On March 19, 2020, we distributed a press release to news organizations and alerted visitors about the availability of the draft fishing plan with a posting on the refuge visitor information center doors. The plan was available on the refuge website, and a press release was shared on Facebook with a link to the plan. No public meetings were held due to bans on public gatherings due to COVID-19. Upon request, the public comment period was extended from May 1 until June 8, 2020, for a total comment period of 81 days. A total of 11 individuals or entities offered comments to the refuge. Additionally, a meeting was held with members of the Jersey Coast Anglers Association on May 21, 2020, to explore expansion of land-based fishing opportunities for the public. Appendix E summarizes the substantive comments received on the proposal, and the Service responses.

DETERMINATION (CHECK ONE BELOW):

 Use is not compatible

 Use is compatible, with the following stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

The fishing program at Edwin B. Forsythe NWR has been conducted for many years and the special regulations, restrictions, and/or general operations have been structured to ensure compatibility. We review the program regularly to ensure that wildlife and habitat management goals are achieved, and that the program is providing a safe, high quality experience for participants. If monitoring indicates that this use materially interferes with or detracts from fulfillment of the Refuge System mission or the purposes of the refuge, we would curtail or eliminate the use.

The following stipulations are necessary to ensure compatibility:

- 1) Ice fishing is not permitted due to a lack of ice safe enough to fish.
- 2) No fishing is permitted from or in the waters adjacent to the Wildlife Drive to avoid disturbance to wildlife and visitors engaging in wildlife observation and photography.
- 3) Fishing will not occur in areas where the activity would contribute to unacceptable levels of erosion, or would in any other way result in significant, detrimental impacts to fish, wildlife, and their habitats.
- 4) We will permit non-motorized boat launching only in designated areas to prevent the erosion and degradation of wetlands or water quality and ensure public safety.
- 5) The use of lead fishing tackle is prohibited on the refuge. We will use a phased approach in implementation that will allow anglers and the public additional time to understand and adapt to the new regulations. Conversion to non-toxic tackle will phase in over the next 5 years, and the refuge will be working with anglers to move toward voluntary use over that time.

JUSTIFICATION:

The Refuge System Improvement Act of 1997 identifies fishing as a priority public use. Priority public uses are to receive enhanced consideration when developing goals and objectives for refuges if they are determined to be compatible. Providing fishing opportunities will promote public appreciation and support for the refuge. Recreational fishing will not materially interfere with or detract from the mission of the Refuge System or the purposes for which the refuge was established. We, therefore, find that public fishing conducted according to the State of New Jersey seasons and limits will be compatible with the principles of sound wildlife management and otherwise in the public interest (50 CFR § 32.1.)

SIGNATURE:
Refuge Manager

Virginia Petty
(Signature)

7-9-2020
(Date)

CONCURRENCE:
Regional Chief

Sam B. Kern
(Signature)

7/29/2020
(Date)

MANDATORY 15 YEAR RE-EVALUATION DATE:

7/29/2035
(Date)

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Appendix A – Compatibility Determination

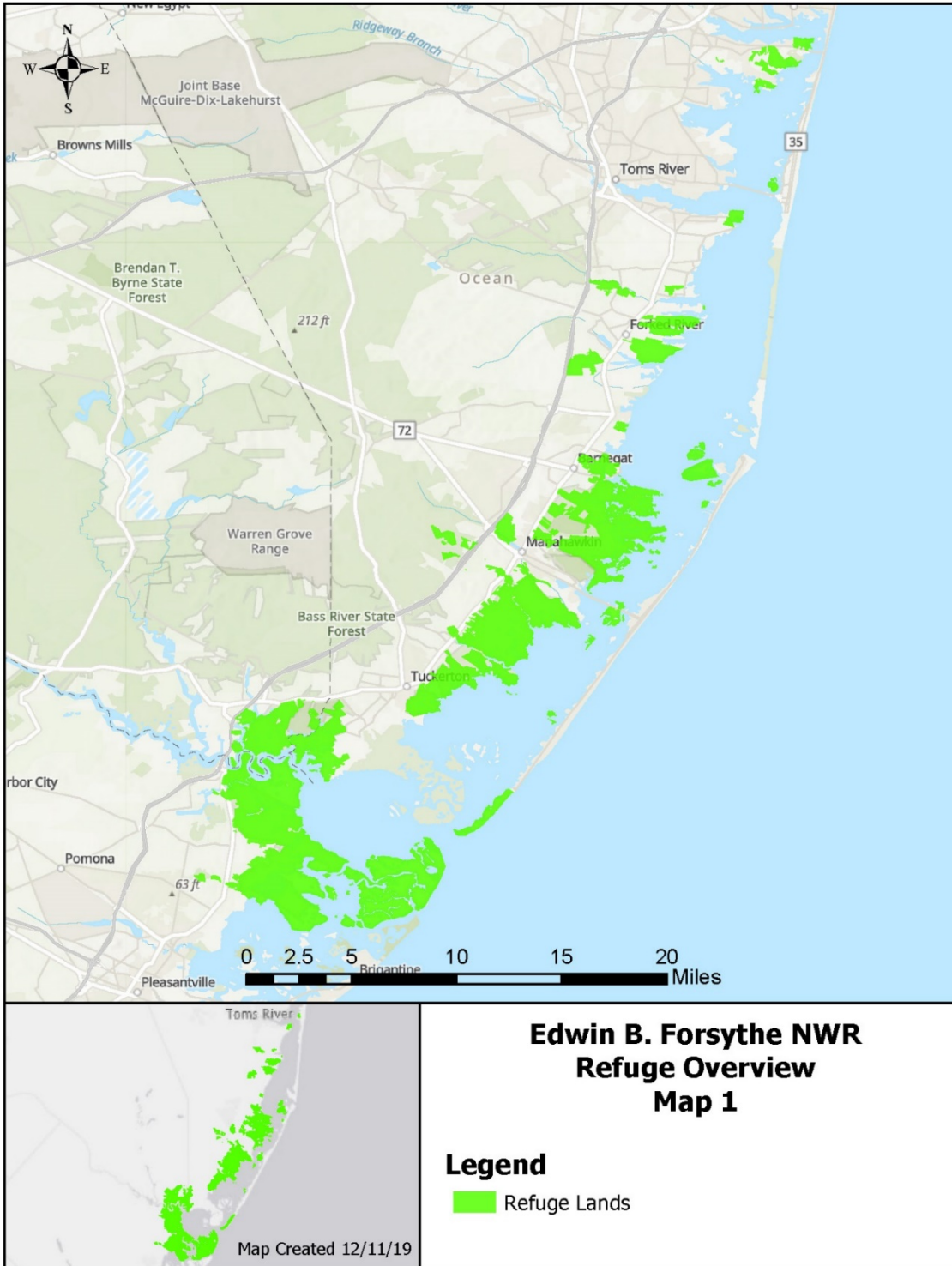
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APPENDIX B
FISHING LOCATION MAPS



U.S. FISH & WILDLIFE SERVICE
Edwin B. Forsythe National Wildlife Refuge

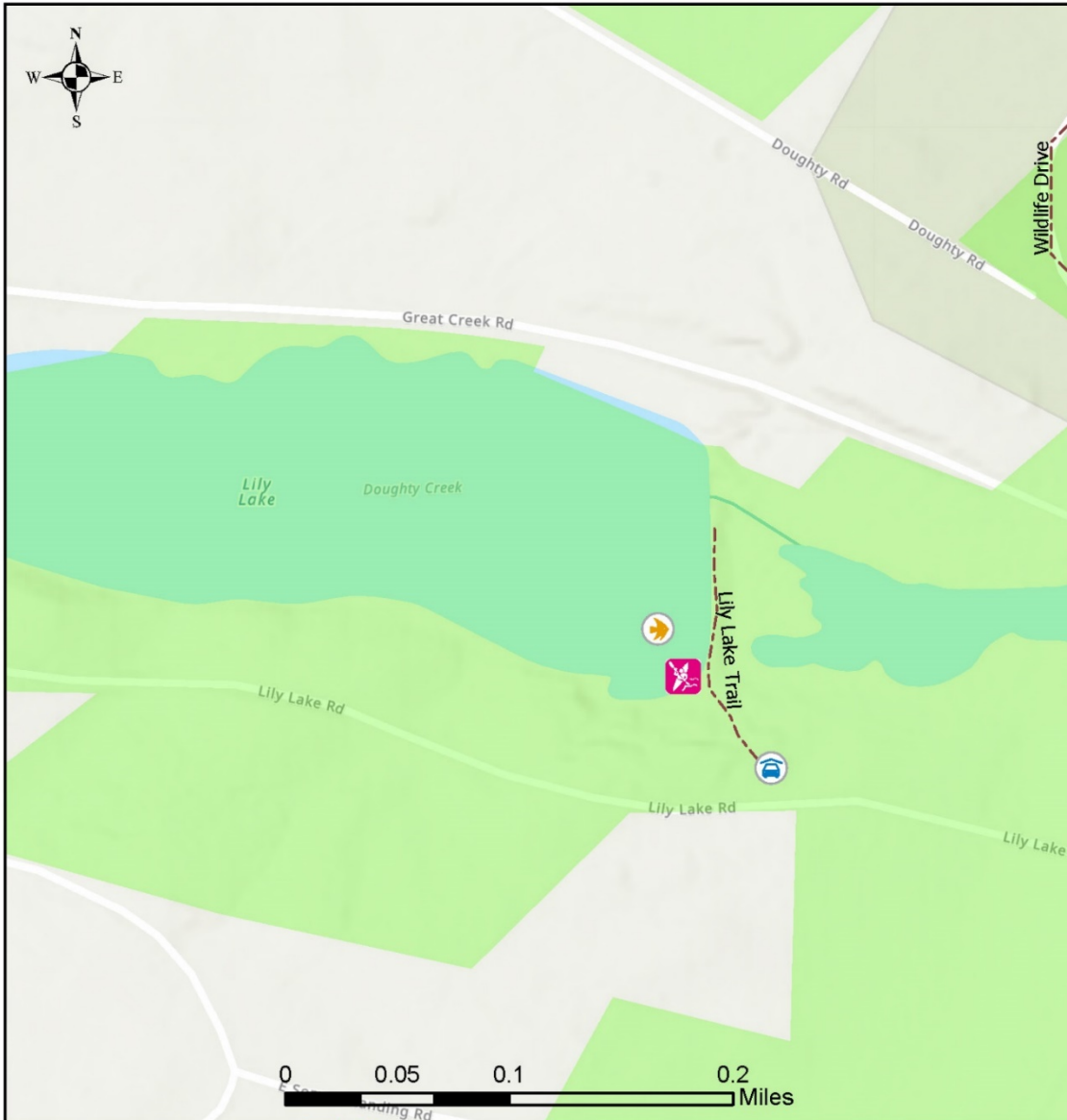
Map 1: Refuge Overview





U.S. FISH & WILDLIFE SERVICE
Edwin B. Forsythe National Wildlife Refuge

Map 2: Lily Lake



Edwin B. Forsythe NWR
Lily Lake
Map 2

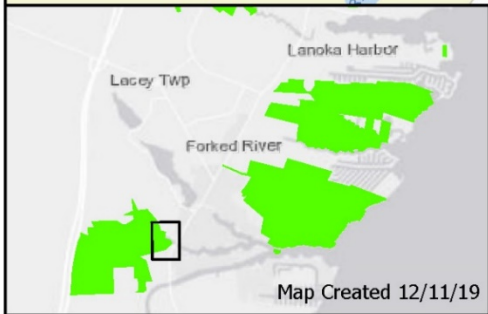
Legend

- Fishing
- Non-Motorized Boat Launching
- Parking
- Refuge Trails
- Refuge Lands



U.S. FISH & WILDLIFE SERVICE
Edwin B. Forsythe National Wildlife Refuge

Map 3: Middle Branch Trail



Edwin B. Forsythe NWR
Middle Branch Trail
Map 3

Legend

- Non-Motorized Boat Launch
- Parking
- Refuge Lands

Map Created 12/11/19



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Edwin B. Forsythe National Wildlife Refuge

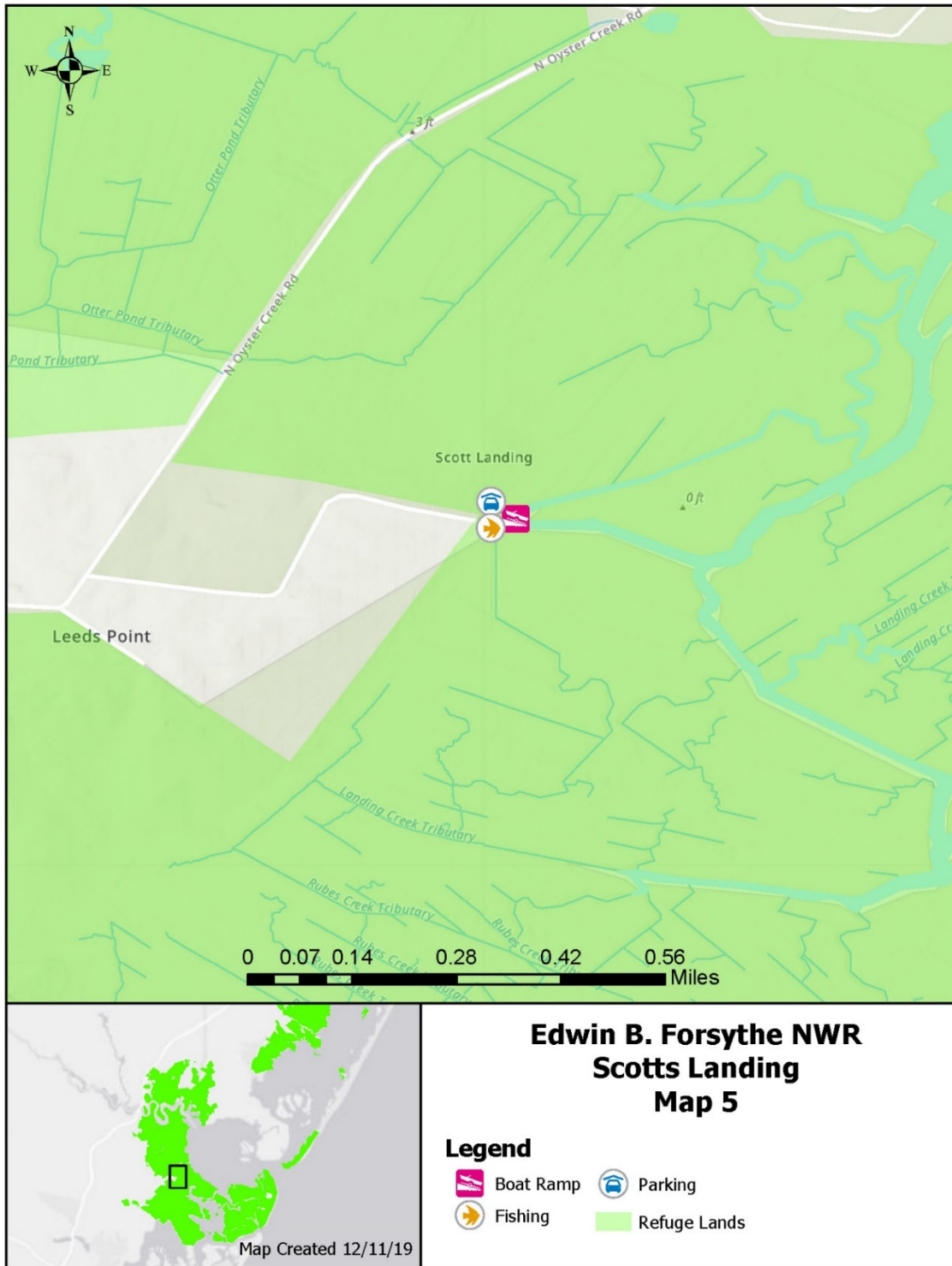
Map 4: Loveladies Kayak Area





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Edwin B. Forsythe National Wildlife Refuge

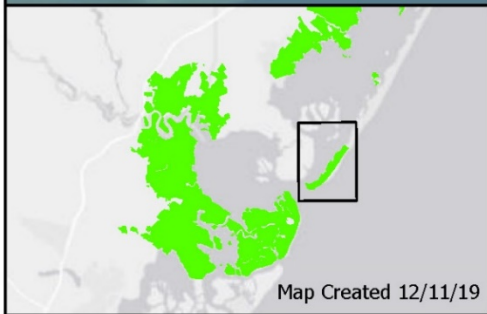
Map 5: Scotts Landing





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Edwin B. Forsythe National Wildlife Refuge

Map 6: Holgate Beach



**Edwin B. Forsythe NWR
Holgate Beach
Map 6**

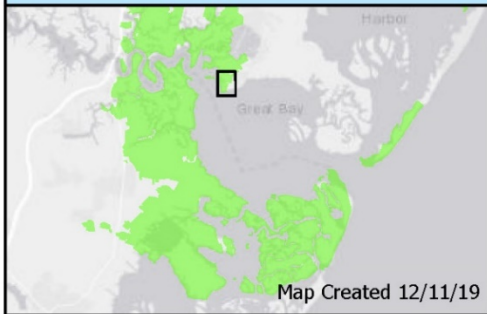
Legend

Holgate Interpretative Site	Refuge Trails
Parking	Refuge Lands



U.S. FISH & WILDLIFE SERVICE
Edwin B. Forsythe National Wildlife Refuge

Map 7: Graveling Point Area



Edwin B. Forsythe NWR
Graveling Point Area
Map 7

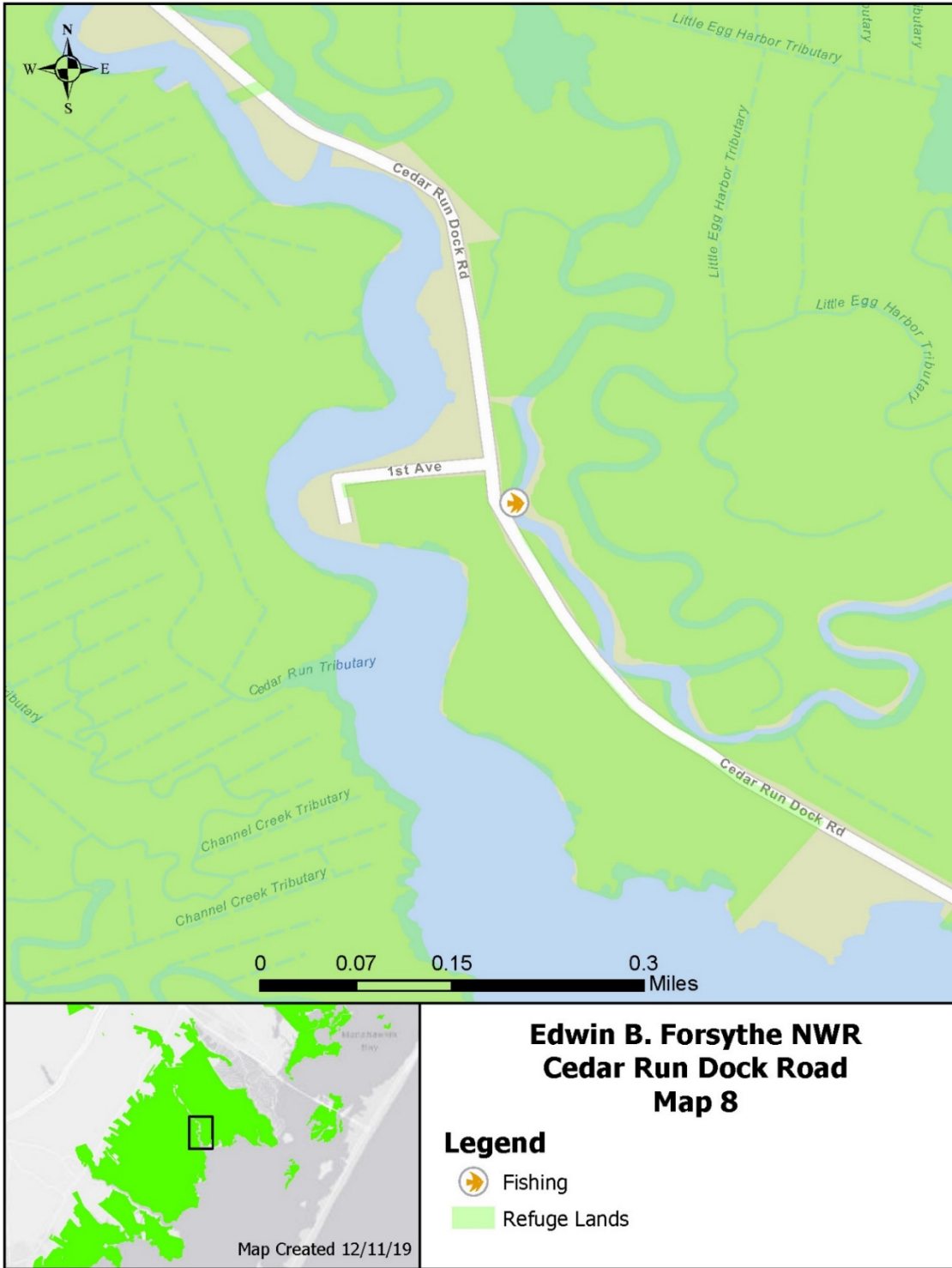
Legend

- Township Trail
- Refuge Trails
- Parking
- Refuge Lands



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Edwin B. Forsythe National Wildlife Refuge

Map 8: Cedar Run Dock Road





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Edwin B. Forsythe National Wildlife Refuge

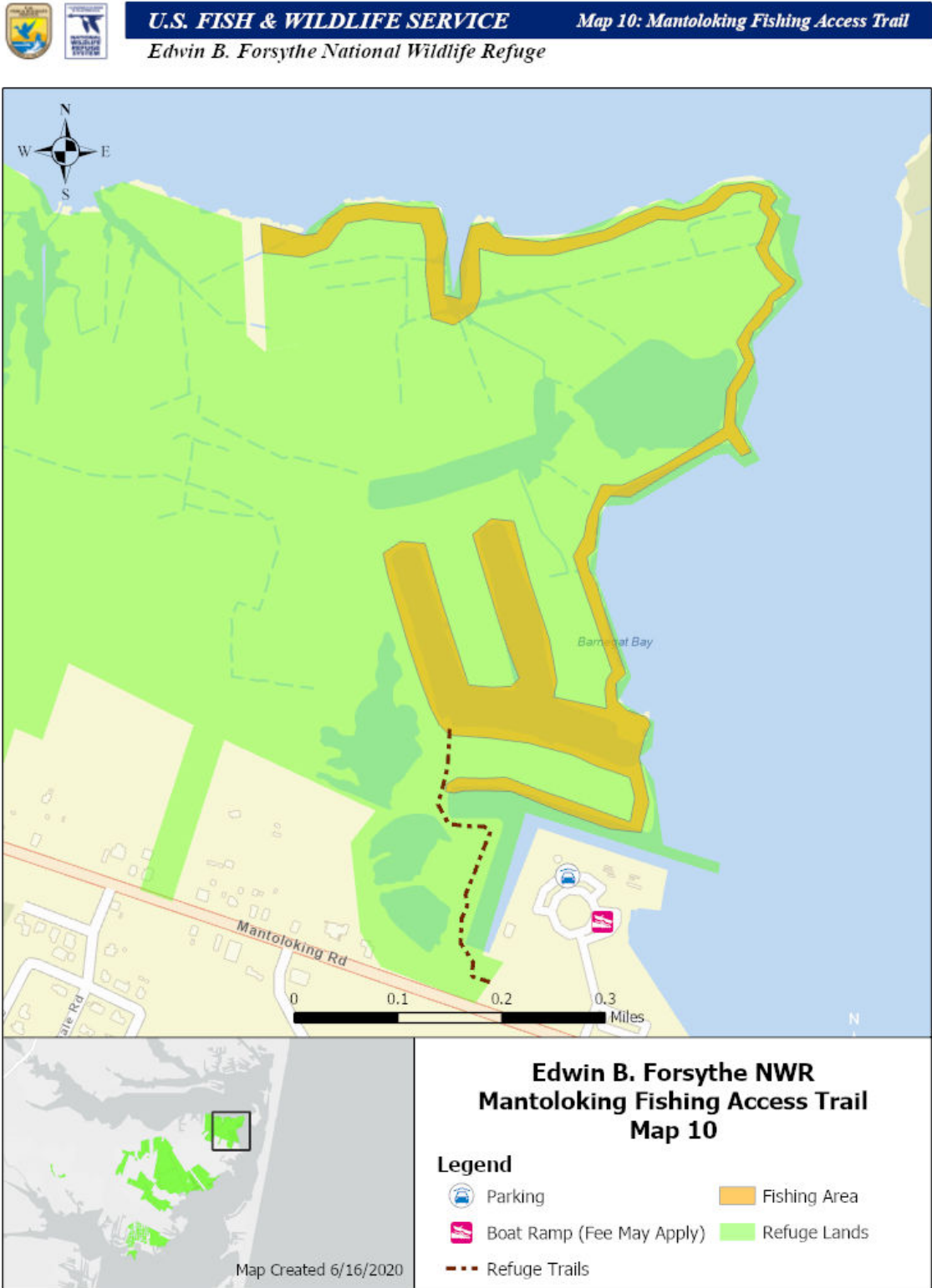
Map 9: Parkertown



Edwin B. Forsythe NWR
Parkertown
Map 9

Legend

- Boat Ramp
- Fishing
- Parking
- Refuge Lands





U.S. FISH & WILDLIFE SERVICE
Edwin B. Forsythe National Wildlife Refuge

Map 11: deCamp Wildlife Trail

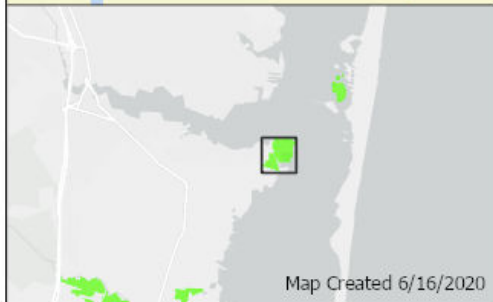




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Map 10: Good Luck Point Trail

Edwin B. Forsythe National Wildlife Refuge



Map Created 6/16/2020

Edwin B. Forsythe NWR Good Luck Point Trail Map 12

Legend

- Parking
- Refuge Trails
- Potential Trail Extension
- Fishing Area
- Refuge Lands



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Edwin B. Forsythe National Wildlife Refuge

Map 13: Cedar Bonnet Island



Environmental Assessment for Recreational Fishing at Edwin B. Forsythe NWR

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 (516 DM 8) and U.S. Fish and Wildlife Service (Service) (550 FW 3) policies. NEPA requires examination of the effects of proposed actions on the natural and human environment.

Proposed Action:

The Service is proposing to provide fishing opportunities for fresh- and salt-water finfish, crabs, and shellfish on the Edwin B. Forsythe National Wildlife Refuge (NWR, refuge) in accordance with the refuge's Comprehensive Conservation Plan (CCP) (USFWS 2004). The nearly 48,000-acre refuge is located in Ocean, Burlington and Atlantic Counties in southern New Jersey. We propose to provide new access opportunities and update fishing regulations.

Background:

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (NWRS, Refuge System), the purposes of an individual refuge, Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife 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.

The refuge was established:

- For lands acquired under the Migratory Bird Conservation Act (16 U.S.C. §715-715r), as amended, "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds...." (16 U.S.C. §715d).
- "...the development, advancement, management, conservation, and protection of fish and wildlife resources...." (16 U.S.C. §742f(a)(4), Fish and Wildlife Act of 1956).
- "...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations (regarding migratory birds)..." (16 U.S.C. §3901(b), 100 Stat. 3583 Emergency Wetlands Resources Act of 1986).
- "...to secure for the American people of present and future generations the benefits of an enduring resource of wilderness." (78 Stat. 890:16 U.S.C. 1121 (note), 1131-1136, Wilderness Act of 1964)

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

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

The NWRSA mandates the Secretary of the Interior in administering the System to:

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System;
- Ensure that the biological integrity, diversity, and environmental health of the Refuge System 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.

Purpose and Need for the Proposed Action:

Fishing is a healthy, traditional recreational use of renewable natural resources deeply rooted in America’s heritage, and it can be an important wildlife management tool. The NWRSA of 1966, the Refuge System Improvement Act of 1997, other laws, and the Service’s policies permit fishing on a national wildlife refuge when it is compatible with the purposes for which the refuge was established and acquired. Edwin B. Forsythe NWR’s CCP (2004) identified the goal to provide and expand compatible fishing opportunities with specific objectives to expand fresh- and saltwater fishing access on the refuge.

To address the needs stated above, the purpose of the proposed action will bring the refuge into

compliance with current day management objectives. Furthermore, Department of the Interior Secretarial Order 3356 directs the Service to enhance and expand public access to lands and waters on national wildlife refuges for hunting, fishing, recreational shooting, and other forms of outdoor recreation. The proposed action will also promote one of the priority public uses of the 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.

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

Alternatives Considered

No Action Alternative [Current Management]

The No Action Alternative would continue to provide fishing opportunities and boating access at Lily Lake and Scotts Landing in Atlantic County, surf fishing at Holgate Beach and Graveling Point, and bank fishing and crabbing at Parkertown Dock Road, Cedar Run Dock Road and Scotts Landing. No expansion of existing opportunities would occur. Limited facility improvements would be proposed to enhance existing access.

Proposed Action Alternative – [Expand Fishing Opportunities and Access]

Refuge staff have worked closely with stakeholders and the New Jersey Division of Fish and Wildlife (NJDFW), a division of the New Jersey Department of Environmental Protection, to develop the current proposed fish plan. There are no unresolved conflicts about the proposed action with respect to the alternative uses of available resources. Additionally, the proposed action builds on an existing fishing program, and includes the addition of some areas that were developed during the writing of the refuge’s CCP. Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310). Table 1 describes the primary differences between the two evaluated alternatives.

Table 1. Comparison of Refuge fishing alternatives.

	<u>No Action Alternative</u>	<u>Proposed Action Alternative</u>
Freshwater fishing via boat	Lily Lake	Lily Lake Middle Branch
Freshwater bank fishing	Lily Lake	Lily Lake Middle Branch
Saltwater fishing via boat	Scotts Landing	Scotts Landing Loveladies Kayak Area
Saltwater surf fishing	Holgate Front Beach Graveling Point	Holgate Front Beach Graveling Point
Crabbing/bait fishing sites	Scotts Landing Parkertown Dock Road	Scotts Landing Parkertown Dock Road

	Cedar Run Dock Road	Cedar Run Dock Road
Shellfishing	Holgate back bays from southern tip	Holgate Clamming Trail
Cost of program (annual)	\$6,500	\$15,360
Improvements	None	Add interpretive signage at all sites; construct pier at Lily Lake

The Service has prepared a fishing plan, which is presented in this document as the Proposed Action Alternative. The updated fishing plan proposes to open new areas. The sites currently open for fishing and crabbing would remain open. All sites would have improved access, signage, and/or parking.

Freshwater Fish Species

The only freshwater fishing area currently open is Lily Lake in Galloway Township, Atlantic County. The area at the Middle Branch Trailhead, Lacey Township, Ocean County will be opened as a part of this plan. There are opportunities for bank fishing at both sites, and non-motorized boats (electric motors only) are permitted at both sites. We would construct a fishing pier at Lily Lake to improve fishing opportunities. A kayak launch evaluated as a part of the refuge’s Big 4 CD Middle Branch Trailhead would facilitate launching there.

Saltwater Fish Species

Tidal streams throughout the refuge are known for an abundance of fishing opportunities. These are nearly all accessible by boat only and combustion engines are permitted as they are considered waters of the State of New Jersey. Fishing from boats on the refuge’s Loveladies Kayak area is available (no combustion engines permitted). Land-based fishing is available from the refuge at Holgate Beach and Graveling Point. We permit boat launching at Scotts Landing, which is the only boat launch owned by the Service at Edwin B. Forsythe NWR. Signage would be improved at all sites as a part of this proposal, and a parking and site enhancement project at Scotts Landing is underway and will enhance the visitor experience there.

Blue Crab

The refuge provides access to fish for crabs at a site along Parkertown Dock Road in Little Egg Harbor Township and Cedar Run Dock Road, Eagleswood Township (both in Ocean County), and at Scotts Landing in Galloway Township, Atlantic County. This alternative would enhance parking and signage at the sites.

Shellfish (clams, oysters, blue mussels, bay scallops)

Access to clamming grounds in State-owned waters along the western edge of the Holgate peninsula is provided to the public via the 0.4-mile-long Clamming Trail evaluated in the refuge’s Big 4 CD in 2019.

Edwin B. Forsythe NWR refuge-specific regulations will be published in the Federal Register as part of the 2020-2021 Refuge-Specific Hunting and Sport Fishing Regulations. Proposed refuge-specific regulations will prohibit use of internal combustion engines on Lily Lake, the lake at

Middle Branch Trailhead, and the Loveladies Kayak Area; and, prohibit ice fishing on the refuge.

This Proposed Action Alternative offers increased opportunities for public fishing, enhances facilities, and fulfills the Service’s mandate under the National Wildlife Refuge System Improvement Act of 1997. It provides a recreational experience to the general public while maintaining sustainable wildlife populations. The estimated cost to operate this fishing program is estimated to be \$15,360 annually. Under this alternative, the refuge fish and wildlife officer and/or NJDFW conservation officers will monitor fishing, and conduct license, bag limit, and compliance checks. The Service has determined that the fishing plan is compatible with the purposes of the Edwin B. Forsythe NWR and the Refuge System. It is found in the refuge Fishing Plan.

Mitigation Measures and Conditions

Proposed Action Alternative

- Nearly all fishing access points are located in areas separate from other visitor uses, such as wildlife observation and photography.
- Access to refuge freshwater lakes is limited to non-motorized (no internal combustion engines) boats to reduce conflict in small water bodies.
- Access to Loveladies Kayak Area is limited to non-motorized (no internal combustion engines) boats to reduce conflict at that popular kayak site.
- Driving around the southern tip of Holgate is prohibited and foot access to clamming beds is only permitted via the Clamming Trail.
- In cooperation with the NJDEP, the ditches around Wildlife Drive will be closed to fishing to ensure boaters do not negatively impact wildlife management goals by disturbing and displacing wildlife. This also avoids conflicts between visitors engaged in wildlife observation and photography and anglers.
- Maps and fishing information and regular social media posts, along with refuge and State law enforcement checks, will ensure the public is aware of applicable laws and policies.
- State regulations are followed regarding season dates and harvest rates.

Affected Environment

Edwin B. Forsythe NWR consists of approximately 68 square miles in Ocean, Burlington, and Atlantic Counties, New Jersey. It is primarily comprised of saltmarsh habitat, but also contains wetland and upland forest, beach and dune and small acreages of scrub/shrub, freshwater wetland, early successional habitat; along with managed impoundments and ponds. The proposed action would occur in multiple sites throughout the refuge but in only a few habitat types (Table 2).

Table 2. Primary refuge habitat plant community descriptions found in fishing areas

Habitat Type	Description
North Atlantic Low Saltmarsh	Monotypic tall grassland dominated by smooth cordgrass (<i>Spartina alterniflora</i>) in regularly flooded intertidal zones with very low species richness
North Atlantic High Saltmarsh	Patch mosaic generally dominated by saltmeadow cordgrass (<i>Spartina patens</i>), saltgrass (<i>Distichlis spicata</i>), or saltmeadow rush (<i>Juncus gerardii</i>)
Beach Strand	Characterized by sparsely vegetated annuals and biennials, including American searocket (<i>Cakile edentula</i>), seaside sandmat (<i>Chamaesyce polygonifolia</i>), and spear saltbush (<i>Atriplex patula</i>)
Northern Beachgrass, Mid-Atlantic Coast Backdune and Overwash Dune Grassland	Maritime grassland dunes with variable cover (25 to 50%) dominated by American beachgrass (<i>Ammophila breviligulata</i>), coastal panicgrass (<i>Panicum amarum</i>), bluestem broomsedge (<i>Andropogon virginicus</i>), shore little bluestem (<i>Schizachyrium littorale</i>), and sparse to variable, often monotypic stands of saltmeadow cordgrass, and other associated species including beach pea (<i>Lathyrus japonicas</i>), seaside goldenrod (<i>Solidago sempervirens</i>), field sagewort (<i>Artemisia campestris</i>), purple sandgrass (<i>Triplasis purpurea</i>), and American searocket (closer to the tidal zone), and sparse shrubs of bayberry and wax myrtle (<i>Morella</i> spp.) (away from the tidal zone)

For more information regarding the affected environment, please see chapter 3 of the refuge’s Comprehensive Conservation Plan (USFWS 2004, https://www.fws.gov/refuge/Edwin_B_Forsythe/what_we_do/finalccp.html) or the refuge Draft Habitat Management Plan (USFWS 2013), which can be found here: https://www.fws.gov/refuge/Edwin_B_Forsythe/what_we_do/conservation.html

Environmental Impacts of the Action

This section analyzes the environmental consequences of the action on each affected resource, including direct and indirect effects. This EA focuses 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.

Impact Types

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

Indirect effects are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.

Table 3. Description of the affected resources and impacts

NATURAL RESOURCES	
AFFECTED ENVIRONMENT	ANTICIPATED DIRECT AND INDIRECT IMPACTS
<p>Freshwater Finfish The refuge contains limited freshwater sites that support fish populations. Species found in Lily Lake in July 2018 were largemouth bass (<i>Micropterus salmoides</i>), bluegill (<i>Lepomis macrochirus</i>), pumpkinseed (<i>Lepomis gibbosus</i>), black crappie (<i>Pomoxis nigromaculatus</i>), chain pickerel (<i>Esox niger</i>), yellow bullhead (<i>Ameiurus natalis</i>), and an unknown <i>Lepomis</i> species. Similar species would be expected in Middle Branch (Forked River).</p>	<p>No Action: Currently, Lily Lake is the only freshwater fishing site on the refuge and would remain open under this alternative. Fishing rates are about a few hundred people per year. Water is accessed by non-motorized boat and fishing occurs from the banks. Most people fish from the dike, which is mowed. Negligible, short-term impacts to freshwater fish populations are expected from this alternative.</p> <p>Proposed Action: A second freshwater site at Middle Branch of the Forked River would be added in this alternative. The site is in a fairly populated area (Lacey Township) with few other freshwater fishing options so opening may double the number of anglers on the refuge. Fishing could slightly decrease the fish population at Middle Branch, but the impact is expected to be negligible.</p>
<p>Saltwater Finfish The refuge does not provide direct fishing opportunities as all saltwater fishing occurs in state waters. However, the refuge provides access in several ways: Scotts Landing boat launch; Loveladies kayak area; and foot access sites.</p>	<p>No Action: No locations would be added or improved to those currently available for saltwater fishing. Current impacts include the direct loss of fish in the system, with regulations determined by state and federal officials to ensure stable populations. No new impacts to saltwater finfish populations would occur from this alternative.</p> <p>Proposed Action: Opening the Loveladies kayak area is proposed, improving opportunities for anglers. This could result in a minor increase in angler numbers and harvest. Harvest would continue to be regulated by the State through surveys and any changes in populations could result in changes to regulations, which would contribute to avoiding negative impacts to finfish species.</p>
<p>Blue Crabs Recreational blue crab fishing results in a harvest of over 6 million crabs each year. On the refuge, crabbing occurs off</p>	<p>No Action: No locations would be added to the areas currently available for blue crab harvest. Blue crab regulations are set by state officials to ensure stable populations. Other than the direct loss of crabs, no impacts would occur from this alternative.</p>

<p>Scotts Landing and Parkertown Dock Road.</p>	<p>Proposed Action: No new areas are proposed for opening for blue crab harvest.</p>
<p>Shellfish Shellfish includes clams, oysters, blue mussels, and bay scallops. On the refuge, shellfish harvest occurs off Scotts Landing and Parkertown Dock Road. Access to clamming beds will occur from the Clamming Trail on Holgate.</p>	<p>No Action: No locations would be added to the areas currently available for shellfish harvest. Shellfish regulations are set by state officials to ensure stable populations. Other than the direct loss of individuals, no impacts would occur from this alternative.</p> <p>Proposed Action: A Clamming Trail at Holgate was added as a part of the refuge’s Big 4 CD in 2019 and would be open to clamming as a part of this EA. No new impacts would occur from this alternative as the new access is replacing access previously sought around the southern tip of the island. Given the large quantity of shellfish harvested in the State, the impacts from refuge harvest would be minor relative to the overall population. Any changes would be monitored by the State and could result in changes to regulations set by the State.</p>
<p>Other Wildlife and Aquatic Species The refuge supports a diversity of wildlife species of southern New Jersey including game and nongame species, reptiles, amphibians, and invertebrates, which are contributors to the overall biodiversity. Songbirds, raptors, and waterbirds breed on the refuge, whereas shorebirds and waterfowl primarily utilize the refuge as wintering and migratory habitat. Refuge lakes and impoundments provide habitat for marine and freshwater species year-round.</p>	<p>No Action: This alternative currently results in some short-term, but negligible, negative impacts to small mammals, birds, and other wildlife due to disturbance in areas where human access for fishing activities occurs.</p> <p>Proposed Action: While resident and non-game wildlife in areas newly opened to fishing may be negatively impacted by disturbance, that impact is expected to be short-term and negligible. The Middle Branch area will have more disturbance than previously occurred. This disturbance would be year-round but increased spring through and fall due to the general increase in fishing in warmer months. Based on past experience by refuge management, wildlife in newly open areas will grow accustomed to these new disturbances after a few weeks.</p>
<p>Threatened and Endangered Species and Other Special Status Species A Section 7 Endangered Species Act review was conducted in coordination with the Service’s New Jersey Field</p>	<p>No Action: Potential impacts to piping plovers includes disturbance from anglers prior to the March 15 closure as birds are arriving. Once the beach closes, no effects on plovers would occur other than pedestrians that violate the law and walk along the beach. Staff are generally present on the beach and can direct people to exit the area.</p>

<p>Office for federally listed species. Species known to occur on the refuge include piping plover (<i>Charadrius melodus</i>), red knot (<i>Calidris canutus rufa</i>), American chaffseed (<i>Schwalbea americana</i>), Knieskern’s beaked-rush (<i>Rhynchospora knieskernii</i>), seabeach amaranth (<i>Amaranthus pumilus</i>), sensitive joint-vetch (<i>Aeschynomene virginica</i>), swamp pink (<i>Helonias bullata</i>), northern long-eared bat (<i>Myotis septentrionalis</i>), and eastern black rail (<i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i>). Piping plover, red and seabeach amaranth are the only species that occur in fishing areas.</p>	<p>Seabeach amaranth grows along the dune edge and could be impacted by vehicles and trampling after the beach opens in September. Refuge staff fence areas where plants are found which reduces the potential for negative impacts to the plants.</p> <p>Red knots use beach habitats and marsh mudflats and could be disturbed by pedestrians and vehicles when Holgate is still open, and by anglers in boats using tidal creeks to fish as they travel between locations. These disturbances are expected to be minimal and unlikely to adversely affect knots.</p> <p>No adverse impacts are expected for American chaffseed, Knieskern’s beaked-rush, northern long-eared bat, swamp pink, sensitive joint-vetch, and eastern black rail as those species do not occur in fishing areas.</p> <p>Proposed Action: Under this alternative, the same impacts are expected as the No Action alternative as only one new area is being opened (Middle Branch). No species evaluated under Section 7 of the Endangered Species Act occur at that site.</p>
<p>Vegetation (including vegetation of special management concern) Vegetation varies throughout the refuge, but fishing areas are generally minimally vegetated. Fishing habitat descriptions are provided in Table 2.</p>	<p>No Action: Negligible negative impacts currently occur to vegetation as a result of fishing. Some marsh vegetation at the Graveling Point and Cedar Run Dock Road fishing areas is trampled, and foot trails have been created by anglers. Cutting vegetation is prohibited on the refuge. Some illegal vegetation clearing may occur along vegetated banks (e.g., along Lily Lake), but the impact is minor. No off-road vehicles are permitted on the refuge.</p> <p>Proposed Action: Vegetation would not be impacted by the addition of boat access as travel would only occur in open water areas. The closing of the back bay area of Holgate to vehicles will improve refuge vegetation that was previously driven over. The proposed fishing pier at Lily Lake could disturb vegetation during construction, but the site would be re-vegetated in areas where permanent facilities are not constructed. Therefore, only short-term and minor impacts are anticipated to vegetation from this alternative.</p>

<p>Air Quality Edwin B. Forsythe NWR is a designated Class I air quality area and the 6,600-acre Brigantine National Wilderness Area is afforded special protection by the Clean Air Act. The State of New Jersey and the Service work together to monitor air quality. Due to industrial facilities to the west, the area never reaches attainment for ozone (USFWS 2019a).</p>	<p>No Action: Negligible, short-term adverse impacts occur on the refuge related to the current fishing program due to the use of fossil fuels by anglers traveling to the refuge.</p> <p>Proposed Action: A negligible, short-term adverse impact could be associated with increased emissions from vehicles if fishing participation increases; however, it is anticipated that if those new anglers were not traveling to the refuge, they would likely be traveling to other locations or engaging in other activities that would have comparable emission releases. Additionally, new boating access is limited to non-motorized boats so no new emissions releases would occur due to boating.</p>
<p>Water Resources Hundreds of miles of tidal creeks occur in the refuge. Lily Lake and Middle Branch are two of only a few freshwater lakes/impounded areas on the refuge.</p>	<p>No Action: Impacts to water resources are generally by motorized boats used by anglers that may inadvertently leak polluting substances in tidal creeks. No motorized boats are permitted in freshwater areas of the refuge. Impacts are considered minor and short-term.</p> <p>Proposed Action: New refuge areas open to boating associated with fishing could be impacted from increased activities and boats (e.g., littering). The impact is expected to be minor and short-term. Further evaluation of the proposed fishing pier in Lily Lake for NEPA would be conducted as a part of the design process when that project is funded.</p>
<p>Wetlands The refuge is comprised of over 33,000 acres of tidal saltmarsh, over 7,000 acres of forested wetlands, 1,700 acres of impoundments, and nearly 600 acres of freshwater herbaceous wetlands. A few of the fishing sites are in or near wetlands.</p>	<p>No Action: Sites impacted by anglers include Graveling Point and Cedar Run Dock Road, where visitors have created trails for access to fishing sites on saltmarshes. That impact is permanent, but negligible; and the past creation of trails encourages pedestrians to stay on the worn paths rather than creating new trails.</p> <p>Proposed Action: The new boating access will not impact wetlands. Further evaluation of the proposed fishing pier in Lily Lake for NEPA would be conducted as a part of the design process when that project is funded.</p>
<p>Wilderness The approximately 6,600-acre Brigantine National Wilderness Area occurs in the refuge. The area is comprised of Holgate</p>	<p>No Action: Negligible impacts occur from foot traffic on Holgate as the wilderness area begins above the mean high water line.</p>

<p>(southern end of Long Beach Island); Little Beach Island (south of Little Egg Inlet); and the Mullica-Motts area (south of the Mullica River). Fishing occurs in adjacent streams in Little Beach and the Mullica-Motts areas.</p>	<p>Proposed Action: The Clamming Trail would be opened for fishing/clamming in the Holgate portion of the wilderness area. A minimum tools analysis was conducted in November 2018, and the trail was evaluated in the refuge’s Big 4 CD in 2019. The Clamming Trail alternative was selected as it is not a permanent trail, will be marked by signage, and will avoid habitat degradation to fragile wetlands on the previous access route (by vehicle).</p>
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<p>VISITOR USE AND EXPERIENCE</p>	
<p>AFFECTED ENVIRONMENT</p>	<p>ANTICIPATED DIRECT AND INDIRECT IMPACTS</p>
<p>The refuge is open to all six of the Refuge System’s priority public uses (hunting, fishing, wildlife observation, wildlife photography, environmental education and environmental interpretation). About 250,000 people visit the refuge each year: 21,000 to the Visitor Information Center; 100,000 to the Wildlife Drive; 58,000 on 6-foot trails; 2,500 hunters; and 27,000 anglers, among other users.</p>	<p>No Action: Nearly all of the refuge’s fishing activities occur in areas where none of the other priority public uses occur. Holgate is used by anglers and visitors engaging in wildlife observation and photography. Scotts Landing is used by anglers and for boat launching for angling, hunting and wildlife observation and photography. No known conflicts have occurred as a result of these mixed uses.</p> <p>Proposed Action: The current proposal expands boating access at Middle Branch Trailhead and allows fishing from boats at Loveladies Kayak Area. The use of only non-motorized boats at these sites should limit conflict between users to help maintain a serene visitor experience. The Clamming Trail at Holgate will be available for all visitors and use is expected to be moderate. The trail will be marked with signs to direct users. We expect minimal additional impacts to users groups as a result of this alternative. In total we expect an additional 5,000 angler-related visits each year.</p>

<p>CULTURAL RESOURCES</p>	
<p>AFFECTED ENVIRONMENT</p>	<p>ANTICIPATED DIRECT AND INDIRECT IMPACTS</p>
<p>Some refuge lands were formerly occupied by the Delaware Tribe of Indians and the Delaware Tribe of</p>	<p>No Action: No adverse impacts would occur under this alternative.</p>

<p>Oklahoma. Some artifacts have been found when conducting Section 106 investigations ahead of construction work in various refuge locations, but primarily in the vicinity of the refuge Headquarters in Galloway, Township. These artifacts were largely remnants of pre-Industrial homesteads and were catalogued and stored. No sites eligible for listing on the National Register of Historic Places would be open for fishing.</p>	<p>Proposed Action: Section 106 compliance was conducted on December 12, 2019. None of the proposed actions will result in impacts to significant historic properties or other cultural resources. Further evaluation of the proposed fishing pier in Lily Lake would be conducted as a part of the design process when that project is funded.</p>
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<p>REFUGE MANAGEMENT & OPERATIONS</p>	
<p>AFFECTED ENVIRONMENT</p>	<p>ANTICIPATED DIRECT AND INDIRECT IMPACTS</p>
<p>Land Use Infrastructure for access to fishing areas associated with refuge management includes roads and trails. While most fishing occurs north of the Headquarters area, anglers using Lily Lake or Scotts Landing may use the Visitor Information Center to gather information or use the restrooms. The refuge is crisscrossed with well-traveled roads owned by local municipalities and counties.</p>	<p>No Action: Current levels of use of refuge infrastructure are short-term and have negligible impact. Planned enhancements at Scotts Landing will improve access and use at that site. Additional NEPA will be conducted to support those improvements.</p> <p>Proposed Action: Existing infrastructure maintained by towns and counties will continue to provide access to anglers. Proposed improvements will likely modestly increase the number of anglers on the refuge, but impacts to local public roads and refuge infrastructure are expected to be negligible.</p>
<p>Administration There are currently eight full-time employee positions at the refuge. We also have short-term visitor services and maintenance/trails support positions. Fishing-related job</p>	<p>No Action: Approximately \$6,500 of the refuge’s budget is currently spent on the fishing program. Refuge managers coordinate the budget each year to ensure funds are available. Occasional assistance from State Conservation Officers and local police departments occurs. The refuge has one Federal Wildlife Officer. No permits are sold and no funds are collected from the public to fish on the refuge.</p>

<p>duties are performed by the fish and wildlife officer (law enforcement and community coordination); visitor services manager (online public communication); refuge and deputy refuge managers (assuring administrative record is updated, ensure fishing-related tasks are accomplished); and maintenance staff (maintaining signs, trail maintenance, removing trash, parking lot maintenance). The refuge has an annual budget of about \$1.4 million.</p>	<p>Proposed Action: Estimated staff costs to implement this alternative are \$15,360. This is largely due to the increased time to manage the addition of new sites. It will require approximately 5 percent of the refuge fish and wildlife officer’s time to enforce fishing, as well as about 2 percent of refuge management time (2 people) to oversee and implement the program. Some visitor services manager and maintenance time will also be needed. The budget would be managed to support the program. Large projects will require funding from sources other than the annual refuge operating budget.</p>
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<p style="text-align: center;">SOCIOECONOMICS</p>	
<p style="text-align: center;">AFFECTED ENVIRONMENT</p>	<p style="text-align: center;">ANTICIPATED DIRECT AND INDIRECT IMPACTS</p>
<p>Local and regional economies The refuge is located 6 miles from Atlantic City, New Jersey, but located in Ocean, Burlington and Atlantic counties (1.3 million residents) (US Places.com 2019). Predominant land uses in vicinity of the refuge are residential and commercial development. The refuge averages about 250,000 visitors per year. Total expenditures from refuge visitors were \$4.1 million with non-residents accounting for \$2.6 million or 62 percent of that total in 2017. Expenditures on refuge fishing activities alone accounted for about 21 percent of all expenditures (Caudill and Carver 2019).</p>	<p>No Action: The current program has a minor, long-term beneficial impact to the local economy.</p> <p>Proposed Action: Fishing use of the refuge would increase as a result of the proposed action due to improvements in refuge facilities, which would have long-term economic benefits to the community. Construction projects will have short-term, minor positive impacts to the economy. Therefore, additional local and regional economies will have short- and long-term moderate beneficial impacts as a result of the proposed action.</p>

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

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”.

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)”.

<p>Past, Present, and Reasonably Foreseeable Activity in Area of Analysis</p>	<p>Descriptions of Anticipated Cumulative Impacts</p>
<p>Fishing Fishing occurs on public lands that are found adjacent to several locations of Edwin B. Forsythe NWR. These areas include: Ocean County Natural Lands Trust, Manahawkin Wildlife Management Area (WMA), Stafford Forge WMA, Great Bay Boulevard WMA, and Bass River State Forest.</p>	<p>Freshwater Fishes: We conduct the refuge fishing program within the framework of State regulations. Harvest rates are established by the State of New Jersey’s Division of Fish and Wildlife. The proposed fishing program rules will be the same as, or more restrictive than, regulations throughout the State of New Jersey. By maintaining 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. The refuge regularly coordinates with the State about the fishing program.</p> <p>Fish in freshwater refuge habitats are limited in their geographic range as those areas have limited flows in or out of the system. Cumulative impacts to freshwater fish are limited to individual ponds/lakes.</p> <p>Saltwater Fishes: In accordance with the Atlantic States Marine Fisheries Commission’s Fishery Management Plans (FMPs) (http://www.asmfc.org/fisheries-management/program-overview) for these species, the State of New Jersey is required to demonstrate that harvest of a given species under the current management regime is sustainable (i.e., will not diminish the potential future stock reproduction and recruitment). The State accomplishes this by conducting multiple fishery dependent and independent surveys throughout New Jersey marine waters. State regulations regarding recreational fishing, including minimum sizes, open seasons, and bag limits that apply to all marine waters in the State should prevent the recreational harvest of target species from negatively impacting target species abundance and have only minor cumulative impacts. The refuge can be more restrictive, but cannot be more liberal than the FMPs allow.</p>
<p>Development and Population Increase The New Jersey population has been increasing, though only slightly, for decades. In the last 10 years, some municipalities near the refuge have experienced</p>	<p>Because the refuge works closely with the NJDFW, who oversees fishing regulations and harvest rates, the refuge fishing program can be adjusted to ensure it meets regional and landscape level goals in the region and does not contribute to negative cumulative impacts brought on by development of human population increases and consumption.</p>

<p>population reductions (<i>e.g.</i>, Bass River: -13%; Lavallette: -10%) as people move back to urban centers (NJ.com). Developmental pressure, however, continues, especially in high elevations relative to areas that were traditionally constructed in tidal saltmarshes (<i>pers. obs.</i>). Development and population growth are events which are most likely to reduce wildlife and available habitat.</p>	
<p>Use of lead fishing gear Lead tackle is permitted in New Jersey but will be prohibited on the refuge for fishing.</p>	<p>Although lead sinkers are legal to use in New Jersey, negative impacts to wildlife are of concern and it will be prohibited on the refuge. Anglers may choose to use non-lead alternatives such as tin, steel, or ceramic sinkers. This can reduce the impacts of lead to wildlife and the environment.</p>
<p>Climate Change Ecological stressors are expected to affect a variety of natural processes and associated resources into the future. A primary concern at the refuge is sea level rise and the impact on marsh elevation. This is already causing marsh migration, marsh inundation, and increased mortality in forests adjacent to saltmarshes. Finfish and shellfish species are likely being impacted by shifting habitat through changes in water temperature, currents, and loss of marsh for nurseries due to prolonged inundation that leads to die-off.</p>	<p>Under this alternative, the refuge would work with the NJDFW and use an adaptive management approach for its fishing hunt program, reviewing the program regularly and revising if necessary. The Service’s fishing program can be adjusted to ensure that it does not contribute further to the cumulative impacts of climate change on fin- and shellfishes.</p>

Summary of Findings and Conclusions

The purpose of this EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a Finding of No Significant Impact (FONSI). The term “significantly” as used in NEPA requires consideration of both the context of the action and the intensity of effects.

No Action Alternative- There would be no additional costs 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. The refuge would not increase its impact on the economy and would not provide new fishing and access opportunities, other than those already planned at Scotts Landing. This alternative has the least direct impacts of physical and biological resources; however, not enhancing fishing opportunities and access will have a long-term adverse impact on public engagement and support of the refuge. In addition, it would minimize our mandates under the NWRSA and Secretarial Order 3356.

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

The Service believes that fishing on the refuge in accordance with NJDFW regulations will not have a significant impact on habitat, wildlife, or the human environment. Opening new fishing sites would promote a priority use of the Refuge System and support CCP goals. Expanding fishing on the refuge in an area where quality fishing exists but public access is limited, would support local economies and engage more people in outdoor recreation, fostering natural resource stewardship. The refuge will evaluate the fishing program on a regular basis and modify, as needed, to protect fish, wildlife, and their habitats.

List of Sources, Agencies and Persons Consulted

To prepare the current plan and alternatives, refuge staff met with the NJDFW, and stakeholders from the Atlantic, Burlington and Ocean County Sportsmen Federations, South Jersey Bass Club Association, Absecon Saltwater Sportsmen, Ocean County Farm Bureau and the general public.

- N.J. Division of Fish and Wildlife – Larry Herrighty, Dave Golden, Russ Babb, Jeff Normant, Jeff Brust, Eric Boehm, Heather Corbett, Chris Smith
- Atlantic County Sportsmen Federation –Eric Gaupp, Les Murray
- Burlington County Sportsmen Federation – Tom Walsh
- Ocean County Sportsmen Federation –Tom Glowacka, Charles Hendrickson
- South Jersey Bass Club Association – Fred Lentz
- Absecon Saltwater Sportsmen – James Van Daley
- Ocean County Farm Bureau – Brick Wenzel

List of Preparers

Virginia Rettig – Refuge Manager
Rich Albers – Deputy Refuge Manager
Vinny Turner – Wildlife Biologist
Chris Pancila – Fish and Wildlife Officer
Keena Graham – Visitor Services Manager

State Coordination

Refuge staff met with NJDFW representatives on February 22, 2018, to discuss the current fishing program and to discuss recommendations for the future. After that meeting, several further conversations were held and emails exchanged to gather more information and recommendations. NJDFW has reviewed and provided initial comments on this EA and the associated draft fishing plan.

Public Outreach

Initial scoping targeted representatives from the three local county sportsmen federations and other organizations in a February 2019 meeting. They were informed that all members and the general public would have the opportunity to provide comments later in the process. The EA and hunt plan will be advertised to the public for comment via the refuge’s website, social media accounts, and press releases. At least one public meeting will be held.

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 on this permit application **may significantly affect** the quality of the human environment and the Service will prepare an Environmental Impact Statement.

Preparer Signature: _____ Date: _____

Name/Title/Organization: _____

Certifying Officer Signature: _____ Date: _____

Name/Title: _____

References:

- Caudill, J. and E. Carver. 2019. Banking on Nature 2017: The economic contributions of national wildlife refuge recreational visitation to local communities. USFWS, Falls Church, VA. 32pp.
- NJ.com. 2019. <https://expo.nj.com/news/g661-2019/01/4c2cb577f19716/the-30-fastestshrinking-towns-in-nj-in-the-past-decade.html>. Accessed March 21, 2019.
- U.S. Fish and Wildlife Service [USFWS]. 2004. Edwin B. Forsythe National Wildlife Refuge Comprehensive Conservation Plan. June 2004. USFWS, Division of Planning, Hadley, MA. 200pp.
- U.S. Fish and Wildlife Service. 2013. Draft Habitat Management Plan, Edwin B. Forsythe National Wildlife Refuge, December June 2013. USFWS, Division of Natural Resources, Hadley, MA. 137pp.
- U.S. Fish and Wildlife Service. 2019a. <https://www.fws.gov/refuges/airquality/ARIS/BRIG/>. Accessed March 21, 2019.
- US Places.com. 2019. <https://us-places.com/New-Jersey/population-by-County.htm>. Accessed March 21, 2019.

OTHER APPLICABLE STATUES, 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

- 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)
- Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22

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)

APPENDIX D
INTRA-SERVICE SECTION 7 EVALUATION

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Project Name:	Fishing on EB Forsythe NWR	Originating Person:	Virginia Rettig
Townships:	Galloway	Telephone Number:	609-382-7638
County:	Atlantic & Ocean	Email Address:	Virginia_rettig@fws.gov
Date:	11/18/19		

Distance to nearest town: Adjacent to Galloway Township

- I. Region:** 5
- II. Service Activity (Program):** NWRs, Edwin B. Forsythe NWR
- III. Pertinent Species and Habitat:**

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

Birds

- Piping plover (*Charadrius melodus*)
- Red knot (*Calidris canutus rufa*)

Flowering Plants

- American chaffseed (*Schwalbea americana*)
- Knieskern's beaked-rush (*Rhynchospora knieskernii*)
- Seabeach amaranth (*Amaranthus pumilus*)
- Sensitive joint-vetch (*Aeschynomene virginica*)
- Swamp pink (*Helonias bullata*)

Mammals

- Northern Long-eared Bat (*Myotis septentrionalis*)

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

- Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*)

C. Candidate species within the action area:

None

D. Include species/habitat occurrences on a map.

An Information for Planning and Conservation (IPaC) trust resources list is attached that covers areas to be opened for fishing. Maps are included. All activities will take place on Edwin B. Forsythe NWR (Refuge).

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

IV. Description of proposed action (attach additional pages as needed):

We propose to expand our existing fishing program. We are adding one new fishing site and increasing access to two other sites. Fishing will be permitted year-round at:

- Middle Branch Trailhead (adding non-motorized boat access)
- Loveladies Kayak Area (new fishing site)
- Cedar Run Dock Road
- Parkertown Dock Road
- Graveling Point
- Scott's Landing
- Lily Lake (non-motorized boats already permitted)

Fishing access will be permitted September 1 through March 15 by vehicle each year at:

- Holgate Beach (through March 31 by foot), front beach and the new Clamming Trail to the backbay

Parking for all sites except Loveladies is available within no more than a few hundred feet from the fishing or boat access location. Single individuals or anglers in small groups will traverse areas open to fishing, generally to walk to a fishing or crabbing spot in which they will remain for a part or whole day. This activity could occur daily by hundreds of anglers throughout the refuge.

Lead fishing tackle will be prohibited for fishing on Refuge lands.

Fishing in tidal creeks throughout the refuge will also occur. Those waters are State-owned and are open to saltwater fishing at all times, and are included for analysis here. Saltmarsh is not open for use (e.g., for walking).

V. Determination of effects:

A. Explanation of effects of the action on species and critical habitats in items III, A, B, and C (attach additional pages as needed):

Piping plovers breed on Holgate in beach/dune habitat. Birds return in March and migrate through as late as September. No fishing will occur in the areas used by this species during the breeding season. Beaches will be closed to all public use April 1 through August 31 each year. Vehicular use will close March 15.

Red Knots migrate through coastal wetlands in spring and fall and spend winters along coastal waters in Central and South America. The Refuge regularly supports migrating red knot flocks that occasionally number in the hundreds of birds. Red knots likely concentrate at and near the inlet (at Holgate) but may occur anywhere along the sand

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

beach, shoals, or tidal flats of the refuge. Available eBird data show red knots in both spring (May 1 to June 7) and fall (July 15 to November 30) migrations. Knots are sensitive to disturbance from humans, which can impact bird's energy budgets (more time alert/fleeing, less time feeding/roosting), preclude use of otherwise suitable habitats, and potentially impact the bird's abilities to complete their annual migration and/or their survival rates (Service 2014 "Rufa Red Knot Background Information and Threats Assessment")

https://www.fws.gov/northeast/redknot/pdf/20141125_REKN_FL_supplemental_doc_FINAL.pdf). Fishing activity could flush birds as anglers boat along tidal streams throughout the refuge.

American Chaffseed occurs in early successional damp, sandy (sandy peat, sandy loam) sites. American chaffseed is generally found in habitats described as open, moist pine flatwoods, fire-maintained savannas, ecotonal areas between peaty wetlands and dry sandy soils, bog borders, and other open grass-sedge systems. This species appears to be shade intolerant, and occurs in species-rich plant communities where grasses, sedges, and other savanna plants are numerous. There are two known occurrences of this species in New Jersey in the Pinelands Reserve. There are no known occurrences on the refuge. No fishing is proposed in these habitats.

Occurring only in southern New Jersey, Knieskern's beaked-rush is an obligate freshwater wetland species found in early successional habitats. The species occurs on the Refuge in Stafford and Lacey Townships, Ocean County. No fishing is proposed in these areas.

Sensitive joint-vetch inhabits the intertidal zone of fresh to brackish tidal river segments, typically in areas where sediments accumulate and extensive marshes are formed. The plant can also occur on accreting point bars and in sparsely vegetated microhabitats of tidal marsh interiors, such as low swales and areas of muskrat (*Ondatra zibethicus*) eat-out.

Seabeach amaranth exists on coastal beaches and one or two plants have been known to occur on the refuge in some years. Many plants were installed on Holgate in summer 2017 to expand the population. Some of those plants were doing well through 2019. If care is not taken the project could have some effect on this species due to trampling. Location of this species varies annually depending on seed dispersal, but generally favors areas in the foredune and not in areas of the surf that would be used for fishing. Vehicles on Holgate (used to access fishing sites) could threaten amaranth sites, if they are not marked.

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Swamp pink is an obligate freshwater wetland species and occurs on the refuge. No fishing is proposed in these sites; and therefore, is unlikely to affect this species.

The refuge contains habitat that could be used by the northern long-eared bat. However, none of the fishing areas are in wooded sites that would be used by this species.

Black rails require densely vegetated emergent wetlands. Rails can use tidal or non-tidal wetlands across the full salinity gradient, but require specific hydrologic conditions. Black rails need moist to saturated substrates (occasionally dry) interspersed with or adjacent to very shallow water (between 1 and 6 centimeters), with elevated refugia to escape high water events. Black rail records on and near the Refuge have been in salt marsh. In tidal areas, the black rail's habitat requirements correspond closely to the high marsh zone. Black rail surveys have been conducted in suitable habitat in the state since 2015 by NJDEP and have shown a decline; with zero detections since the 2018 surveys. Boaters accessing fishing along coastal streams could impact (flush) black rails.

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

Piping plovers generally do not occur during the time fishing is conducted on the parts of the refuge known to support this species so no actions would be implemented to reduce adverse effects.

Red knots may occur but no actions will be taken to reduce effects because they occur in such small numbers and unpredictable locations on refuge beaches and marshes that the impact from fishing would be negligible.

American chaffseed does not occur on the Refuge.

Knieskern's beaked-rush, Sensitive joint vetch, and swamp pink are not near any fishing areas so the activity will have no effect on those species.

Seabeach amaranth could be present in areas where vehicles may occur on Holgate. Refuge staff will ensure plant protection by surveying potential plant sites before the beach re-opens in September each year. If plants are found, the areas will be marked off to ensure no negative impacts occur.

Northern long-eared bats may occur on the refuge, but no fishing will be occurring near potential bat habitat so no effect is expected to this species.

**INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan**

VI. Effect determination and response requested: [* = optional]

A. Listed species/designated critical habitat:

<u>Determination</u>	<u>Response requested</u>
no effect/no adverse modification (species: <u>American chaffseed, Knieskern's beaked-rush, northern long-eared bat, swamp pink, sensitive joint vetch</u>)	<u> X </u> Concurrence
may affect, but is not likely to adversely affect species/adversely modify critical habitat (species: <u>piping plover, red knot, seabeach amaranth</u>)	<u> X </u> *Concurrence
may affect, and is likely to adversely affect species/adversely modify critical habitat (species: _____)	_____ Formal Consultation

B. Proposed species/proposed critical habitat:

<u>Determination</u>	<u>Response requested</u>
no effect on proposed species/no adverse modification of proposed critical habitat (species: <u>Eastern black rail</u> _____)	<u> X </u> *Concurrence
is likely to jeopardize proposed species/ adversely modify proposed critical habitat (species: _____)	_____ Conference

C. Candidate species:

<u>Determination</u>	<u>Response requested</u>
no effect (species: _____)	_____ *Concurrence
is likely to jeopardize candidate species (species: _____)	_____ Conference

**INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan**

Virginia Petty
Project Biologist/Supervisor (Requestor)

11-18-2019
Date

VII. Reviewing ESFO Evaluation:

- A. **Concurrence** _____ **Nonconcurrence** _____
- B. **Formal consultation required** _____
- C. **Conference required** _____
- D. **Informal conference required** _____
- E. **Remarks (attach additional pages as needed):**

[Signature]
Endangered Species Biologist (Reviewer),
New Jersey Field Office

11-20-19
Date

[Signature]
Assistant Supervisor, New Jersey Field Office

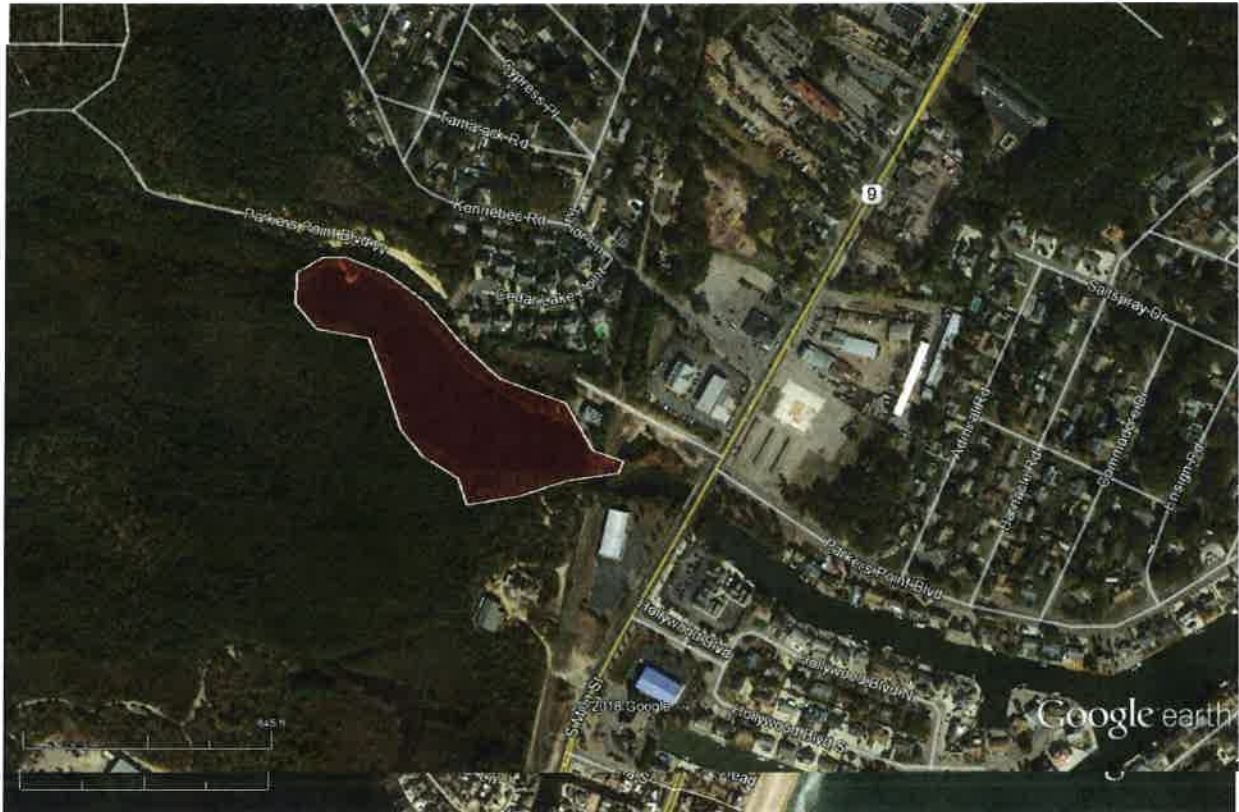
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Date

VIII. Map

Maps of areas open to fishing. All tidal marshes were included as a part of this submittal.

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Middle Branch Trailhead, Lacey Township



Loveladies Kayak Area, Loveladies

Cedar Run Dock Road, Stafford Township



INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Parkertown Dock Road, Eagleswood Township



Graveling Point, Tuckerton Borough



INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Holgate, Long Beach Township



Scott's Landing, Galloway Township



INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM
E.B. Forsythe NWR – Fishing Plan

Lily Lake, Galloway Township



Summary of Public Comments and Service Responses on the Edwin B. Forsythe National Wildlife Refuge Recreational Fishing Plan and Environmental Assessment

Introduction

In March 2020, the U.S. Fish and Wildlife Service (Service, we, our) published the draft Recreational Fishing Plan and Environmental Assessment (EA) for Edwin B. Forsythe National Wildlife Refuge (NWR, the refuge). The draft plan and EA proposed opening new areas for fishing.

On March 19, 2020, we distributed a press release to news organizations and alerted visitors about the availability of the fishing plan with a posting on the refuge visitor information center doors. The plan was available on the refuge website, and a press release was shared on Facebook with a link to the plan. No public meetings were held due to bans on public gatherings due to COVID-19. Upon request, the public comment period was extended from May 1 until June 8, 2020. A total of 11 individuals or entities offered comments to the refuge. This document summarizes and responds to the substantive comments received.

Summary of Comments Received

After the comment period ended on June 8, 2020, we compiled all of the comments we received. Additionally, a meeting was held with members of the Jersey Coast Anglers Association on May 21, 2020, to explore expansion of land-based fishing opportunities for the public. We received 12 correspondences from 11 unique submitters.

Commenters Key:

1. Tom Siciliano, Sunrise Bay Anglers & Point Pleasant Fishing Club
2. Fred Lentz President of South Jersey Bass Club Association
3. New Jersey Division of Fish and Wildlife
4. George J. Brown, Jersey Coast Anglers Association
5. Mike Leonard, American Sportfishing Association (1)
6. Mike Leonard, American Sportfishing Association (2)
7. Paul Harris
8. Carl Hartman, American Angler Fishing Club
9. Michael Rosado
10. Brent Miller, Congressional Sportsmen’s Foundation
11. Douglas Taylor
12. Gary Conk, Sr., New Jersey Beach Buggy Association

Service’s Response to Comments by Subject

Directly beneath each subject heading, you will also see a list of unique correspondence numbers that correspond to the submitter name listed in Table 1.

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

Appendix E – Summary of Public Comments

Our discussion usually does not include detailed responses to comments we determined to be non-substantive, such as comments that solely support or object to our statements without providing reasoning that meet the criteria for a substantive comment; comments that do not pertain to the project area or proposal; or typographical corrections. A summary of changes to the draft plan and draft Compatibility Determination (CD) can be found at the end of this appendix.

The full versions of the Recreational Fishing Plan, CD, and draft EA are available online at: https://www.fws.gov/refuge/edwin_b_forsythe/

For additional information, please contact:

Virginia Rettig
Refuge Manager
Edwin B. Forsythe NWR
800 Great Creek Road
Galloway, New Jersey 08205
Phone: 609-652-1665

We grouped similar comments together and organized them by subject in the discussion below:

- General Comments on the Fishing Plan
 - General Support
 - Questions/Comments on Plan’s Organization, Content
- Opposition to Lead Prohibition
 - Opposition to lead ban due to lack of biological evidence
 - Opposition to lead ban due to lack of practical alternatives
 - Concern over the feasibility of enforcement
 - Opposition to lead ban because it prevents fishing opportunity
- Comments on Fishing Access
 - Concern over access to Holgate Beach
 - Support for expanded fishing access
 - Request that refuge reconsiders ice fishing
 - Request to expand fishing to Wildlife Drive impoundment system

General Comments on Fishing Plan

General Support

Commenters were supportive of the plan. Several anglers and associations and NJ Division of Fish and Wildlife (NJDFW) supported the expansion of the program. *ID # 2, 3, 4, 6, 9, 10*

Response: We appreciate the support, and remain interested in providing a variety of fishing opportunities for the public, which is supported by the National Wildlife Refuge System’s priority public uses policy. Sections 5(c) and (d) of the National Wildlife Refuge System Improvement Act (Improvement Act) states “compatible wildlife–dependent recreational uses are the priority general public uses of the NWRS 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.” Fishing 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. We generally implement regulations based on state and federal guidelines. Secretarial Order 3356 also directs “greater collaboration with state, tribes, and territorial partners” which encourages better alignment of refuge-specific regulations with State regulations.

Questions/Comments on Plan’s Organization, Content

Editing and comments directly related to organization and content to the fishing plan were provided by NJDFW. *ID# 3*

Response: We appreciate the thorough review, feedback and comments from the commenter on the fishing plan document. Edits and clarifications have been addressed in the final plan.

Opposition to Lead Prohibition

Opposition to lead ban due to lack of biological evidence

Comments were received opposing the proposed prohibition on lead fishing tackle due to lack of biological evidence to support a ban. *ID# 1, 4, 5, 6, 10*

Response: It is well-known that lead is a potent neurotoxin for both humans and wildlife. Lead-based products for waterfowl hunting were banned nationwide in 1991 based on clear evidence of the detrimental effects to wildlife in aquatic systems. Those effects have been known for over 100 years. In addition, there is no known benefit of introducing lead in natural systems. Prohibiting the use of lead tackle at Forsythe Refuge is consistent with the lead shot ban for waterfowl that inhabit the same pond, marsh and open water habitats where fishing will occur. This action is intended to reduce the unintentional introduction of a known neurotoxin into habitats used by people, diving ducks, loons, eagles, and other wildlife species sensitive to the effects of lead.

Opposition to lead ban due to lack of practical alternatives

Comments were received sharing concerns about not finding alternatives to lead for fishing gear and the costs of alternatives. *ID# 3, 5, 6, 10*

Response: While many stores in New Jersey may not currently provide non-toxic fishing gear, there are numerous producers and sellers in the online market. With the increasing implementation of non-toxic tackle throughout the United States, the market is growing and additional demand is expected to create a rise in production and availability. While there are currently no lead restrictions in the State, as the Forsythe Refuge implementation occurs, we believe that local businesses are more likely to respond and start selling non-toxic options.

Concern over the feasibility of enforcement

The ability to enforce a lead prohibition was questioned. *ID# 2, 4*

Response: While the refuge proposes to ban the use of lead tackle at the refuge, we are also proposing to use a phased approach in implementation that will allow anglers and the public additional time to understand and adapt to the new regulations. Conversion to non-toxic tackle will phase in over the next 5 years, and the refuge will be working with anglers to move toward voluntary use over that time to support enforcement efforts.

Opposition to lead ban because it prevents fishing opportunity

A commenter stated that the lead prohibition would discourage fishing by the public. *ID# 1*

Response: We have not seen fishing participation numbers decline at refuges that prohibit lead. The lead ban for fishing tackle on Forsythe Refuge will be implemented over a 5-year phase-in period, allowing anglers time to adapt to the new regulations without diminishing fishing opportunities. The refuge will conduct education programs and provide information to assist a valuable transition period that benefits fish, wildlife, and people.

Comments on Fishing Access

Concern over access to Holgate Beach

Several commenters requested that access by vehicle to Holgate Beach be extended to May 15 each year to allow anglers to fish for bluefish and striped bass there. *ID# 3, 7, 8, 11, 12*

Response: Holgate Beach is currently open to all users from September 1 through March 14, and for pedestrians until April 1 each year. The site is closed to provide undisturbed nesting grounds for beach-nesting birds, but particularly the federally threatened piping plover (*Charadrius melodus*). Plovers arrive at Holgate in early March to begin establishing their territories, and arrivals continue into early April. The Holgate site is primarily managed for piping plover use, which is the refuge's highest priority and obligation. Therefore, all other uses must be managed in a way that does not adversely impact the species, or conflict with the Endangered Species Act of 1973. Over the last 10 years, as smaller nesting sites have disappeared due to development and disturbance in

New Jersey, the Holgate site has gained in significance for this species, and the refuge now supports over 35 percent of plovers nesting in the state. We will continue to manage for piping plovers in a way that reduces impacts to them and supports recovery of this bird.

Support for expanded fishing access

Several commenters were interested in improved access to fishing, particularly for land-based saltwater fishing, as access is limited unless an angler owns a boat. One commenter requested access to sites along Route 30 in Atlantic County. *ID# 4, 6, 9, 11*

Response: We were pleased to get recommendations and ideas about creating improved access to saltwater locations. Conversations with the Jersey Coast Anglers Association provided excellent feedback on potential locations. Those sites that are viable options for development/improvement in the next five years were included as a part of the final Recreational Fishing Plan. Some sites may require partner participation for development to support refuge staff and resources, and we look forward to working with fishing organizations on these projects. We do not manage lands along Route 30, which is part of the Absecon Wildlife Management Area (NJ Division of Fish and Wildlife).

Request that refuge reconsider ice fishing

One commenter asked us to reconsider the closure of ice fishing on the refuge. *ID# 3*

Response: Ice fishing is only available in some years when sites are frozen. The two sites where this might occur would be Lily Lake and Middle Branch. Lily Lake has not frozen-through in decades due to rising winter temperatures. We have observed anglers on frozen portions of the lake with children and pets and cannot ensure public safety. Therefore, we are eliminating ice fishing from refuge activities.

Request to expand fishing to Wildlife Drive impoundment system

One commenter asked for fishing around the Wildlife Drive impoundment system to be permitted. *ID# 11*

Response: The Wildlife Drive area is managed for migratory birds and, secondarily, for wildlife observation. The site is heavily used with about 150,000 visitors each year. One of the goals of the refuge is to develop strategies to permit public uses but to manage them in space and time and to minimize impact to wildlife. All users of the area are restricted to the tops of the dike system to reduce interference with migratory bird use of surrounding habitats. This precludes the ability to provide fishing at the site. We have made an effort in the final Recreational Fishing Plan to add new land-based sites for fishing throughout the refuge.

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT

For RECREATIONAL FISHING

EDWIN B. FORSYTHE NATIONAL WILDLIFE REFUGE

OCEANVILLE, NJ

The U.S. Fish and Wildlife Service (Service) proposes to provide fishing opportunities for fresh- and saltwater finfish, crabs, and shellfish on the Edwin B. Forsythe National Wildlife Refuge (NWR, refuge) in accordance with the refuge Recreational Fishing Plan. The refuge is located in Ocean, Burlington and Atlantic Counties in southern New Jersey. This plan seeks to (1) provide the public with a quality recreational experience on refuge lands and increase opportunities and access for anglers; (2) design a fishing program that is administratively efficient and manageable with existing staffing levels; (3) implement a fishing program that is safe for all refuge users; (4) provide fishing opportunities for youth and those that need assistance; and (5) design a fishing program that is in alignment with refuge habitat management objectives.

Selected Action

Proposed Action Alternative

The refuge proposes to expand fishing opportunities and access in several locations (see Appendix B – Fishing Location Maps). This includes access to a 5-acre freshwater lake (Middle Branch), access to clamming beds on the west side of Holgate, providing new land-based saltwater fishing (Mantoloking Fishing Trail, deCamp Wildlife Trail, Good Luck Point, and Cedar Bonnet Island Trail), and the opening of fishing to non-motorized boaters in Loveladies; and as funding allows, installation of a fishing pier in Lily Lake, which would be further evaluated when it is designed.

Recreational fishing will be conducted according to Federal and New Jersey Division of Fish and Wildlife (NJDFW) regulations, with some additional conditions to protect fish, wildlife, and habitat, and reduce potential conflicts among other public uses. Anglers would have to comply with refuge-specific regulations, including but not limited to those contained in the Code of Federal Regulations (50 CFR §32.49), which are revised or updated annually as needed. A valid New Jersey fishing license will be required to fish freshwater areas, and saltwater anglers are required to register with the state's Saltwater Registry program. No additional refuge permit is required.

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 harmful 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 offers the best opportunity for recreational fishing that would result in a minimal impact on physical and biological resources, while meeting Service mandates under the National Wildlife Refuge System Administration Act

(NWRSA) of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997. The Service believes that expanding the fishing program on the refuge will not have a significant impact to wildlife, other uses, or refuge administration. Edwin B. Forsythe NWR’s Comprehensive Conservation Plan (CCP) published in 2004 identified the goal to provide and expand compatible fishing opportunities with specific objectives to expand fresh- and saltwater fishing access on the refuge. This alternative will best meet the purpose and need, refuge goal and 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 “...enhance recreational fishing, specifically regarding efforts to enhance and expand recreational fishing access.” 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

The No Action Alternative would continue to provide fishing opportunities and boating access at Lily Lake and Scotts Landing in Atlantic County, surf fishing at Holgate Beach and Graveling Point, and bank fishing and crabbing at Parkertown Dock Road, Cedar Run Dock Road and Scotts Landing. No expansion of existing opportunities would occur. Limited facility improvements would be proposed to enhance existing access. A rehabilitation project at Scotts Landing would occur as funding has been secured and planning is underway. However, this alternative does not fully meet the goals and objectives detailed in the 2004 CCP.

Summary of Effects of Selected Action

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

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

Affected Environment	Selected Action
Freshwater Finfish	Negligible, short-term adverse impacts
Saltwater Finfish	Negligible, short-term adverse impacts

Appendix F – Finding of No Significant Impact

Blue Crabs	Negligible, short-term adverse impacts (increased pressure from increased angler presence)
Shellfish	Negligible, short-term adverse impacts
Other Wildlife and Aquatic Species	Minor, short-term adverse impacts (disturbance)
Threatened and Endangered Species	Minor, short-term adverse impacts (plover and red knot disturbance)
Vegetation	Minor, short-term adverse impacts (trampling)
Air Quality	Negligible, short-term adverse impacts (emissions)
Water Resources	Minor, short-term adverse impacts (boat emissions)
Wetlands	Negligible, short-term adverse impacts
Wilderness	Negligible, short-term adverse impacts
Visitor Use and Experience	Negligible, short-term adverse impacts
Cultural Resources	No adverse impacts
Refuge Management & Operations	Moderate, long-term positive (providing opportunities)
Socioeconomics	Moderate, long-term positive impacts (economic growth)

Minimal public use conflicts are expected to occur on the refuge when people are engaged in fishing. The fishing program is distributed across a 50-mile-long portion of the New Jersey coast, and much of the fishing on the refuge occurs in designated areas that are generally not used for other authorized uses. Anglers will generally be walking along refuge trails or using non-motorized (or electric motors) boats. Given the habitat types near fishing areas and observation from staff, anglers would have minimal effect on nesting birds of conservation concern. The new Holgate Clamming Trail is expected to be used by people engaging in shellfishing and visitors that are engaging in other approved activities. Any conflicts should be minimal as the site is currently only open September 1 to March 31, when visitation is limited due to local population reduction (winter residents) and weather conditions. Overall, impacts to visitor services/recreation opportunities are considered short-term, minor and local.

The adverse direct and indirect effects of the selected action on refuge resources, such as air, water, soil, habitat, wildlife, aesthetic/visual resources, and wilderness values, are expected to be minor and short-term. However, we expect the long-term benefits to the human environment that these efforts will accomplish far outweigh any of the short-term adverse impacts discussed in the EA.

While refuges, by their nature, are unique areas protected for the 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 fishing opportunities on

Appendix F – Finding of No Significant Impact

the refuge on a regular basis to ensure that the fishing programs continue to contribute to the biodiversity and ecosystem health of the refuge and these opportunities do not contribute to any cumulative impacts to habitat or wildlife.

2. The refuge-specific regulations detailed in 50 CFR are measures that will reduce or avoid impacts. Fishing regulations will be enforced by refuge and State law enforcement officers. Maps and fishing information and regular social media posts, along with refuge and State law enforcement checks, 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:

- Ice fishing is not permitted due to a lack of ice safe enough to fish.
- No fishing is permitted from or in the waters adjacent to the Wildlife Drive to avoid disturbance to wildlife and visitors engaging in wildlife observation and photography.
- Fishing will not occur in areas where the activity would contribute to unacceptable levels of erosion, or would in any other way result in significant, detrimental impacts to fish, wildlife, and their habitats.
- We will permit non-motorized boat launching only in designated areas to prevent the erosion and degradation of wetlands or water quality and ensure public safety.
- The use of lead fishing tackle is prohibited on the refuge.

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 Recreational Fishing Plan).

Furthermore, the action is consistent with applicable laws and policies regarding the establishment of fishing on national wildlife refuges.

Public Review

The plan has been thoroughly coordinated with all interested and/or affected parties. To prepare the plan and alternatives, refuge staff met with the NJDFW, and stakeholders from the Atlantic, Burlington and Ocean County Sportsmen Federations, South Jersey Bass Club Association, Absecon Saltwater Sportsmen, Ocean County Farm Bureau, and the general public.

On March 19, 2020, we distributed a press release to news organizations and alerted visitors about the availability of the draft fishing plan with a posting on the refuge visitor information center doors. The plan was available on the refuge website, and a press release was shared on

Appendix F – Finding of No Significant Impact

Facebook with a link to the plan. No public meetings were held due to bans on public gatherings due to COVID-19. Upon request, the public comment period was extended from May 1 until June 8, 2020, for a total comment period of 81 days. A total of 11 individuals or entities offered comments to the refuge. Additionally, a meeting was held with members of the Jersey Coast Anglers Association on May 21, 2020, to explore expansion of land-based fishing opportunities for the public. Appendix E summarizes the substantive comments received on the proposal, and the Service responses.

Based on input we received during the public comment period, we have made three minor adjustments to the proposed alternative discussed in the EA:

1. Several commenters were interested in improved access to fishing, particularly for land-based saltwater fishing, as access is limited unless an angler owns a boat. We have added four additional refuge sites for land-based fishing opportunities, and these can be seen in Appendix B, Maps 10 through 13. These sites may require partner participation for development to support refuge staff and resources, and we look forward to working with fishing organizations on these projects.
2. Regarding the proposal to ban the use of lead tackle at the refuge, we will be using a phased implementation that will allow anglers and the public additional time to understand and adapt to the new regulations. Conversion to non-toxic tackle will phase in over the next 5 years, and the refuge will be working with anglers to move toward voluntary use over that time.
3. The increased focus on education and outreach for the lead tackle prohibition phase-in period will require additional staff time and funding. We estimate annual costs to implement the fishing program at the refuge will now be \$21,301, an annual increase of \$5,941 more than originally estimated.

Determination

Based upon a review and evaluation of the information contained in the EA, as well as other documents and actions of record affiliated with this proposal, the Service has determined that the proposal to expand recreational fishing on Edwin B. Forsythe 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 C) and is available upon request to Edwin B. Forsythe NWR.

The Service has decided to select the proposed action as described in the EA, with the minor modifications described in this document, and implement the Recreational Fishing Plan for Edwin B. Forsythe 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 National Wildlife Refuge System, and consistent with applicable laws and policies. See attached Compatibility Determination (Appendix A).

Appendix F – Finding of No Significant Impact

SHARON MARINO Digitally signed by SHARON MARINO
Date: 2020.07.08 16:29:16 -04'00'

Acting Regional Chief
National Wildlife Refuge System

Date