

APPENDIX C
THREATENED AND ENDANGERED SPECIES FINDINGS



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New Jersey Ecological Services Field Office
4 E. Jimmie Leeds Road, Suite 4
Galloway, NJ 08205
Phone: (609) 646-9310 Fax: (609) 646-0352

<http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

In Reply Refer To:

January 20, 2022

Consultation Code: 05E2NJ00-2020-SLI-1050

Event Code: 05E2NJ00-2022-E-01547

Project Name: Supawna Meadows National Wildlife Refuge Design/Build Marsh Restoration Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species that may occur in your proposed action area and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*)

If the enclosed list indicates that any listed species may be present in your action area, please visit the New Jersey Field Office consultation web page as the next step in evaluating potential project impacts: <http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

On the New Jersey Field Office consultation web page you will find:

- habitat descriptions, survey protocols, and recommended best management practices for listed species;
- recommended procedures for submitting information to this office; and
- links to other Federal and State agencies, the Section 7 Consultation Handbook, the Service's wind energy guidelines, communication tower recommendations, the National Bald Eagle Management Guidelines, and other resources and recommendations for protecting wildlife resources.

The enclosed list may change as new information about listed species becomes available. As per Federal regulations at 50 CFR 402.12(e), the enclosed list is only valid for 90 days. Please return to the ECOS-IPaC website at regular intervals during project planning and implementation to obtain an updated species list. When using ECOS-IPaC, be careful about drawing the boundary of your Project Location. Remember that your action area under the ESA is not limited to just the

footprint of the project. The action area also includes all areas that may be indirectly affected through impacts such as noise, visual disturbance, erosion, sedimentation, hydrologic change, chemical exposure, reduced availability or access to food resources, barriers to movement, increased human intrusions or access, and all areas affected by reasonably foreseeable future that would not occur without ("but for") the project that is currently being proposed.

We appreciate your concern for threatened and endangered species. The Service encourages Federal and non-Federal project proponents to consider listed, proposed, and candidate species early in the planning process. Feel free to contact this office if you would like more information or assistance evaluating potential project impacts to federally listed species or other wildlife resources. Please include the Consultation Tracking Number in the header of this letter with any correspondence about your project.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

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

This species list is provided by:

New Jersey Ecological Services Field Office

4 E. Jimmie Leeds Road, Suite 4
Galloway, NJ 08205
(609) 646-9310

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Chesapeake Bay Ecological Services Field Office

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2NJ00-2020-SLI-1050
Event Code: Some(05E2NJ00-2022-E-01547)
Project Name: Supawna Meadows National Wildlife Refuge Design/Build Marsh Restoration Project
Project Type: LAND - RESTORATION / ENHANCEMENT
Project Description: The refuge is located along the Delaware Bay, an area that is threatened by the effects of sea level rise. In 2010, a report by the PDE projected the future acreage of tidal wetland in the Delaware Estuary will decrease by approximately two-thirds by the year 2100 due to the rapid changes in sea levels.

The Supawna Meadows NWR Proposed Action area consists of an old stone breakwater along the Delaware River and approximately 262 acres of open water and marsh complexes located around it.

The purpose of the project is to increase the resiliency of degraded salt marshes within the Supawna Meadows National Wildlife Refuge (refuge) in response to ecosystem stressors, through a viable and cost-effective manner that upholds the United States Fish and Wildlife Service's (Service) and refuge's missions, purposes, and goals.

The Proposed Action is the restoration of tidal marsh hydrology at the Supawna Meadows Project Area (Project) through implementation of the following restoration techniques:

- Removal of portions of an offshore stone breakwater dike in select areas to improve tidal exchange
- Enhancement of the stone breakwater dike in select areas to provide shoreline protection

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.59924349400012,-75.5233338948172,14z>



Counties: Delaware and New Jersey

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 3 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key The specified area occurs within the range of the northern long-eared bat. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> This activity area is upstream of red knot habitat. Consultation is needed ONLY for proposed new or changed petroleum product storage or transport, and for spill response planning. No other activity types are expected to affect red knots in this area. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
<p>Bog Turtle <i>Glyptemys muhlenbergii</i></p> <p>Population: Wherever found, except GA, NC, SC, TN, VA</p> <p>No critical habitat has been designated for this species.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> Activity is in a supporting watershed for known/suspected bog turtle habitat. Consultation recommended only for activities involving significant changes to surface/ground water, including stormwater. See details on FWS NJFO website. <p>Species profile: https://ecos.fws.gov/ecp/species/6962</p>	Threatened

Insects

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/9743</p>	Candidate

Flowering Plants

NAME	STATUS
<p>Sensitive Joint-vetch <i>Aeschynomene virginica</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/855</p>	Threatened

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
SUPAWNA MEADOWS NATIONAL WILDLIFE REFUGE https://www.fws.gov/refuges/profiles/index.cfm?id=52571	3,503.729

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
Blue-winged Warbler <i>Vermivora pinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Common Loon <i>gavia immer</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/4464	Breeds Apr 15 to Oct 31
Double-crested Cormorant <i>phalacrocorax auritus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/3478	Breeds Apr 20 to Aug 31
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-breasted Merganser <i>Mergus serrator</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Red-throated Loon <i>Gavia stellata</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Ring-billed Gull <i>Larus delawarensis</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

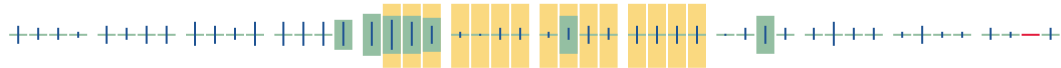
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee

BCC Rangewide
(CON)

Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Parks & Forestry

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

State Forestry Service
Mail Code 501-04
Office of Natural Lands Management – Natural Heritage Program
P.O. Box 420
Trenton, NJ 08625-0420
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March 15, 2016

Christy L. Benes
AMEC Foster Wheeler Environment & Infrastructure, Inc.
285 Davidson Avenue, Suite 405
Somerset, NJ 08873

Re: Cape May National Wildlife Refuge Complex - Marsh Enhancement/Design Project - Supawna Meadows
Block(s) - 5501; 4701, Lot(s) - 6 and 17; 25
Pennsville Township, Salem County

Dear Ms. Benes:

Thank you for your data request regarding rare species information for the above referenced project site in Pennsville Township, Salem County.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.1) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

NHP File No. 16-3907555-9531

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive NJ-GeoWeb website at the following URL, <http://www.state.nj.us/dep/gis/geoweb splash.htm> or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert J. Cartica', with a long horizontal flourish extending to the right.

Robert J. Cartica
Administrator

c: NHP File No. 16-3907555-9531

Table 1: On Site Data Request Search Results (7 Possible Reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. On or In the Immediate Vicinity of the Project Site Based on Search of the Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
3. Natural Heritage Priority Sites On Site	No	0 pages included
4. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	1 page(s) included
5. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.1	Yes	1 page(s) included
6. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
7. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Possibly on Project Site Based on Search of
Natural Heritage Database: Rare Plant Species and
Ecological Communities Currently Recorded in the New
Jersey Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Terrestrial Community - Other Classification</i>									
Brackish tidal marsh complex	Brackish Tidal Marsh Complex				G4	S2?	Y - Yes	1972-08-15	MANNINGTON MEADOW, KATES CREEK MEADOW, AND PINE ISLAND MEADOW.

Total number of records: 1

**On or In the Immediate Vicinity of the
Project Site Based on Search of the
Natural Heritage Database: Rare Plant Species and
Ecological Communities Currently Recorded in the New
Jersey Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Cyperus polystachyos var. texensis	Coast Flat Sedge		E	LP, HL	G5T5	S1	Y - Yes	1934-10-29	Along Delaware River 2 miles southwest of Harrisonville.
Schoenoplectus novae-angliae	New England Bulrush			HL	G5	S2	Y - Yes	1934-11-05	Along Delaware River, 2 miles southwest of Harrisonville.
Total number of records:		2							

<p>Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Species Based Patches</p>

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	Haliaeetus leucocephalus	Nest	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	Haliaeetus leucocephalus	Wintering	3	NA	State Threatened	G5	S1B,S2N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B
	Osprey	Pandion haliaetus	Nest	3	NA	State Threatened	G5	S2B
<i>Insecta</i>								
	Bronze Copper	Lycaena hyllus	Breeding/Courtship	4	NA	State Endangered	G4G5	S1
<i>Osteichthyes</i>								
	Shortnose Sturgeon	Acipenser brevirostrum	Migration Corridor - Adult Sighting	5	Federally Listed Endangered	State Endangered	G3	S1

**Vernal Pool Habitat on the
Project Site Based on Search of
Landscape Project 3.1**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	723
Potential vernal habitat area	791
Total number of records: 2	

Table 2: Vicinity Data Request Search Results (6 possible reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites within the Vicinity	Yes	See emailed attachments
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.1	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

**Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in
the New Jersey Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Cyperus polystachyos var. texensis	Coast Flat Sedge		E	LP, HL	G5T5	S1	Y - Yes	1934-10-29	Along Delaware River 2 miles southwest of Harrisonville.
Hydrocotyle ranunculoides	Floating Marsh-pennywort		E	LP, HL	G5	S1	Y - Yes	1985-09-15	North side of Lighthouse Road ca. 0.7 mile west-northwest of Harrisonville.
Schoenoplectus novae-angliae	New England Bulrush			HL	G5	S2	Y - Yes	1934-11-05	Along Delaware River, 2 miles southwest of Harrisonville.

Total number of records: 3

Terrestrial Community - Other Classification

Brackish tidal marsh complex	Brackish Tidal Marsh Complex				G4	S2?	Y - Yes	1972-08-15	MANNINGTON MEADOW, KATES CREEK MEADOW, AND PINE ISLAND MEADOW.
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Total number of records: 1

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.1 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	Haliaeetus leucocephalus	Nest	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	Haliaeetus leucocephalus	Wintering	3	NA	State Threatened	G5	S1B,S2N
	Cooper's Hawk	Accipiter cooperii	Nest	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B
	Osprey	Pandion haliaetus	Nest	3	NA	State Threatened	G5	S2B
	Savannah Sparrow	Passerculus sandwichensis	Breeding Sighting	3	NA	State Threatened	G5	S2B,S4N
<i>Insecta</i>								
	Bronze Copper	Lycaena hyllus	Breeding/Courtship	4	NA	State Endangered	G4G5	S1
<i>Osteichthyes</i>								
	Shortnose Sturgeon	Acipenser brevirostrum	Migration Corridor - Adult Sighting	5	Federally Listed Endangered	State Endangered	G3	S1

**Vernal Pool Habitat
In the Immediate Vicinity of Project Site
Based on Search of
Landscape Project 3.1**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Potential vernal habitat area	723
Potential vernal habitat area	791
Total number of records: 2	

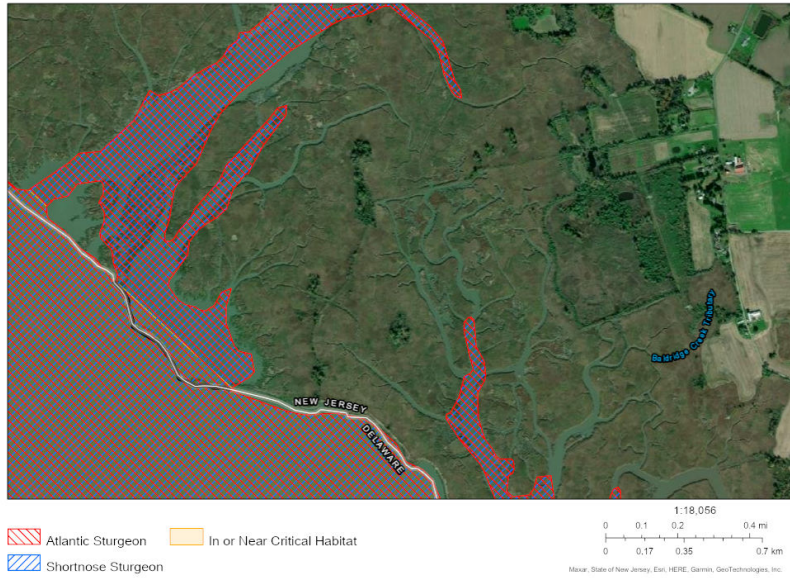


Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 2.41 acres

Feb 9 2022 10:35:25 Eastern Standard Time



Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	5	11.97	N/A
Shortnose Sturgeon	5	11.97	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	0	0	N/A
Atlantic Large Whales	0	0	N/A
In or Near Critical Habitat	1	2.39	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_DEL_PYL_MAF	Atlantic sturgeon	Post Yolk-sac Larvae	Migrating & Foraging	Delaware River	04/01	09/30	N/A	N/A	2.39
2	ANS_DEL_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	Delaware River	03/15	11/30	N/A	N/A	2.39
3	ANS_DEL_YOY_MAF	Atlantic sturgeon	Young of year	Migrating & Foraging	Delaware River	01/01	12/31	N/A	N/A	2.39
4	ANS_DEL_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	Delaware River	03/15	11/30	N/A	N/A	2.39
5	ANS_DEL_JUV_MAF	Atlantic sturgeon	Juvenile	Migrating & Foraging	Delaware River	01/01	12/31	N/A	N/A	2.39

Shortnose Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	SNS_DEL_YOY_MAF	Shortnose sturgeon	Young of year	Migrating & Foraging	Delaware River	01/01	12/31	N/A	N/A	2.39
2	SNS_DEL_PYL_MAF	Shortnose sturgeon	Post Yolk-sac Larvae	Migrating & Foraging	Delaware River	03/15	07/31	N/A	N/A	2.39
3	SNS_DEL_JUV_WIN	Shortnose sturgeon	Juvenile	Overwintering	Delaware River	11/01	03/31	N/A	N/A	2.39
4	SNS_DEL_JUV_MAF	Shortnose sturgeon	Juvenile	Migrating & Foraging	Delaware River	01/01	12/31	N/A	N/A	2.39
5	SNS_DEL_ADU_MAF	Shortnose sturgeon	Adult	Migrating & Foraging	Delaware River	01/01	12/31	N/A	N/A	2.39

In or Near Critical Habitat

#	Species	In or Near Critical Habitat Unit	Area(acres)
1	Atlantic Sturgeon	New York Bight Unit 4: Delaware River	2.39

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[Greater Atlantic Regional Office](#)
[Atlantic Highly Migratory Species Management Division](#)

Query Results

Degrees, Minutes, Seconds: Latitude = 39° 35' 12" N, Longitude = 76° 28' 13" W
Decimal Degrees: Latitude = 39.587, Longitude = -75.530









The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

*** WARNING ***

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH



Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
		Atlantic Herring	Juvenile Adult	New England	Amendment 3 to the Atlantic Herring FMP
		Red Hake	Adult	New England	Amendment 14 to the Northeast Multispecies FMP
		Windowpane Flounder	Adult Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Clearnose Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Longfin Inshore Squid	Eggs	Mid-Atlantic	Atlantic Mackerel, Squid, & Butterfish Amendment 11
		Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Atlantic Butterfish	Larvae Adult Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
		Scup	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Summer Flounder	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Black Sea Bass	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

HAPCs

Link	Data Caveats	HAPC Name	Management Council
		Summer Flounder	Mid-Atlantic

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

****For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

All spatial data is currently available for the Mid-Atlantic and New England councils,

Secretarial EFH,

Bigeye Sand Tiger Shark,

Bigeye Sixgill Shark,

Caribbean Sharpnose Shark,

Galapagos Shark,

Narrowtooth Shark,

Sevengill Shark,

Sixgill Shark,

Smooth Hammerhead Shark,

Smalltail Shark

Re: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

Wilson, Bartholomew D <bartholomew_wilson@fws.gov>

Wed 4/14/2021 6:07 AM

To: keith.hanson <keith.hanson@noaa.gov>

Cc: Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>; Hanlon, Heidi <heidi_hanlon@fws.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>; Karen Greene - NOAA Federal <karen.greene@noaa.gov>

Keith

That would be great.

Thanks

Bart

Bartholomew Wilson P.G., Ph D.
Project Manager
U.S. Fish and Wildlife Service
Coastal Delaware National Wildlife Refuge Complex
Cell: (302) 222-7602
Office: (302) 653-9345
Bartholomew_Wilson@fws.gov

From: Keith Hanson - NOAA Federal <keith.hanson@noaa.gov>**Sent:** Monday, April 12, 2021 1:02 PM**To:** Wilson, Bartholomew D <bartholomew_wilson@fws.gov>**Cc:** Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>; Hanlon, Heidi <heidi_hanlon@fws.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>; Karen Greene - NOAA Federal <karen.greene@noaa.gov>**Subject:** Re: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

Sure thing. Or I can send a google meeting invite, which allows for "screen sharing", if you all could benefit from that.

Let me know.

Keith

On Mon, Apr 12, 2021 at 12:57 PM Wilson, Bartholomew D <bartholomew_wilson@fws.gov> wrote:

let's plan to have a meeting with both NMFS and ESA, and we can plan for 10-11 am on Friday.

I'll send out call number.

Bart

Bartholomew Wilson P.G., Ph D.
Project Manager
U.S. Fish and Wildlife Service
Coastal Delaware National Wildlife Refuge Complex
Cell: (302) 222-7602
Office: (302) 653-9345
Bartholomew_Wilson@fws.gov

From: Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>**Sent:** Monday, April 12, 2021 10:54 AM**To:** Wilson, Bartholomew D <bartholomew_wilson@fws.gov>**Cc:** keith.hanson <keith.hanson@noaa.gov>; Hanlon, Heidi <heidi_hanlon@fws.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>; Karen Greene - NOAA Federal <Karen.Greene@noaa.gov>**Subject:** Re: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

I would be available for a meeting to discuss the potential need for initiating an ESA consultation on Friday, April 16. I could either join the times suggested by Keith or if you prefer to meet separately with HESD and PRD, any other time on Friday.

Peter

On Mon, Apr 12, 2021 at 9:08 AM Wilson, Bartholomew D <bartholomew_wilson@fws.gov> wrote:

I'll get right back to you on what works for us.

Bartholomew Wilson P.G., Ph D.
Project Manager

U.S. Fish and Wildlife Service
Coastal Delaware National Wildlife Refuge Complex
Cell: (302) 222-7602
Office: (302) 653-9345
Bartholomew_Wilson@fws.gov

From: Keith Hanson - NOAA Federal <keith.hanson@noaa.gov>
Sent: Monday, April 12, 2021 9:01 AM
To: Wilson, Bartholomew D <bartholomew_wilson@fws.gov>
Cc: Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>; Hanlon, Heidi <heidi_hanlon@fws.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>; Karen Greene - NOAA Federal <Karen.Greene@noaa.gov>
Subject: Re: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

To be more clear, those are all 1-hour windows of availability for me, so from 8-9am and 1-2pm on Thursday and 10-11am and 1-2pm on Friday.

Thanks,
Keith

On Mon, Apr 12, 2021 at 8:50 AM Keith Hanson - NOAA Federal <keith.hanson@noaa.gov> wrote:

Hi All,

Pretty jammed up this week, but Thursday at 8am or 1pm would work for me. 10AM or 1pm would work on Friday.

The NWP 27 permit should be a good start for our EFH purposes if you don't mind forwarding that along.

Thanks!

Keith

On Mon, Apr 12, 2021 at 8:44 AM Wilson, Bartholomew D <bartholomew_wilson@fws.gov> wrote:

Keith

Could we squeeze something in this week? The Refuge would like to get a sense of what will be needed and work to satisfy those needs for EFH assessment.

What does your schedule look like on Wednesday through Friday?

I can put a doodle poll together if there are blocks that are free for you.

Heidi, could you send out a project description?

Thanks so much!

Bart

Bartholomew Wilson P.G., Ph D.
Project Manager
U.S. Fish and Wildlife Service
Coastal Delaware National Wildlife Refuge Complex
Cell: (302) 222-7602
Office: (302) 653-9345
Bartholomew_Wilson@fws.gov

From: Keith Hanson - NOAA Federal <keith.hanson@noaa.gov>
Sent: Friday, April 9, 2021 10:31 AM
To: Wilson, Bartholomew D <bartholomew_wilson@fws.gov>
Cc: Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>; Hanlon, Heidi <heidi_hanlon@fws.gov>; undefined <karen.greene@noaa.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>
Subject: Re: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

Hi Bart,

I'm definitely open to the idea of a call, but it would be good to get some "read ahead" information to review, such as the previous documents/consultations, project descriptions, copy of the permit, etc.

I think my best availability would be the weeks of April 26 and May 3rd, but could try to squeeze something in earlier even if it is EFH/FWCA-only chat and you chat with Peter separately.

Thanks,
Keith

On Fri, Apr 9, 2021 at 7:15 AM Wilson, Bartholomew D <bartholomew_wilson@fws.gov> wrote:
Keith and Peter

Would it be helpful to setup a call to discuss the details (i.e. scope, timelines, phases, etc.) of the project and provide an opportunity to talk through questions (rather than emailing back and forth)?

Maybe something later next week?

Thanks

Bart

Bartholomew Wilson P.G., Ph D.
Project Manager
U.S. Fish and Wildlife Service
Coastal Delaware National Wildlife Refuge Complex
Cell: (302) 222-7602
Office: (302) 653-9345
Bartholomew_Wilson@fws.gov

From: Keith Hanson - NOAA Federal <keith.hanson@noaa.gov>

Sent: Thursday, April 8, 2021 12:02 PM

To: Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov>

Cc: Hanlon, Heidi <heidi_hanlon@fws.gov>; undefined <karen.greene@noaa.gov>; Wilson, Bartholomew D <bartholomew_wilson@fws.gov>; Braudis, Brian <brian_braudis@fws.gov>; Turner, Noel L <noel_turner@fws.gov>

Subject: [EXTERNAL] Re: Supawna Meadows NWR Phase 2 marsh restoration project

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Heidi,

I'm a little unclear of the EFH/FWCA timeline for this project and if it would be a reinitiation or a separate consultation. If you have the original consultation, could you please share that info with me (EFH letter, etc.)? Was the entire project considered at that time or just phase 1?

Thanks!

On Thu, Apr 8, 2021 at 11:42 AM Peter B Johnsen - NOAA Federal <peter.b.johnsen@noaa.gov> wrote:

Hi Heidi,

As I do not know the exact details of the project, I cannot give you an answer with regard to whether you need to reinitiate the consultation. As you know, there are [four reinitiation triggers](#): 1) exceedance of allowable incidental take (or for an informal, the occurrence of any take), 2) new information that shows effects that were not considered in the previous consultation, 3) the project is modified in such a manner that it will result in effects that were not considered in the previous consultation, and 4) new species listings or designation of critical habitat .

As far as I am aware, initiation triggers 1 and 2 are not applicable. With regard to trigger #3, I cannot remember if Phase 2 was included in the consultation. If it was, then trigger 3 should not be applicable. If Phase 2 was not included, then you will have to consider whether the planned activities may affect listed species or critical habitat in ways that were not considered in our previous consultation. The important part here is for you to consider if there are new effects, not only whether there are new activities (or modifications to the project) that were not previously considered.

We have not proposed or listed species since the consultation. **However, at the time of the consultation for the project, the Atlantic sturgeon Critical Habitat was only proposed.** Because we concluded that the proposed project would not destroy or adversely modify the proposed critical habitat, we did not conduct a conference consultation on the proposed critical habitat. Since then, we issued a final designation of Atlantic sturgeon critical habitat. You may want to consider reinitiating the consultation if you think the second phase may affect the Atlantic sturgeon critical habitat.

I hope that helps. Feel free to call me if you want to discuss this issue further.

Sincerely,

Peter

On Tue, Mar 30, 2021 at 12:44 PM Hanlon, Heidi <heidi.hanlon@fws.gov> wrote:

Supawna Meadows National Wildlife Refuge submitted for section 7 of the ESA consultation for the first phase of marsh restoration for a breakwater project in 2017.

We completed the construction for this consultation by adding rocks to an existing breakwater in 2017 around Mill Creek in Pennsville, NJ in order to protect the marsh habitat and create a more resilient marsh. We are proposing to conduct the second phase of this project by adding rocks to this existing breakwater southeast from the Mill Creek site around Goose Pond.

The project details are the same from the 2017 Mill Creek site to the proposed Goose Pond site and the 2017 consultation application references the Goose Pond site.

Would we need to submit an entirely new package for a new consultation or would the existing consultation cover this action?

Thank you in advance for your help.

Heidi

Heidi Hanlon
Wildlife Biologist
Cape May and Supawna Meadows NWR
24 Kimbles Beach Road
Cape May Court House, NJ 08210
609-463-0994 Ex. 2372

--

Keith M. Hanson (he, him, his)
Marine Habitat Resource Specialist
NOAA Fisheries
Greater Atlantic Region
Habitat & Ecosystem Services Division (Habitat Conservation)
Annapolis, MD Field Office

NOTE: All NOAA staff are teleworking until further notice. Please do not hesitate to contact me repeatedly through email. Please put URGENT in the subject line for any emergency issues.

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<https://www.fisheries.noaa.gov/about/greater-atlantic-regional-fisheries-office>



From: Peter Johnsen - NOAA Federal [<mailto:peter.b.johnsen@noaa.gov>]
Sent: Monday, November 07, 2016 3:12 PM
To: Mitchell, Shoshana <shoshana.mitchell@amecfw.com>
Subject: Re: NOAA NMFS Submittal - Supawna Meadows Marsh Enhancement Design/Build Project

Mitchell,

Sorry for the Indian Bay, a copy and paste mistake. The correct should be Delaware River.

You requested information on the presence near **Supawna Meadows** National Wildlife Refuge in Pennsville, New Jersey, of Endangered Species Act (ESA) threatened and endangered species listed under the jurisdiction of NOAA's National Marine Fisheries Service (NMFS). We offer the following comments:

Endangered Species

The Delaware River adjacent to the Supawna Meadows March Enhancement Design/Build Project supports two ESA listed species under our jurisdiction. These are the Atlantic sturgeon and shortnose sturgeon (see below). Whether these species may occur at the specific project location may be determined based on local information such as depth, available habitat, surveys conducted, opinions of species experts intimately familiar with the location, and other site specific information. With regard to consultation with NMFS on ESA listed species, this will be conducted by the Federal agency (probably the U.S. Army Corps of Engineers) that will permit your work or that funds the project. In preparing your permit or material to the lead Federal agency, you should include information about listed species that may be within the action area and information about the status of habitat for these species at the project location. Information should include such as possibility for listed species to access the project area, depth of the channel leading to the project area and at the project area, presence of benthic invertebrates and submerged aquatic vegetation within the channel and project area, level of human activity (esp. vessel traffic) adjacent to the project area and the channel leading into it, and other information pertinent to determining presence of species and effects from the proposed project.

I've included some listed species information and details on the section 7 process under the ESA. Let me know if you have any questions. I am happy to provide further explanation via email or on the phone.

Species

The following ESA-listed species under our jurisdiction may occur in the Delaware River:

Common name	Scientific name	ESA Status	Federal Register/Recovery Plan
Shortnose sturgeon	<i>Acipenser brevirostrum</i>	Endangered	32 FR 4001; Recovery plan: NMFS 1998
Atlantic sturgeon	<i>Acipenser oxyrinchus oxyrinchus</i>		77 FR 5880 and 77 FR 5914
Gulf of Maine DPS		Threatened	
New York Bight DPS		Endangered	
Chesapeake Bay DPS		Endangered	
Carolina DPS		Endangered	
South Atlantic DPS		Endangered	

The Delaware River and Bay is within the Atlantic sturgeon New York Bight Distinct Population Segment (DPS). However, the marine range of all five Atlantic sturgeon DPSs extends along the Atlantic coast from Canada to Cape Canaveral, Florida; therefore, Atlantic sturgeon originating from any of the five DPSs may be present in the Delaware River and Bay.

Occurrence maps and species tables for the above species in the Greater Atlantic Region can be found on our website at: <http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html>.

Species maps and tables are intended to aid Federal action agencies during their section 7 consultation responsibilities under the ESA and with their determination whether activities authorized, funded, or carried out by a Federal agency may affect species we listed under the ESA.

You can find more information on the biology and life history of shortnose sturgeon at <https://www.greateratlantic.fisheries.noaa.gov/protected/snsturgeon/>

You can find more information on the biology and life history Atlantic sturgeon at <http://www.greateratlantic.fisheries.noaa.gov/protected/atlsturgeon/>

Effects Consideration

As listed species occur within the vicinity of your proposed project, any proposed in-water work has the potential to impact these species. As project plans develop, we recommend you consider the following mitigation/minimization measures for all of the proposed project's activities that might affect sturgeon.

- For activities that increase levels of suspended sediment, consider the use of silt management and/or soil erosion best practices (i.e., silt curtains and/or cofferdams).

- For activities that may cause the suspension of contaminated sediment, consider the use of appropriate containment measures.
- For work that will increase vessel traffic within the project area, consider restricting the number of trips taken by each vessel and restricting the speed at which the vessel can travel.
- For any impacts to habitat or conditions that temporarily render affected water bodies unsuitable for the above-mentioned species, consider the use of timing restrictions for in-water work.
- For pile driving or other activities that may affect underwater noise levels, consider the use of a soft start, vibratory hammer, cushion blocks, and other noise attenuating tools and strategies to avoid reaching noise levels that will cause injury or behavioral disturbance to sturgeon (see the table below for more information regarding noise criteria for injury/behavioral disturbance in sturgeon).

Species Classification	Size	Injury Threshold	Behavioral Modification Threshold
Sturgeon	> 2g	206 dBpeak/187 cSEL	150 dB re 1 μ Pa RMS
	< 2g	206 dBpeak/183 cSEL	150 dB re 1 μ Pa RMS

As project details become finalized, a consultation, pursuant to section 7 of the ESA, may be necessary. If the final project plans have the potential to affect listed species, and it is being approved, permitted, or funded by a Federal agency, the lead Federal agency, or their designated non-Federal representative, is responsible for determining whether the proposed action is likely to affect the listed species. The Federal agency would submit their determination along with justification for their determination and a request for concurrence to NMFS.GAR.ESA.Section7@Noaa.gov

For additional technical guidance on the ESA section 7 process, please visit our website, here:

<http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/consultation/index.html>

Proposed Critical Habitat

On June 3, 2016, we issued two proposed rules to designate critical habitat for the five listed distinct population segments (DPSs) of Atlantic sturgeon found in U.S. waters (Gulf of Maine, New York Bight, and Chesapeake Bay DPSs: 81 FR 35701; Carolina and South Atlantic DPSs: 81 FR 36078). Federal agencies are required to confer with us on any action that is likely to jeopardize the continued existence of any species proposed for listing or result in destruction or adverse modification of proposed critical habitat (50 CFR §402.10). “Destruction or adverse modification” is defined as a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species (50 CFR § 402.02). The action you have inquired about will occur in an area proposed to be designated as critical habitat Gulf of Maine, New York Bight, and Chesapeake Bay DPSs.

The proposed rules identified the following four essential physical and biological features necessary for the conservation of the species. The term “physical or biological features” is defined as the features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species or other features.

- Hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0 to 0.5 parts per thousand range) for settlement of fertilized eggs, refuge, growth, and development of early life stages;
- Aquatic habitat with a gradual downstream salinity gradient of 0.5 to 30 parts per thousand and soft substrate (e.g., sand, mud) downstream of spawning sites for juvenile foraging and physiological development;
- Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support: (1) Unimpeded movement of adults to and from spawning sites; (2) seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary; and (3) staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (e.g., ≥ 1.2 m) to ensure continuous flow in the main channel at all times when any sturgeon life stage would be in the river; and
- Water, especially in the bottom meter of the water column, with the temperature, salinity, and oxygen values that, combined, support: (1) spawning; (2) annual and interannual adult, subadult, larval, and juvenile survival; and (3) larval, juvenile, and subadult growth, development, and recruitment (e.g., 13 °C to 26 °C for spawning habitat and no more than 30 °C for juvenile rearing habitat, and 6 mg/L dissolved oxygen for juvenile rearing habitat).

Magnuson-Stevens Fishery and Conservation and Management Act

Essential Fish Habitat (EFH) is present in the area, and depending upon the activities proposed, you may need to initiate consultation with us under the Magnuson Stevens Fishery and Management Act. For questions related to EFH please contact Michelle Magliocca with our Habitat Conservation Division by phone at (410) 573-4559 or by email (Michelle.Magliocca@noaa.gov).

Kind regards,

Peter