# NOAA Fisheries Greater Atlantic Regional Fisheries Office Essential Fish Habitat (EFH) Assessment & Fish and Wildlife Coordination Act (FWCA) Consultation Worksheet

### August 2021 rev.

## Authorities

The Magnuson Stevens Fishery Conservation and Management Act (MSA) requires federal agencies to consult with NOAA Fisheries on any action or proposed action authorized, funded, or undertaken by such agency that may adversely affect essential fish habitat (EFH) identified under the MSA. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in the consultation process.

The Fish and Wildlife Coordination Act (FWCA) requires that all federal agencies consult with NOAA Fisheries when proposed actions might result in modifications to a natural stream or body of water. The FWCA also requires that federal agencies consider the effects that these projects would have on fish and wildlife and must also provide for improvement of these resources. Under the FWCA, we work to protect, conserve and enhance species and habitats for a wide range of aquatic resources such as shellfish, diadromous species, and other commercially and recreationally important species that are not federally managed and do not have designated EFH.

It is important to note that these consultations take place between NOAA Fisheries and federal action agencies. As a result, EFH assessments, including this worksheet, must be provided to us by the federal agency, not by permit applicants or consultants.

### Use of the Worksheet

This worksheet can serve as an EFH assessment for **Abbreviated EFH Consultations**, and as a means to provide information on potential effects to other NOAA trust resources considered under the FWCA. An abbreviated consultation allows us to determine quickly whether, and to what degree, a federal action may adversely affect EFH. Abbreviated consultation procedures can be used when federal actions do not have the potential to cause substantial adverse effects on EFH and when adverse effects could be alleviated through minor modifications.

The intent of the EFH worksheet is to provide a guide for determining the information needed to fully assess the effects of a proposed action on EFH. In addition, the worksheet may be used as a tool to assist you in developing a more comprehensive EFH assessment for larger projects that may have more substantial adverse effects to EFH. <u>However</u>, for large, complex projects that have the potential for significant adverse effects, an **Expanded EFH Consultation** may be warranted and the use of this worksheet alone is not appropriate as your EFH assessment.

An **adverse effect** is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Consultation under the MSA is not required if there is no adverse effect on EFH or if no EFH has been designated in the project area. However, because the definition of "adverse effect" is very broad, most in-water work will result in some level of adverse effect requiring consultation with us, even if the impact is temporary or the overall result of the project is habitat restoration or enhancement. It is important to remember that an adverse effect determination is a trigger to consult with us. It does not mean that a project cannot proceed as proposed, or that project modifications are necessary. An adverse effect determination under the EFH provisions of the MSA simply means that the effects of the proposed action on EFH must be evaluated to determine if there are ways to avoid, minimize, or offset adverse effects. Additional details on EFH consultations, tools, and resources, including frequently asked questions can be found on our website.

# Instructions

This worksheet should be used as your EFH assessment for **Abbreviated EFH Consultations** or as a guide to develop your EFH assessment. It is not appropriate to use this worksheet as your EFH assessment for large, complex projects, or those requiring an Expanded EFH Consultation.

When completed fully and with sufficient information to clearly describe the activities proposed, habitats affected, and project impacts, as well as the measures taken to avoid, minimize or offset any unavoidable adverse effects, this worksheet provides us with required components of an EFH assessment including:

- 1. A description of the proposed action.
- 2. An analysis of the potential adverse effects on EFH and the federally managed species.
- 3. The federal agency's conclusions regarding the effects of the action on EFH.
- 4. Proposed mitigation, if applicable.

When completing this worksheet and submitting information to us, it is important to ensure that sufficient information is provided to clearly describe the proposed project and the activities proposed. At a minimum, this should include the public notice (if applicable) or project application and project plans showing:

- location map of the project site with area of impact.
- existing and proposed conditions.
- all in-water work and the location of all proposed structures and/or fill.
- all waters of the U.S. on the project site with mean low water (MLW), mean high water (MHW), high tide line (HTL), and water depths clearly marked.
- Habitat Areas of Particular Concern (HAPCs).
- sensitive habitats mapped, including special aquatic sites (submerged aquatic vegetation, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), hard bottom or natural rocky habitat areas, and shellfish beds.
- site photographs, if available.

Your analysis of effects **should focus on impacts that reduce the quality and/or quantity of the habitat or result in conversion to a different habitat type** for all life stages of species with designated EFH within the action area. Simply stating that fish will move away or that the project will only affect a small percentage of the overall population is not a sufficient analysis of the effects of an action on EFH. Also, since the intent of the EFH consultation is to evaluate the direct, indirect, individual and cumulative effects of a particular federal action on EFH and to identify options to avoid, minimize or offset the adverse effects of that action, is it not appropriate to conclude that an impact is minimal just because the area affected is a small percentage of the total area of EFH designated. The focus of the consultation is to reduce impacts resulting from the activities evaluated in the assessment. Similarly, a large area of distribution or range of the fish species is also not appropriate rationale for concluding the impacts of a particular project are minimal.

Use the information on the our EFH consultation website and NOAA's EFH Mapper to complete this worksheet. The mapper is a useful tool for viewing the spatial distribution of designated EFH and HAPCs. Because summer flounder HAPC (defined as: " all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, within adult and juvenile summer flounder EFH") does not have region-wide mapping, local sources and on-site surveys may be needed to identify submerged aquatic vegetation beds within the project area. The full designations for each species may be viewed as PDF links provided for each species within the Mapper, or via our website links to the New England Fishery Management Councils Omnibus Habitat Amendment 2 (Omnibus EFH Amendment), the Mid-Atlantic Fishery Management Councils FMPs (MAMFC - Fish Habitat), or the Highly Migratory Species website. Additional information on species specific life histories can be found in the EFH source documents accessible through the Habitat and Ecosystem Services Division website. This information can be useful in evaluating the effects of a proposed action. Habitat and Ecosystem Services Division (HESD) staff have also developed a technical memorandum Impacts to Marine Fisheries Habitat from Non-fishing Activities in the Northeastern United States, NOAA Technical Memorandum NMFS-NE-209 to assist in evaluating the effects of non-fishing activities on EFH. If you have questions, please contact the HESD staff member in your area to assist you.

Federal agencies or their non-federal designated lead agency should email the completed worksheet and necessary attachments to the HESD New England (ME, NH, MA, CT, RI) or Mid- Atlantic (NY, NJ, PA, DE, MD, VA) Branch Chief and the regional biologist listed on the <u>Contact Regional Office</u> Staff section on our EFH consultation website and listed below.

We will provide our EFH conservation recommendations under the MSA, and recommendations under the FWCA, as appropriate, within 30 days of receipt of a **complete** EFH assessment for an abbreviated consultation. Please ensure that the EFH worksheet is completed in full and includes detail to minimize delays in completing the consultation. If we are unable to assess potential impacts based on the information provided, we may request additional information necessary to assess the effects of the proposed action on our trust resources before we can begin a consultation. If the worksheet is not completely filled out, it may be returned to you for completion. **The EFH consultation and our response clock does not begin until we have sufficient information upon which to consult.** 

If this worksheet is not used, you should include all the information required to complete this worksheet in your EFH assessment. The level of detail that you provide should be commensurate with the magnitude of impacts associated with the proposed project. You may need to prepare a more detailed EFH assessment for more substantial or complex projects to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. The format of the EFH worksheet may not be sufficient to incorporate the extent of detail required for large-scale projects, and a separate EFH assessment may be required.

Regardless of the format, you should include an analysis as outlined in this worksheet for an expanded EFH assessment, along with any additional necessary information including:

- the results of on-site inspections to evaluate habitat and site-specific effects.
- the views of recognized experts on habitat or the species that may be affected.
- a review of pertinent literature and related information.
- an analysis of alternatives that could avoid or minimize adverse effects on EFH.

For these larger scale projects, interagency coordination meetings should be scheduled to discuss the contents of the EFH consultation and the site-specific information that may be needed in order to initiate the consultation.

Please contact our Greater Atlantic Regional Fisheries Office, <u>Protected Resources Division</u> regarding potential impacts to marine mammals or threatened and endangered species and the appropriate consultation procedures.

### **HESD Contacts\***

New England - ME, NH, MA, RI, CT Chris Boelke, Branch Chief Mike Johnson - ME, NH Kaitlyn Shaw - ME, NH, MA Sabrina Pereira -RI, CT

#### Mid-Atlantic - NY, NJ, PA, MD, VA

Karen Greene, Branch Chief Jessie Murray - NY, Northern NJ (Monmouth Co. and north) Keith Hanson - NJ (Ocean Co. and south), DE and PA, Mid-Altantic wind Maggie Sager - NJ (Ocean Co. and south), DE and PA Jonathan Watson - MD, DC David O'Brien - VA

#### **Ecosystem Management (Wind/Aquaculture)**

Peter Burns, Branch Chief Alison Verkade (NE Wind) Susan Tuxbury (wind coordinator) christopher.boelke@noaa.gov mike.r.johnson@noaa.gov kaitlyn.shaw@noaa.gov sabrina.pereira@noaa

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\*Please check for the most current staffing list on our <u>contact us page</u> prior to submitting your assessment.

# EFH Assessment Worksheet rev. August 2021

Please read and follow all of the directions provided when filling out this form.

# 1. General Project Information

Date Submitted:
Project/Application Number:
Project Name: Indian River Flood Shoal Dredging and Beneficial Use Project
Project Sponsor/Applicant: DNREC Division of Watershed Stewardship, Stephen Williams
Federal Action Agency (or state agency if the federal agency US Army Corps of Engineers has provided written notice delegating the authority <sup>1</sup> ):
Fast-41: Yes No
Action Agency Contact Name:
Contact Phone: Contact Email:
Address, City/Town, State:
2. Project Description
<sup>2</sup> Latitude: 38.606549 Longitude: -75.074819
Body of Water (e.g., HUC 6 name): Indian River Inlet, Sussex County, Delaware
Project Purpose:
DNREC is seeking EMERGENCY AUTHORIZATION to repair the North Indian River Inlet Beach (North Beach), Delaware Seashore State Park as critical infrastructure like the Charles W. Cullen Memorial (Inlet) Bridge and Delaware Route-1 are in imminent risk of failure due to erosion. The Project aims to restore the severely eroded berm and dune system at North Beach using dredged material from the Indian River Inlet flood shoal, essentially replicating the 2013 USACE project, to enhance resiliency and protect critical infrastructure and habitat from the effects of coastal erosion.
Project Description:
North Beach has a long history of erosion due to the interruption of the northward flow of sand caused by the construction of the inlet jetties. This erosion has made critical infrastructure, such as Delaware Route-1 and the Inlet Bridge, more vulnerable to storm damages. Conditions at North Beach have been severely deteriorating overtime and adding sand via truck haul can no longer overcome the current rate of erosion. North Beach needs to be rebuilt with a large volume of sand that is delivered rapidly; therefore the Project aims to hydraulically maintenance dredge the flood shoal near the Federal navigation channel within the Indian River Inlet, and then use all dredged material as beach fill to nourish North Beach. The flood shoal is to be dredged to the authorized federal channel elevation of -24 ft NAVD with 1 ft of allowable over-dredge and approximately 640 ft wide. Up to 600,000 cubic yards (cy) of mostly sandy (>90%) material would be transported via pipeline to North Beach to nourish ~5,200 linear feet of shoreline beginning from the north jetty and extending northward. Front-end loaders and bulldozers would be used to construct the berm (100 to 150 ft wide, +9.0 ft NAVD) and dune to have an overall dune crest elevation of +16.0 ft NAVD by 25 ft wide. See the Permit Supplement for further details.
Anticipated Duration of In-Water Work including planned Start/End Dates and any seasonal restrictions proposed to be included in the schedule:
DNREC is seeking EMERGENCY ALITHORIZATION to rebuild North Beach using dredged material from the Inlet flood shoal:

DNREC is seeking EMERGENCY AUTHORIZATION to rebuild North Beach using dredged material from the Inlet flood shoal; therefore in-water work is requested for October 2024 through February 2025 based on the time of year restriction window.

<sup>&</sup>lt;sup>1</sup> A federal agency may designate a non-Federal representative to conduct an EFH consultation by giving written notice of such designation to NMFS. If a non-federal representative is used, the Federal action agency remains ultimately responsible for compliance with sections 305(b)(2) and 305(b)(4)(B) of the Magnuson-Stevens Act. <sup>2</sup> Provide the decimal, or the degrees, minutes, seconds values for latitude and longitude using the World Geodetic System 1984 (WGS84) and negative degree values where applicable.

# 3. Site Description

EFH includes the biological, chemical, and physical components of the habitat. This includes the substrate and associated biological resources (e.g., benthic organisms, submerged aquatic vegetation, shellfish beds, salt marsh wetlands), the water column, and prey species.

Is the project in designated EFH <sup>3</sup> ?		Ves	No	
Is the project in designated HAPC	?	Ves	No	
Does the project contain any Speci	al Aquatic Sites <sup>4</sup> ?	Yes	No No	
Is this coordination under FWCA of	only?	Yes	✓ No	
Total area of impact to EFH (indic	ate sq ft or acres):	50 acres		
Total area of impact to HAPC (ind	icate sq ft or acres)	: 50 acres		
Current range of water depths at M	ILW Salinity ran	ge (PPT):	Water temperature range (°F):	
14-16 ft	24-33 ppt		63-77 F	

<sup>3</sup>Use the tables in Sections 5 and 6 to list species within designated EFH or the type of designated HAPC present. See the worksheet instructions to find out where EFH and HAPC designations can be found. <sup>4</sup> Special aquatic sites (SAS) are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. They include sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle and pool complexes (40 CFR Subpart E). If the project area contains SAS (i.e. sanctuaries and refuges, wetlands, mudflats, vegetated shallows/SAV, coral reefs, and/or riffle and pool complexes, describe the SAS, species or habitat present, and area of impact.

# 4. Habitat Types

In the table below, select the location and type(s) for each habitat your project overlaps. For each habitat type selected, indicate the total area of expected impacts, then what portion of the total is expected to be temporary (less than 12 months) and what portion is expected to be permanent (habitat conversion), and if the portion of temporary impacts will be actively restored to pre- construction conditions by the project proponent or not. A project may overlap with multiple habitat types.

Habitat Location	Habitat Type	Total impacts (lf/ft²/ft³)	Temporary impacts (lf/ft <sup>2</sup> /ft <sup>3</sup> )	Permanent impacts (lf/ft <sup>2</sup> /ft <sup>3</sup> )	Restored to pre-existing conditions?*
Marine	Substrate (sand/shell)	2,166,000 sf		2,166,000 sf	No
Marine	Shore (unconsolidated)	5,200 lf		5,200 lf	No
Select one	Select One				Select one
Select one	Select One				Select one
Select one	Select One				Select one
Select one	Select One				Select one
Select one	Select One				Select one
Select one	Select One				Select one

\*Restored to pre-existing conditions means that as part of the project, the temporary impacts will be actively restored, such as restoring the project elevations to pre-existing conditions and replanting. It does not include natural restoration or compensatory mitigation.

### Submerged Aquatic Vegetation (SAV) Present?:

Yes:

No	1
No:	V

If the project area contains SAV, or has historically contained SAV, list SAV species and provide survey results including plans showing its location, years present and densities if available. Refer to Section 12 below to determine if local SAV mapping resources are available for your project area.

### **Sediment Characteristics:**

The level of detail required is dependent on your project – e.g., a grain size analysis may be necessary for dredging. In addition, if the project area contains rocky/hard bottom habitat <sup>6</sup>(pebble, cobble, boulder, bedrock outcrop/ledge) identified as Rocky (coral/rock), Substrate (cobble/gravel), or Substrate (rock) above, describe the composition of the habitat using the following table.

Substrate Type* (grain size)	Present at Site? (Y/N)	Approximate Percentage of Total Substrate on Site
Silt/Mud (<0.063mm)	Yes	10
Sand (0.063-2mm)	Yes	90
Rocky: Pebble/Gravel /Cobble(2-256mm)**	Select one	
Rocky: Boulder (256- 4096mm)**	Select one	
Rocky: Coral	Select one	
Bedrock**	Select one	

<sup>6</sup>The type(s) of rocky habitat will help you determine if the area is cod HAPC.

\* Grain sizes are based on Wentworth grain size classification scale for granules, pebbles, cobbles, and boulders.

\*\* Sediment samples with a content of 10% or more of pebble-gravel-cobble and/or boulder in the top layer (6-12 inches) should

be delineated and material with epifauna/macroalgae should be differentiated from bare pebble-gravel-cobble and boulder.

If no grain size analysis has been conducted, please provide a general description of the composition of the sediment. If available please attach images of the substrate.

In 2013, grain size analysis prior to dredging revealed the flood shoal sediment was 94% sand. We hypothesize the flood shoal is a renewable source of sand as survey data after one year indicated that nearly 50% of the material dredged ended up back in the flood shoal, and nearly 100% after four years. See further information in the Permit Supplement. The Sediment Chemical Evaluation, including physical data, will be provided as soon as available.

Diadromous Fish (migratory or spawning habitat- identify species under Section 10 below): Yes: No: 🗸

# 5. EFH and HAPC Designations

Within the Greater Atlantic Region, EFH has been designated by the New England, Mid-Atlantic, and South Atlantic Fisheries Management Councils and NOAA Fisheries. Use the <u>EFH mapper</u> to determine if EFH may be present in the project area and enter all species and life stages that have designated EFH. Optionally, you may review the EFH text descriptions linked to each species in the EFH mapper and use them to determine if the described habitat is present at your project site. If the habitat characteristics described in the text descriptions do not exist at your site, you may be able to exclude some species or life stages from additional consideration. For example, the water depths at your site are shallower that those described in the text description for a particular species or life stage. We recommend this for larger projects to help you determine what your impacts are.

Species Present	EFH is o Indian Riv	What is the source of the			
	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/ spawning adults	EFH information included?
Atlantic butterfish			$\checkmark$	$\checkmark$	EFH Mapper o
Atlantic herring			$\checkmark$		EFH Mapper o
Black sea bass			$\checkmark$	$\checkmark$	EFH Mapper of
bluefish			$\checkmark$	$\checkmark$	EFH Mapper o
clearnose skate			$\checkmark$	$\checkmark$	EFH Mapper o
little skate			$\checkmark$	$\checkmark$	EFH Mapper c
long-finned squid	$\checkmark$				EFH Mapper c
red hake				$\checkmark$	EFH Mapper c
sand tiger shark		$\checkmark$	$\checkmark$	$\checkmark$	EFH Mapper o
sandbar shark		$\checkmark$	$\checkmark$		EFH Mapper o
scup			$\checkmark$	$\checkmark$	EFH Mapper o

# **Continued:**

Species Present	EFH is a Indian Ri	<b>EFH is designated/mapped for:</b> Indian River Flood Shoal and North Beach				
	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/ spawning adults	EFH information included?	
skipjack tuna 🔹				$\checkmark$	EFH Mappe <mark> -</mark>	
smoothhound shark (Atlantic stock -	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	EFH Mappe <mark> -</mark>	
spiny dogfish			$\checkmark$	$\checkmark$	EFH Mappe <mark></mark>	
summer flounder		$\checkmark$	$\checkmark$	$\checkmark$	EFH Mappe <mark></mark>	
windowpane flounder	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	EFH Mappe <mark></mark>	
winter skate			$\checkmark$	$\checkmark$	EFH Mapper	

#### **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.

<u>Greater Atlantic Regional Office</u> <u>Atlantic Highly Migratory Species Management Division</u>

#### **Query Results**

Degrees, Minutes, Seconds: Latitude = 38° 36' 29" N, Longitude = 76° 56' 6" W Decimal Degrees: Latitude = 38.608, Longitude = -75.065

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
R	0	Atlantic Butterfish	Adult, Juvenile	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
R	0	Atlantic Herring	Juvenile	New England	Amendment 3 to the Atlantic Herring FMP
A	0	Black Sea Bass	Adult, Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
A	0	Bluefish	Adult, Juvenile	Mid-Atlantic	Bluefish
R	0	Clearnose Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
R	0	Little Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
P	0	Longfin Inshore Squid	Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
P	0	Red Hake	Adult	New England	Amendment 14 to the Northeast Multispecies FMP
M	0	Sand Tiger Shark	Adult, Neonate/Juvenile	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
P	0	Sandbar Shark	Juvenile, Neonate	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
M	0	Scup	Adult, Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
R	0	Skipjack Tuna	Adult	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
P	0	Smoothhound Shark Complex (Atlantic Stock)	ALL	Secretarial	Amendment 10 to the 2006 Consolidated HMS FMP: EFH
M	0	Spiny Dogfish	Adult Male, Sub-Adult Female	Mid-Atlantic	Amendment 3 to the Spiny Dogfish FMP
P	0	Summer Flounder	Adult, Juvenile, Larvae	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
P	0	Windowpane Flounder	Adult, Eggs, Juvenile, Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
A	0	Winter Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP

### Pacific Salmon EFH

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

### **Atlantic Salmon**

No Atlantic Salmon were identified at the report location.

### HAPCs

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

## 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: <u>open data inventory --></u> 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: <u>open data inventory --></u>
All EFH species have been mapped for the Greater Atlantic region,
Atlantic Highly Migratory Species EFH,
Bigeye Sand Tiger Shark,
Bigeye Sixgill Shark,
Caribbean Sharpnose Shark,
Galapagos Shark,
Narrowtooth Shark,
Sevengill Shark,
Sixgill Shark,
Sixgill Shark,
Simooth Hammerhead Shark,
Smalltail Shark

#### **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.

<u>Greater Atlantic Regional Office</u> <u>Atlantic Highly Migratory Species Management Division</u>

#### **Query Results**

Degrees, Minutes, Seconds: Latitude = 38° 36' 37" N, Longitude = 76° 56' 13" W Decimal Degrees: Latitude = 38.610, Longitude = -75.063

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
M	0	Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
M	Θ	Black Sea Bass	Adult, Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
A	0	Bluefish	Adult, Juvenile	Mid-Atlantic	Bluefish
<b>N</b>	0	Clearnose Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
<b>N</b>	Θ	Little Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
M	Θ	Longfin Inshore Squid	Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
A	0	Scup	Adult, Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
<u>M</u>	0	Spiny Dogfish	Adult Male, Sub-Adult Female	Mid-Atlantic	Amendment 3 to the Spiny Dogfish FMP

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
A	Θ	Summer Flounder	Adult, Juvenile, Larvae	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
A	Θ	Windowpane Flounder	Adult, Eggs, Juvenile, Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
A	Θ	Winter Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP

### Pacific Salmon EFH

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

# Atlantic Salmon

No Atlantic Salmon were identified at the report location.

### HAPCs

Link	Data Caveats	HAPC Name	Management Council
	Θ	Sand Tiger Shark (Delaware Bay)	NMFS Highly Migratory Species Division
	0	Summer Flounder SAV	Mid-Atlantic Fishery Management Council

# 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: <u>open data inventory --></u>
All EFH species have been mapped for the Greater Atlantic region,
Atlantic Highly Migratory Species EFH,
Bigeye Sand Tiger Shark,
Bigeye Sixgill Shark,
Caribbean Sharpnose Shark,
Galapagos Shark,
Narrowtooth Shark,
Sevengill Shark,
Sixgill Shark,
Sixgill Shark,
Simoth Hammerhead Shark,
Smalltail Shark

# 6. Habitat Areas of Particular Concern (HAPCs)

HAPCs are subsets of EFH that are important for long-term productivity of federally managed species. HAPCs merit special consideration based their ecological function (current or historic), sensitivity to humaninduced degradation, stresses from development, and/or rarity of the habitat.While many HAPC designations have geographic boundaries, there are also habitat specific HAPC designations for certain species, see note below. Use the <u>EFH mapper</u> to identify HAPCs within your project area. Select all that apply.

$\checkmark$	Summer flounder: SAV <sup>7</sup>	Alvin & Atlantis Canyons
	Sandbar shark	Baltimore Canyon
$\checkmark$	Sand Tiger Shark (Delaware Bay)	Bear Seamount
	Sand Tiger Shark (Plymouth-Duxbury- Kingston Bay)	Heezen Canyon
	Inshore 20m Juvenile Cod <sup>8</sup>	Hudson Canyon
	Great South Channel Juvenile Cod	Hydrographer Canyon
	Northern Edge Juvenile Cod	Jeffreys & Stellwagen
	Lydonia Canyon	Lydonia, Gilbert & Oceanographer Canyons
	Norfolk Canyon (Mid-Atlantic)	Norfolk Canyon (New England)
	Oceanographer Canyon	Retriever Seamount
	Veatch Canyon (Mid-Atlantic)	Toms, Middle Toms & Hendrickson Canyons
	Veatch Canyon (New England)	Washington Canyon
	Cashes Ledge	Wilmington Canyon
	Atlantic Salmon	

<sup>&</sup>lt;sup>7</sup> Summer flounder HAPC is defined as all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, within adult and juvenile summer flounder EFH. In locations where native species have been eliminated from an area, then exotic species are included. Use local information to determine the locations of HAPC.

<sup>&</sup>lt;sup>8</sup> The purpose of this HAPC is to recognize the importance of inshore areas to juvenile Atlantic cod. The coastal areas of the Gulf of Maine and Southern New England contain structurally complex rocky-bottom habitat that supports a wide variety of emergent epifauna and benthic invertebrates. Although this habitat type is not rare in the coastal Gulf of Maine, it provides two key ecological functions for juvenile cod: protection from predation, and readily available prey. See <u>EFH mapper</u> for links to text descriptions for HAPCs.

# 7. Activity Details

Select all that apply	Project Type/Category		
	Agriculture		
	Aquaculture - List species here:		
	Bank/shoreline stabilization (e.g., living shoreline, groin, breakwater, bulkhead)		
$\checkmark$	Beach renourishment ~5,200 linear ft at North Beach, Delaware Seashore State Park		
$\checkmark$	Dredging/excavation Indian River Inlet flood shoal, up to 600,000 cu yd		
	Energy development/use e.g., hydropower, oil and gas, pipeline, transmission line, tidal or wave power, wind		
$\checkmark$	Fill >90% sand to be used to beach nourishment		
	Forestry		
	Infrastructure/transportation (e.g., culvert construction, bridge repair, highway, port, railroad)		
	Intake/outfall		
	Military (e.g., acoustic testing, training exercises)		
	Mining (e.g., sand, gravel)		
	Overboard dredged material placement		
	Piers, ramps, floats, and other structures		
	Restoration or fish/wildlife enhancement (e.g., fish passage, wetlands, mitigation bank/ILF creation)		
$\checkmark$	Survey (e.g., geotechnical, geophysical, habitat, fisheries)		
	Water quality (e.g., storm water drainage, NPDES, TMDL, wastewater, sediment remediation)		
	Other:		

# 8. Effects Evaluation

Select all that apply	Potential Stressors Caused by the Activity	Select al apply an tempora or perm	ll that nd if ary <sup>9</sup> anent	Habitat alterations caused by the activity
$\checkmark$	Underwater noise	Temp	Perm	
$\checkmark$	Water quality/turbidity/ contaminant release		$\checkmark$	Water depth change
	Vessel traffic/barge grounding			Tidal flow change
	Impingement/entrainment		$\checkmark$	Fill
	Prevent fish passage/spawning			Habitat type conversion
	Benthic community disturbance			Other:
	Impacts to prey species			Other:

<sup>9</sup> Temporary in this instance means during construction. <sup>10</sup> Entrainment is the voluntary or involuntary movement of aquatic organisms from a water body into a surface diversion or through, under, or around screens and results in the loss of the organisms from the population. Impingement is the involuntary contact and entrapment of aquatic organisms on the surface of intake screens caused when the approach velocity exceeds the swimming capability of the organism.

### **Details - project impacts and mitigation**

Briefly describe how the project would impact each of the habitat types selected above and the amount (i.e., acreage or sf) of each habitat impacted. Include temporary and permanent impact descriptions and direct and indirect impacts. For example, dredging has a direct impact on bottom sediments and associated benthic communities. The turbidity generated can result in a temporary impact to water quality which may have an indirect effect on some species and habitats such as winter flounder eggs, SAV or rocky habitats. The level of detail that you provide should be commensurate with the magnitude of impacts associated with the proposed project. Attach supplemental information if necessary.

The Project area contains Essential Fish Habitat for both highly migratory and New England/ Mid-Atlantic species that may be adversely affected during dredging and placement activities. The borrow area flood shoal is approx 50 acres; dredging will change the water depth and improve navigability within Indian River Inlet. Underwater noise and the disturbance of bottom sediments due to dredging could interfere with feeding and predation of nearby organisms as well as generate water column turbidity. In addition, beach nourishment can disturb invertebrate species that use the beach and cover potential food sources for birds. However, adverse impacts are expected to be temporary and localized during construction. Motile species such as mammals, birds, and insects are expected to avoid the dredging and placement sites. Overall, the Project will enhance coastal habitat and resiliency at North Beach. See the Permit Supplement included with the Permit Application Package for additional information. What specific measures will be used to avoid and minimize impacts, including project design, turbidity controls, acoustic controls, and time of year restrictions? If impacts cannot be avoided or minimized, why not?

Temporary perimeter controls will be used near dredging operations and will be monitored routinely throughout construction to protect water quality, and mitigation will occur if control limits are exceeded. Dredging during winter months will also limit the disruption to migrating fish and aquatic species that could be adversely impacted by water column turbidity. Transport pipelines will be floated and clearly marked to avoid environmental impact. Proper construction oversite will be implemented to ensure there are no negative impacts to water quality via daily site inspections.

Is compensatory mitigation proposed?



If compensatory mitigation is not proposed, why not? If yes, describe plans for compensatory mitigation (e.g. permittee responsible, mitigation bank, in-lieu fee) and how this will offset impacts to EFH and other aquatic resources. Include a proposed compensatory mitigation and monitoring plan as applicable.

Dredging of the Indian River Inlet flood shoal would be performed to the previously authorized elevation of +24 ft NAVD.

Yes

# 9. Effects of Climate Change

Effects of climate change should be included in the EFH assessment if the effects of climate change may amplify or exacerbate the adverse effects of the proposed action on EFH. Use the <u>Intergovernmental Panel on Climate Change</u> (IPCC) Representative Concentration Pathways (RCP) 8.5/high greenhouse gas emission scenario (IPCC 2014), at a minimum, to evaluate the future effects of climate change on the proposed projections. For sea level rise effects, use the intermediate-high and extreme scenario projections as defined in <u>Sweet et al. (2017)</u>. For more information on climate change effects to species and habitats relative to NMFS trust resources, see <u>Guidance for Integrating Climate Change</u> Information in Greater Atlantic Region Habitat Conservation Division Consultation Processes.

1. Could species or habitats be adversely affected by the proposed action due to projected changes in the climate?If yes, please describe how:

No affect, the Project will actually increase habitat and coastal resiliency.

2. Is the expected lifespan of the action greater than 10 years? If yes, please describe project lifespan:

The Indian River flood shoal will likely need to be dredged again in approximately 5 years.

3. Is climate change currently affecting vulnerable species or habitats, and would the effects of a proposed action be amplified by climate change? If yes, please describe how:

No affect

4. Do the results of the assessment indicate the effects of the action on habitats and species will be amplified by climate change? If yes, please describe how:

No affect

5. Can adaptive management strategies (AMS) be integrated into the action to avoid or minimize adverse effects of the proposed action as a result of climate? If yes, please describe how:

Yes, adaptive management strategies are included in the Project Monitoring Plan included with the Permit Application Package.

# 10. Federal Agency Determination

Federal Action Agency's EFH determination (select one)			
	There is no adverse effect <sup>7</sup> on EFH or EFH is not designated at the project site. EFH Consultation is not required. This is a FWCA only request.		
$\checkmark$	The adverse effect <sup>7</sup> on EFH is not substantial. This means that the adverse effects are no more than minimal, temporary, or can be alleviated with minor project modifications or conservation recommendations. This is a request for an abbreviated EFH consultation.		
	The adverse effect <sup>7</sup> on EFH is substantial. This is a request for an expanded EFH consultation. We will provide more detailed information, including an alternatives analysis and NEPA documents, if applicable.		

<sup>7</sup> An adverse effect is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

# 11. Fish and Wildlife Coordination Act

Under the FWCA, federal agencies are required to consult with us if actions that the authorize, fund, or undertake will result in modifications to a natural stream or body of water. Federal agencies are required to consider the effects these modifications may have on fish and wildlife resources, as well as provide for the improvement of those resources. Under this authority, we consider the effects of actions on NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats, that are not managed under a federal fisheries management plan. Some examples of other NOAA-trust resources are listed below. Some of these species, including diadromous fishes, serve as prey for a number of federally-managed species and are therefore considered a component of EFH pursuant to the MSA. We will be considering the effects of your project on these species and their habitats as part of the EFH/FWCA consultation process and may make recommendations to avoid, minimize or offset and adverse effects concurrently with our EFH conservation recommendations.

Please contact our Greater Atlantic Regional Fisheries Office, <u>Protected Resources Division</u> regarding potential impacts to marine mammals or species listed under the Endangered Species Act and the appropriate consultation procedures.

Fish and Wildlife Coordination Act Resources			
Species known to occur at site (list others that may apply)	Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). Please note, impacts to federally listed species of fish, sea turtles, and marine mammals must be coordinated with the GARFO Protected Resources Division.		
alewife			
American eel			
American shad			
Atlantic menhaden			
blue crab			
blue mussel			
blueback herring			
Eastern oyster			
horseshoe crab	No impact. Spawning and migration near shore is not expected during the winter months (Oct - March) when construction is planned.		
quahog			
soft-shell clams			
striped bass			
other species:	Summer Flounder SAV. No permanent impacts to habitat of particular concern during winter months (Oct - March) when construction is planned.		
other species:	Sand Tiger Shark (Delaware Bay). No permanent impacts to habitat of particular concern during winter months (Oct-March) when construction is planned.		
other species:			

# 12. Useful Links

<u>National Wetland Inventory Maps</u> <u>EPA's National Estuary Program (NEP)</u> <u>Northeast Regional Ocean Council (NROC) Data Portal</u> Mid-Atlantic Regional Council on the Ocean (MARCO) Data Portal

## **Resources by State**

#### Maine

Maine Office of GIS Data Catalog Town shellfish information including shellfish conservation area maps State of Maine Shellfish Sanitation and Management Eelgrass maps Casco Bay Estuary Partnership Maine GIS Stream Habitat Viewer

### **New Hampshire**

NH Statewide GIS Clearinghouse, NH GRANIT NH Coastal Viewer State of NH Shellfish Program

#### Massachusetts

MA DMF Shellfish Sanitation and Management Program MassGIS Data (Including Eelgrass Maps) MA DMF Recommended TOY Restrictions Document Massachusetts Bays National Estuary Program Buzzards Bay National Estuary Program Massachusetts Division of Marine Fisheries Massachusetts Office of Coastal Zone Management

### **Rhode Island**

RI Shellfish and Aquaculture RI Shellfish Management Plan RI Eelgrass Maps Narragansett Bay Estuary Program Rhode Island Division of Marine Fisheries Rhode Island Coastal Resources Management Council

#### Connecticut

CT Bureau of Aquaculture Natural Shellfish Beds in CT Eelgrass Maps Long Island Sound Study CT GIS Resources CT DEEP Office of Long Island Sound Programs and Fisheries CT River Watershed Council New York Eelgrass Report Peconic Estuary Program NY/NJ Harbor Estuary Program New York GIS Clearinghouse

#### **New Jersey**

Submerged Aquatic Vegetation Mapping Barnegat Bay Partnership NJ GeoWeb NJ DEP Shellfish Maps

#### Pennsylvania

Delaware River Management Plan PA DEP Coastal Resources Management Program PA DEP GIS Mapping Tools

#### Delaware

Partnership for the Delaware Estuary Center for Delaware Inland Bays Delaware FirstMap

### Maryland

<u>Submerged Aquatic Vegetation Mapping</u> <u>MERLIN (Maryland's Environmental Resources and Land Information Network)</u> <u>Maryland Coastal Atlas</u> <u>Maryland Coastal Bays Program</u>

### Virginia

<u>VMRC Habitat Management Division</u> <u>Submerged Aquatic Vegetation mapping</u>