

LAKE MONTAUK HARBOR, EAST HAMPTON, NEW YORK

NAVIGATION IMPROVEMENTS

DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

MAY 2025

APPENDIX D:

ESSENTIAL FISH HABITAT ASSESSMENT



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT JACOB K. JAVITS FEDERAL BUILDING 26 FEDERAL PLAZA NEW YORK NEW YORK 10278-0090

January 8, 2025

Environmental Analysis Branch

Ms. Karen Greene Habitat and Ecosystems Services Division Greater Atlantic Regional Fisheries Office James J. Howard Marine Sciences Laboratory Highlands, New Jersey

Subject: Revised Essential Fish Habitat Assessment for the Lake Montauk Harbor Project

Dear Ms. Greene:

The purpose of this letter is to request revised Essential Fish Habitat (EFH) consultation under the Magnuson-Stevens Fishery Conservation Management Act (MSFCMA) for the Lake Montauk Harbor Navigations Improvements (LMH) Project. The District had received concurrence on prior consultation on June 13, 2019.

During the Pre-construction Engineering and Design (PED) phase of the study, surveys identified the presence of hard material in the channel, which ranged in size from cobble to boulders, that obstructed maintenance dredging and required removal for the channel to reach authorized depth. Additionally, due to real estate constraints and the narrow width of the receiving beach, the dredged material must be placed in nearshore waters. These changes in conditions necessitated changes to project designs from what had been previously assessed and therefore require additional EFH assessment.

The revised proposed action includes the removal of approximately 110,000 cubic yards of sand and 15,000 cubic yards of hard material from the LMH channel using a cutterhead dredge and excavator on modular barge pulled by tug boat. Placement of the dredged material will largely be between the upland areas and -6 feet MLLW. Approximately 5,000 cubic yards of dredged material will be placed seaward of -6 feet MLLW due to space constraints. The hard material removed from the channel will be transported approximately 35 nautical miles northwest via barge and will be beneficially reused at the New York State Department of Environmental Conservation (NYSDEC) Mattituck Artificial Reef site, which was selected in coordination with NYSDEC. Note, additional surveys of the channel are planned for February 2025 and the results of these surveys will refine designs and quantities.

With the attached revised EFH assessment, the District has determined that the proposed action would not have a significant adverse effect to EFH and would have no more than a minimal (temporary and local) impact for the species and life stages identified. With the implementation of a reasonable seasonal restriction of January 1

through September 30 to protect EFH habitat and allow the work to occur within one season, construction of the project does not require additional mitigation measures.

The District requests your review and assistance in this consultation process to fulfill our consultation responsibilities under the EFH Amendment. If you have any questions or require further information, please contact the undersigned at 917-790-8634, or Ms. Sophie Killy at 917-790-8726 or via email at <u>Sophie.R.Killy@usace.army.mil</u>.

Sincerely, WEPPLER.PETER Digitally signed by WEPPLER.PETER.M.1228647353 .M.1228647353 Date: 2025.01.08 11:37:57 -05'00'

Peter Weppler Chief, Environmental Analysis Branch

Enclosures

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> <u>Staff section</u> on our <u>EFH consultation website</u> 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:

Project Sponsor/Applicant:

Federal Action Agency (or state agency if the federal agency has provided written notice delegating the authority¹):

Fast-41:	Yes	No	
Action Agence	ey Contact Name:		
Contact Phon	e:		Contact Email:
Address, City	/Town, State:		

2. Project Description

²Latitude: Longitude: Body of Water (e.g., HUC 6 name):

Project Purpose:

Project Description:

Anticipated Duration of In-Water Work including planned Start/End Dates and any seasonal restrictions proposed to be included in the schedule:

¹ 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. ² 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 ³ ?	Yes	No	
Is the project in designated HAPC?	Yes	No	
Does the project contain any Special Aquatic Sites ⁴ ?	Yes	No	
Is this coordination under FWCA only?	Yes	No	
Total area of impact to EFH (indicate sq ft or acres):			
Total area of impact to HAPC (indicate sq ft or acres	5):		
Current range of water depths at MLW Salinity ra	nge (PPT):	Water tempera	ture range (°F):

³Use 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. ⁴ 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/ft ² /ft ³)	Temporary impacts (lf/ft ² /ft ³)	Permanent impacts (lf/ft ² /ft ³)	Restored to pre-existing conditions?*

*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:

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 ⁶(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)		
Sand (0.063-2mm)		
Rocky: Pebble/Gravel /Cobble(2-256mm)**		
Rocky: Boulder (256- 4096mm)**		
Rocky: Coral		
Bedrock**		

⁶The 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.

Diadromous Fish (migratory or spawning habitat- identify species under Section 10 below):

Yes:

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 designated/mapped for:				What is the source of the
•	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/ spawning adults	EFH information included?

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.

Summer flounder: SAV ⁷	Alvin & Atlantis Canyons
Sandbar shark	Baltimore Canyon
Sand Tiger Shark (Delaware Bay)	Bear Seamount
Sand Tiger Shark (Plymouth-Duxbury- Kingston Bay)	Heezen Canyon
Inshore 20m Juvenile Cod ⁸	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	

⁷ 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.

⁸ 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)
	Beach renourishment
	Dredging/excavation
	Energy development/use e.g., hydropower, oil and gas, pipeline, transmission line, tidal or wave power, wind
	Fill
	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)
	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	Select all Potential Stressors Caused that apply by the Activity		Select all that apply and if temporary ⁹ or permanent		Habitat alterations caused by the activity
	Underwater noise		Temp	Perm	
	Water quality/turbidity/ contaminant release				Water depth change
	Vessel traffic/barge grounding				Tidal flow change
	Impingement/entrainment				Fill
	Prevent fish passage/spawning				Habitat type conversion
	Benthic community disturbance				Other:
	Impacts to prey species				Other:

⁹ Temporary in this instance means during construction. ¹⁰ 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.

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?

Is compensatory mitigation proposed? Yes No

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.

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

10. Federal Agency Determination

Feder	ral Action Agency's EFH determination (select one)
	There is no adverse effect ⁷ on EFH or EFH is not designated at the project site. EFH Consultation is not required. This is a FWCA only request.
	The adverse effect ⁷ 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 ⁷ 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.

⁷ 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
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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	
quahog	
soft-shell clams	
striped bass	
other species:	
other species:	
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 <u>Town shellfish information including shellfish conservation area maps</u> <u>State of Maine Shellfish Sanitation and Management</u> <u>Eelgrass maps</u> <u>Casco Bay Estuary Partnership</u> <u>Maine GIS Stream Habitat Viewer</u>

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>

LAKE MONTAUK HARBOR, EAST HAMPTON, NEW YORK NAVIGATION IMPROVEMENTS

Revised Essential Fish Habitat Assessment

January 2025

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1.0 Introduction

The Magnuson-Stevens Fishery Conservation Management Act (16 U.S.C. 1801-1882) established regional Fishery Management Councils (FMCs) and mandated that Fishery Management Plans (FMPs) be developed to responsibly manage exploited fish and invertebrate species in U.S. Federal waters. The 1996 amendments of this Act, as the Sustainable Fisheries Act, charged NMFS with designating and conserving Essential Fish Habitat (EFH) for species managed under existing FMPs. This is intended to minimize, to the extent practicable, any adverse effects on habitat caused by fishing or non-fishing activities, and to identify other actions to encourage the conservation and enhancement of such habitat. EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. 1801(10)). Within the EFH designated areas, particular areas termed Habitat Areas of Particular Concern (HAPCs) are also identified. HAPCs are discrete subsets of EFH that provide extremely important ecological functions or are especially vulnerable to degradation, but this designation does not confer any particular protections.

2.0 Description of the Action

The Lake Montauk Harbor (LMH) project was authorized for construction under the U.S. Army Corps of Engineers (USACE) Continuing Authorities Program (CAP) per Section 107 of the Rivers and Harbor Act of 1960 (33 U.S.C. Section 577). The recommended plan assessed in the previously completed EFH assessment included the deepening of the existing navigation channel and deposition basin from -12 feet MLLW to -17 feet MLLW plus 2 feet of allowable over dredge, widening of the existing deposition basin to 100 feet, and the placement of approximately 174,900 cubic yards (cy) of dredged material on the downdrift eroded beach above historic MHW.

During the Pre-construction Engineering and Design (PED) phase of the LMH project, the USACE New York District (District) was informed by survey data collected to inform project designs of the presence of hard material within LMH channel. This material, ranging in size from cobbles to boulders, has obstructed maintenance dredging of the channel and must be removed before the channel can be deepened to its authorized depth. Additionally, due to real estate constraints and the existing narrow shoreline to the west of LMH channel, dredged material cannot be placed only in the upland areas and therefore must be placed in nearshore waters. These constraints and changes in channel condition necessitated design changes.

The proposed action includes the removal of approximately 110,000cy of sand and approximately 15,000cy of hard material from the LMH channel using a cutterhead dredge and excavator on a modular barge pulled by a tug boat. Transitional placement of the sandy material will occur along the shore on the western side of the jetty; transitional placement is defined as sediment that is kept within the system but will naturally move through the system or be rehandled (USACE 2023). This placement will largely be between the upland areas and -6 feet MLLW. Approximately 5,000cy of dredged material will be placed seaward of -6 feet MLLW due to space constraints. Based on prior maintenance dredging, the material is expected to downdrift naturally to the eroded downdrift shore. The hard material removed from the channel will be transported approximately 35 nautical miles northwest via barge and will be beneficially reused at the New York State Department of Environmental Conservation (NYSDEC) Mattituck Artificial Reef site (see Figure 1). The Mattituck site was selected in coordination with NYSDEC.



Figure 1: Location of Mattituck Artificial Reef in reference to LMH project area.

The District is providing this supplemental EFH assessment to document the potential effects of the removal and transport of hard material from the LMH channel to the NYSDEC Mattituck Artificial Reef and the placement of dredged material within the nearshore environment. This assessment addresses the physical effects of rock removal and placement of dredged material within the nearshore only. This evaluation is provided to supplement and summarize the EFH Worksheet Assessment (Attachment 1). Best management practices, such as adherence to a seasonal restriction to be protective of EFH, will be employed to minimize potential adverse effects, precluding the need for compensatory mitigation.

The previously completed EFH assessment (October 2020) addressed the effects of deepening the LMH channel via dredging and upland beach placement of the dredged material (available online: https://www.nan.usace.army.mil/Missions/Civil-Works/Projects-in-New-York/Lake-Montauk-Harbor/). The NYSDEC EFH assessment addressed the effects of material placement at the Mattituck Artificial Reef (available online: https://extapps.dec.ny.gov/docs/fish_marine_pdf/dmrreeffinalappc.pdf). These previous evaluations and the actions assessed in them will not be discussed further in this assessment but will be included by reference as needed.

2.1 Description of Construction Activities

Cutterhead Suction Dredge

The cutterhead is the most common and versatile type of hydraulic pipeline dredge used. As the dredge swings on an arc, the cutterhead (surrounding the intake of the suction line) excavates and translates the bottom material into the influence of the high velocity water at the suction intake, where solids are entrained, passed through the dredge pump to the floating discharge line and on to the placement area through the shore pipe. The cutterhead dredge is held in position by two spuds at the stern of the dredge, only one of which can be down while swinging. Two swing anchors are secured some distance from either side of the dredge and are connected by wire rope to the swing winches. The dredge is swung from port to starboard alternately, while passing the cutterhead through the bottom material

until the authorized depth is achieved. A discharge pipeline will transport the sediment to the placement site. Additional sections of pipeline will be added as the dredge moves up the channel towards the harbor.

Backhoe (Excavator) Dredge

A backhoe dredge is a stationary platform with a hydraulic excavator that has a single digging bucket positioned on the end of an articulated arm. The excavator sits on an anchored barge and the position is maintained with spud poles to provide a stable platform while digging. The excavator digs by drawing sediment backwards and dredged material is stored and transported by several barges. This dredging is discontinuous and cyclical, as the backhoe is lowered, drawn backwards to fill with sediment, lifted, swung to the barge, and the bucket inverted to release the material.

3.0 Description of the Habitat

Lake Montauk is a marine harbor with a navigable channel connecting the lake to Block Island Sound on the northern shore of the south fork of Long Island, within the Town of East Hampton, Suffolk County, New York (Figure 2). Other major water bodies near the project area include Nepeague Bay, Gardiners Bay, Fort Pond Bay, and the waters of the Atlantic Ocean. Lake Montauk was a brackish lake until the channel connecting it to Block Island Sound was constructed in 1926.



Figure 2: Project Area Map

The average dissolved oxygen (DO) level conditions recorded for Lake Montauk suggest healthy waters (7.69 – 13.74 mg/L). Recorded salinity in the harbor and at the channel entrance ranges from 28.03 parts per thousand (ppt) to 30.35 ppt and 28.83 to 30.79 ppt, respectively (USACE 1995). Average maximum

tidal currents at the harbor entrance range from 0.6 - 1.2 knots, on the ebb and flood respectively (USACE 1995). Additionally, the circulation in the lake is primarily tidally induced. Surface conditions in the inlet are greatest, at velocities of greater than 1.5 knots (60 centimeters per second). Currents within the central harbor are substantially lower than the inlet, typically below 0.13 knots (4 centimeters per second). Because of the north by northwest orientation of the entrance channel, heavy seas in the inlet are common, especially in the winter months.

The average sediment grain size analyses (to approximately -16 feet MLLW, as of 2018) results for maintenance dredging is 98% sand and 2% silt. A geophysical investigation conducted during PED identified a hard surface on the western edge of the eastern jetty within the LMH channel. This material likely originates from the construction or rehabilitation of the jetty. The approximately 15,000 cubic yards of hard material consists of stones ranging in size from boulder to cobbles, with a mixture of sands and gravels (Baird 2023).

Jetties on both the east and west protect the channel, which is Federally maintained. The Block Island Sound shorelines on both sides of the channel are public beaches. LMH supports a variety of commercial, institutional, and residential activities. The harbor contains marinas for commercial fishing vessels and recreational boats, restaurants, and homes.

The current 12-foot channel depth is only marginally adequate for most current commercial activity. As channel depths decrease due to sedimentation caused by littoral drift, some deeper draft vessels must transit the channel only during high tide or must put out to sea underloaded to minimize their drafts. The shoaling in the channel along the southern portion of the eastern jetty reduces the effective channel width, resulting in the crowding of passing vessels. Maintaining sufficient navigable depths in the channel would allow the harbor to fully support its commercial marine activities and provide ready access to Block Island Sound for the U.S. Coast Guard (USCG).

Facilities

LMH can accommodate vessels with lengths up to approximately 100 feet. There are 15 commercial fishing vessels, 3 commercial fishing plants, and 200 recreational vessel moorings located in the harbor, as well as a seasonal ferry service between the harbor and several destinations. The USCG conducts search and rescue missions out of their facility on Star Island, which lies within LMH.

Dune and Beach System

The dune and beach system on the east shoreline is adequate for erosion control and storm surge protection for the 50-year project design life. The western 3,200 feet of shoreline has inadequate protection from erosion and storm surge. Should a storm occur with a greater intensity than the existing protection level can tolerate the properties behind this stretch of shoreline would potentially be subject to wave and water damage. The damage is predominantly storm-induced shoreline erosion. Wave damage on structures due to run-up is insignificant since the existing ground level is high enough to dissipate the run-up elevation and wave force during storm surges.

Habitat Characteristics

The littoral material on the shoreline is primarily sand and gravel composed mainly of light to brown fine- to medium-grained sand (USACE 1995). Due to erosion, the beach sand on the western shoreline

next to the inlet has been reduced to a gravel beach. The median sand size along the western shoreline is approximately 0.24mm. This smaller sediment size is believed to be the material placed on the beach from previous channel dredging activities. The proposed dredging material in the channel consists of predominantly fine- to medium-grained sand with traces of silt.

The habitat characteristics of the Mattituck Artificial Reef site are described in Section 2.3.2 and Appendix E of the NYSDEC FSGEIS. See Attachment 1 and the 2020 Final EA (referenced above) for full description and analysis of the dredging site.

4.0 Potential Impacts

Based on the 2020 LMH Conservation Recommendations, potential impacts from the proposed Federal action could include:

- Potential adverse effects to early life stages of winter flounder EFH;
- Potential impacts to migrating anadromous species;
- Potential impacts to the SAV on the east side of LMH inlet;
- Entrainment of early life stages (eggs and larvae) as a short-term direct impact due to hydraulic dredging and capture of eggs and possibly larvae in the dredge;
- Physical disturbance and turbidity.

4.1 Direct Impacts

Direct impacts are defined as those impacts that directly affect EFH or cause mortality. These impacts include physical alteration to the habitat of a particular species. Potential direct impacts to EFH species within the project area include the entrainment of demersal eggs and larvae by hydraulic dredges, changes to and/or removal of EFH habitat, localized changes in water column depth, bathymetry, hydrodynamics, and sedimentation rates, the temporary and localized impacts from other construction activities (i.e., water disturbance and noise), and short-term changes to water quality conditions associated with dredging operations including the re-suspension of sediments in the water column.

4.2 Indirect Impacts

Indirect impacts are defined as those impacts that indirectly affect the well-being of a particular species. These impacts include activities that cause the loss of forage species. The primary indirect impact to EFH species within the project area is disturbance of benthic and epibenthic forage communities. Several of the EFH species are demersal, or benthic feeders (i.e., winter flounder), that may experience a change in feeding efficiency for some period of time during and immediately following construction activities.

4.3 Cumulative Impacts

Cumulative impacts are defined as those impacts to EFH resulting from the ongoing activities of a particular project or from the activities of multiple projects in an area. These impacts represent the cumulative effects that can result from individually minor but collectively significant actions taking place over a period of time in a particular habitat.

Short-term cumulative impacts are related to dredging operations within the LMH channel. Long-term cumulative impacts would be limited to localized changes in water column depth, bathymetric contours,

hydrodynamics, and sedimentation rates, such as those potential impacts associated with the Operations and Maintenance (O&M) of the deepened channel.

5.0 EFH Distribution and Species Assessment

The EFH Mapper was referenced on 30 August 2024 to determine potential EFH within the project area. The EFH descriptions for the life stages of each species identified by the mapper are summarized in Table 2 at the end of this document.

5.1 General Impacts (All Species)

All fish resources and EFH identified in the construction area could potentially be impacted by (1) noise generated during construction activities; (2) vessel presence and traffic; and (3) sediment disturbance and turbidity.

Noise Generated During Construction

The acoustic threshold for behavioral disturbances to fish is 150dB¹ (NMFS 2023). The noise generated during dredge operation exceeds this threshold: ranging from 168-175dB for a cutterhead dredge and from 163-179dB for a backhoe dredge (Burton et al., 2019). However, the channel and harbor are frequented by larger commercial fishing and recreation vessels and the noise typically generated by small boats and ships ranges from 160 – 180dB (RMS) with larger vessels generating 180-190dB (RMS) (Burton et al., 2019). Therefore, the noise generated during dredging operations would be within the range of noise experienced in the channel from present vessel movement in and out of the harbor. The one-time operation of a backhoe dredge within the channel and the short-term operation of a cutterhead dredge during construction and future maintenance operations (every 7 years) is not expected to cause significant behavioral disturbance to fish in the area.

Vessel Presence and Traffic

Lake Montauk channel is a well-trafficked, relatively shallow waterway, used by both recreational and commercial vessels. The disturbance of a small-scale hydraulic dredging operation and future maintenance activity (every 7 years) should have no greater impact. The one-time disturbance of a mechanical dredge to remove the hard material likewise is expected to have no significant impact. The short-term presence of these additional vessels during construction is not expected to cause observable changes in the behavior and/or presence of fish resources and their associated EFH.

Sediment Disturbance and Turbidity

Turbidity is not expected to increase during construction. Due to the low percentage of fine-grained sediments that will be removed by the cutterhead dredge, turbidity will be temporary and localized (immeasurable and insignificant) and primarily confined to the channel prism. This turbidity is a natural feature of estuarine habitats and embayments and is comparable to the prop wash presently created in this shoaling environment by the large number of vessels using the harbor. Turbidity from the placement of dredged material in the nearshore environment is also expected to be negligible, as the sand is expected to quickly settle out of the water column.

 $^{^{1}}$ Source level dB re 1 μPa at 1 m, unless otherwise stated.

5.2 Species Assessments

Albacore Tuna (Thunnus alalunga):

EFH has been identified within LMH for the juvenile life stage of albacore tuna. The Town of East Hampton (TEH) Marine Life Inventory did not have any records of albacore tuna within the lake (TEH 2014). Albacore tunas are generally not expected to occur in the vicinity of the dredging or placement areas. Therefore, no direct, indirect, and cumulative impacts to albacore tuna EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Atlantic Butterfish (Peprilis triacanthus):

EFH has been identified within LMH for eggs, larval, juvenile, and adult life stages of Atlantic butterfish. The TEH Marine Life Inventory includes records of single butterfish in 2001, 2003, and 2005, and 3 individuals in 1999 (TEH 2014). A Northeast Area Monitoring and Assessment Program (NEAMAP) trawl survey indicates that Atlantic butterfish are abundant in the Block Island Sound and along the Atlantic coast of Long Island (Bonzek et al 2017). More recent NEAMAP survey data indicates the species is abundant in the waters adjacent to LMH (VIMS MRG 2023, 2024).

Atlantic butterfish is a pelagic species that migrates inshore in the summers and offshore in the winters due to changes in water temperature. In Long Island Sound, spawning occurs in the summer months with a peak in July (Cross 1999). Given the location of the project (within the navigation channel and nearshore placement area) and timing of construction (late fall to winter), impacts to butterfish eggs and larvae are not anticipated.

Potential project related impacts to EFH and juvenile and adult butterfish would be more likely to occur in the fall months. Because juveniles and adults prefer open and near bottom waters, potential direct impacts to Atlantic butterfish are limited to temporary disturbances within the water column. Turbidity is expected to be negligible, as sand will settle quickly out of the water column, therefore impacts relating to turbidity would be negligible.

Potential indirect impacts would include those resulting from temporary loss of forage organisms and/or forage habitat and the alteration of existing habitat related to construction. Because Atlantic butterfish juveniles feed primarily on ctenophores and macro-zooplankton and adults feed on mollusks, the potential indirect impacts associated with loss of forage species are minimal given the small size of the construction area and the availability of other foraging habitat in adjacent waters.

Cumulative impacts are expected to be negligible because of the species' mobility and availability of habitat in adjacent waters. Therefore, no more than a minimal direct impact on Atlantic butterfish juvenile and adult life stage EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Atlantic Cod (Gadus morhua):

EFH has been identified within the LMH for adult Atlantic cod life stage. The TEH Marine Life Inventory did not have any records of Atlantic cod within the lake (TEH 2014). No Atlantic cod were caught along the Atlantic coast of Long Island or in the Block Island Sound in either the fall or spring NEAMAP trawls (Bonzek et al 2017). Atlantic cod are generally not expected to occur in the vicinity of the construction

area. Therefore, no potential direct, indirect, and cumulative impacts to Atlantic cod EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Atlantic Herring (Clupea harengus):

EFH has been identified within the LMH for the juvenile and adult life stages of Atlantic herring. The TEH Marine Life Inventory did not have any records of Atlantic herring within the lake (TEH 2014). Recent NEAMAP surveys showed low numbers of herring present at stations near LMH, with 2 caught in the fall of 2023 and 5 caught in the spring of 2024 (VIMS MRG 2023, 2024).

Atlantic herring juveniles and adults are pelagic, therefore potential direct impacts to EFH will be limited to temporary disturbances within the water column, such as bucket hoisting operations. These impacts are localized and may include increased turbidity by settling sediments within the water column. Since this species feeds within the water column and turbidity resulting from construction is expected to be negligible, impacts to feeding success are likewise expected to be negligible. Exposed individuals are likely to move to adjacent waters. Potential impacts would be further minimized wherever possible through BMPs as well as through seasonal restrictions.

Indirect impacts to the species are those resulting from the temporary loss of forage organisms and/or forage habitats and the alteration of existing habitat related to construction activities. Because Atlantic herring are planktivorous and feed primarily on zooplankton, the indirect impacts associated with the loss of forage species are expected to be minimal as there is other viable habitat and food sources in the adjacent waters outside of the construction area.

Cumulative impacts are also expected to be negligible because of the species' mobility and the availability of other EFH in adjacent waters (i.e. the Long Island and Block Island Sounds). Therefore, no more than a minimal direct, indirect, and cumulative impacts on Atlantic herring EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Atlantic Mackerel (Scomber scombrus):

EFH has been identified within the LMH for eggs, larval, juvenile, and adult life stages of Atlantic mackerel. The TEH Marine Life Inventory did not have any records of Atlantic mackerel within the lake (TEH 2014). No Atlantic mackerel were caught in the waters surrounding Lake Montauk during the fall 2023 or spring 2024 NEAMAP surveys (VIMS MRG 2023, 2024). Atlantic mackerel are generally not expected to occur in the vicinity of the construction area. Therefore, no potential direct, indirect, and cumulative impacts to Atlantic mackerel EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Black Sea Bass (Centropristus striata)

EFH has been identified within LMH for juvenile and adult black sea bass. The TEH Marine Life Inventory included one instance of black sea bass in 2003 (TEH 2014). Recent NEAMAP surveys caught 2-5 individuals in the fall of 2023 and 5-19 individuals in the spring of 2024 at stations located in the waters surrounding LMH (VIMS MRG 2023, 2024).

Because juveniles and adults are demersal and occur near bottom in structural habitat such as reefs, they are not expected to occur in the vicinity of the channel or the dredged material placement area. Therefore, no potential direct and indirect impacts to black sea bass EFH are anticipated.

Cumulative impacts are also expected to be negligible because of the species' mobility, occurrence of structured habitat, and the availability of EFH throughout adjacent waters. Therefore, no direct, indirect, and cumulative impacts on black sea bass EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Bluefish (Pomatomus saltatrix):

EFH has been identified within LMH for juvenile and adult bluefish. The TEH Marine Life Inventory included records of bluefish within the lake from 1997 – 2005, with the most abundance in 1997. (TEH 2014). No bluefish were caught near the project area in the recent fall NEAMAP survey; however bluefish were caught in the Block Island Sound during the spring survey with 9 – 99 individuals caught at the stations nearest to the project area (VIMS MRG 2023, 2024).

Pelagic juveniles and adult bluefish are seasonally present in mid-Atlantic waters in the late spring to early fall and migrate south during late fall/winter. Yearly fluctuations in abundances are possibly related to year class strength, prey abundance, and physical conditions. The seasonal occurrence and pelagic behavior of bluefish greatly limits potential impacts due to construction and future maintenance activities. Given the seasonal migration and timing of construction, no direct, indirect, or cumulative impacts to bluefish are anticipated as a result of construction activities or future maintenance within LMH channel.

Little Skate (Raja erinacea):

EFH has been identified within LMH for the juvenile and adult life stages of little skate. The TEH Marine Life Inventory did not have any records of little skate within the lake (TEH 2014). Recent NEAMAP surveys indicate little skate are present in Block Island Sound and were less abundant near the project area in the fall (2 individuals caught at nearby stations) than in the spring (9 to 33 individuals caught at nearby stations) (VIMS MRG 2023, 2024).

Little skate are not expected to be present in the channel or placement area and no direct impacts to little skate EFH are anticipated.

Potential direct impacts to little skate EFH are related to direct impacts to benthic prey resources. These indirect impacts are temporary and limited to the area of bottom disturbance. The potential loss of prey resources within the immediate construction area may induce individual skates to relocate to alternative foraging areas. However, given the small area of construction and the availability of nearby foraging areas in adjacent waters, this impact is expected to be negligible.

Cumulative impacts are expected to be negligible because of the species' mobility, seasonal occurrences, and the availability of other EFH in adjacent waters. Therefore, no direct, and minimal indirect and cumulative impacts to little skate EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Longfin Inshore Squid (Doryteuthis pealeii):

EFH has been identified within LMH for the eggs, juvenile, and adult life stages of longfin inshore squid. The TEH Marine Life Inventory did not have any records of longfin inshore squid within the lake (TEH 2014). Recent NEAMAP surveys indicate abundance of longfin inshore squid in the waters surrounding the project area, with catches of 50-60 individuals in the spring and catches ranging from 200 – 1,000 individuals in the fall at nearby stations (VIMS MRG 2023, 2024).

Generally, eggs are spawned in May and hatching occurs in July; spawning has occurred between spring and summer in the mid-Atlantic and New England waters (Jacobson 2005). Given the time of year that eggs are potentially present in the waters surrounding the project area, eggs of longfin inshore squid are not expected to be present during construction or future maintenance activities. Therefore, no direct, indirect, or cumulative impacts to the eggs are anticipated.

Longfin inshore squid are seasonally present, as they overwinter along the continental shelf and return inshore during spring/early summer where they remain through late fall (Jacobson 2005). Potential project impacts to juvenile and adults are limited to the fall months (October – November). Juveniles are planktivorous, while adults feed on fish and crustaceans. Potential direct impacts include short-term disturbances to bottom habitat and water column habitat. As turbidity resulting from construction is expected to be negligible, impacts to juvenile feeding in the water column is expected to be negligible. These disturbances are localized, and individuals are anticipated to utilize undisturbed habitat available in adjacent waters.

Potential indirect impacts are those resulting from temporary loss of forage organisms and/or forage habitats and the alteration of existing habitat related to construction activities. Indirect impacts associated with the loss of forage species are expected to be minimal as there is other viable habitat and food sources in the adjacent waters.

Cumulative impacts would be negligible due to the species' mobility and availability of habitat in adjacent waters. Therefore, there would be minimal indirect impacts and negligible direct and cumulative impacts to longfin squid as a result of construction activities or future maintenance within LMH channel.

Red Hake (Urophycis chuss):

EFH has been identified within LMH for the adult stage of red hake. The TEH Marine Life Inventory did not have any records of red hake within the lake (TEH 2014). Red hake were not caught in the waters surrounding LMH but were present in the more open waters of the Block Island and Rhode Island sounds (VIMS MRG 2023, 2024). Red hake are generally not expected to occur in the vicinity of the channel or placement area. Therefore, no potential direct, indirect, and cumulative impacts to red hake EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Sand Tiger Shark (Carcharius taurus):

EFH has been identified within LMH for the neonate/juvenile life stage of the sand tiger shark. The TEH Marine Life Inventory did not have any records of sand tiger shark within the lake (TEH 2014). No sand tiger sharks were caught during recent NEAMAP surveys near the project area (VIMS MRG 2023, 2024). Distribution data from the NMFS Cooperative Shark Tagging Program (1962-2013) shows the most occurrences of sand tiger sharks in the waters surrounding Long Island in the summer, with a few occurrences in the fall, and no occurrences in the winter and spring (Kohler and Turner, 2019).

Given the survey data and timing of construction, sand tiger sharks are generally not expected to occur in the vicinity of the dredged channel or placement area. Therefore, no potential direct, indirect, and

cumulative impacts to sand tiger shark EFH are anticipated as a result of the construction activities or future maintenance within LMH channel.

Sandbar Shark (Carcharhinus plumbeus):

EFH has been identified within LMH for the juvenile and adult life stages of the sandbar shark. The TEH Marine Life Inventory did not have any records of sandbar shark within the lake (TEH 2014). No sandbar sharks were caught during recent NEAMAP surveys near the project area (VMS MRG 2023, 2024). Distribution data from the NMFS Cooperative Shark Tagging Program (1962-2013) show that sandbar shark have the highest occurrence in the waters surrounding Long Island in the summer and fall, with less distribution in the spring, and no occurrences in the winter (Kohler and Turner, 2019).

Based on survey data and due to the work occurring in the winter, sandbar sharks are generally not expected to occur in the vicinity of the dredged channel or the placement area. Therefore, no potential direct, indirect, and cumulative impacts to sandbar shark EFH are anticipated as a result of the construction activities or future maintenance within LMH channel.

Scup (Stenotomus chrysops):

EFH has been identified within LMH for the eggs, larval, juvenile, and adult life stages of scup. The TEH Marine Life Inventory included records of scup from 2000-2006 and in 2008 (TEH 2014). Scup were caught during the recent NEAMAP survey, with 4,000-6,000 individuals caught at nearby stations in the fall and 200 – 1,000 individuals caught at nearby stations in the spring (VIMS MRG 2023, 2024).

Eggs and larvae of scup are found in the nearshore waters of New England from May through September (MAFMC 1998). Given the timing of construction, it is unlikely that eggs and larvae would be present in the construction area. Therefore, there would be no direct, indirect, or cumulative impacts to these life stages of scup.

Potential short-term impacts to juvenile and adult scup EFH are related to the disruption of bottom habitats during construction activities. These impacts will be localized and confined to the immediate dredging and placement areas and will include the disruption/burial of substrate by settling sediments. Turbidity is expected to be negligible, as sand will settle quickly out of the water column, therefore impacts relating to turbidity would be negligible. Adjacent waters would remain available for foraging and growth and scup will take advantage of undisturbed habitat elsewhere. Potential impacts to EFH for this species would be limited to the spring and fall months, when adults and juveniles are most common.

Potential indirect impacts to scup EFH will continue to be limited to the disturbance and temporary loss of benthic species included in the diets of scup. Indirect impacts to EFH will be short-term and localized to the construction area. Scup will be able to forage for prey in the adjacent waters outside of the construction area.

Cumulative impacts are expected to be negligible because of the species' mobility, seasonal occurrences, and the availability of other EFH in adjacent waters. Therefore, minimal direct, indirect, and cumulative impacts to scup EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Skipjack Tuna (Katsuwonus pelamis):

EFH has been identified within LMH for adult skipjack tuna. The TEH Marine Life Inventory did not have any records of skipjack tuna within the lake (TEH 2014). Skipjack tunas are not expected to be present in the project area. Therefore, no direct, indirect, or cumulative impacts to skipjack tuna EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Smoothhound Shark Complex (Atlantic Stock):

EFH has been identified in LMH for all life stages of the smoothhound shark complex species. This complex includes smooth dogfish (*Mustelus canis*), Florida smoothhound (*Mustelus norrisi*), and gulf smoothhound (*Mustelus sinusmexicanus*). The smooth dogfish is the only species of this complex to occur in the Atlantic and will therefore be the only species of the complex to be discussed further in this EFH (NMFS 2017). Distribution data from the NMFS Cooperative Shark Tagging Program (1962-2013) show that smooth dogfish have the highest occurrence in the waters surrounding Long Island in the summer and fall, with less distribution in the spring, and no occurrences in the winter (Kohler and Turner, 2019).

The TEH Marine Life Inventory did not have any records of smooth dogfish within the lake (TEH 2014). The recent NEAMAP surveys caught 2-5 individual smooth dogfish in the spring and 2-8 in the fall at stations in open waters surrounding LMH (VIMS MRG 2023, 2024). Distribution data from the NMFS Cooperative Shark Tagging Program (1962 – 2013) show that smooth dogfish are seasonally present in the waters adjacent to the project area in the summer and fall (Kohler and Turner, 2019).

Given the distribution data, smooth dogfish are not expected to be present in the project area. No direct, indirect, or cumulative impacts to smooth dogfish are anticipated as a result of construction activities or future maintenance of within LMH channel.

Spiny Dogfish (Squalus acanthias):

EFH has been identified in LMH for the male adult and female sub-adult life stages of the spiny dogfish. The TEH Marine Life Inventory did not have any records of spiny dogfish within the lake (TEH 2014). Spiny dogfish were not caught during the recent fall or spring NEAMAP surveys (VIMS MRG 2023, 2024).

The salinity range of the LMH and channel (approximately 28 – 31 ppt) falls outside of the salinity range of both female sub-adult and adult spiny dogfish (32-35 ppt) (MAFMC 2014). Given this, it is unlikely that spiny dogfish are present in the construction area. Therefore, no direct, indirect, and cumulative impacts to spiny dogfish are anticipated as a result of construction activities or future maintenance within LMH channel.

Summer Flounder (Paralichthys dentatus):

EFH has been identified in LMH for the juvenile and adult life stages of summer flounder. The TEH Marine Life Inventory recorded summer flounder in the lake in 1998-1999 and 2004-2006 (TEH 2014). Low numbers of summer flounder were caught during the recent NEAMAP surveys, with 6-11 caught in the fall and 3-5 caught in the spring at stations in the open waters surrounding LMH (VIMS MRG 2023, 2024).

Potential direct impacts to summer flounder EFH include the temporary disruption and loss of habitat. Changes to bathymetry are limited to the channel, side slope areas, and the dredged material placement areas and will therefore minimally impact shallow nearshore areas during construction. No impacts to SAV habitat are expected (see Section 6.0).

Potential indirect impacts include the removal and/or burial of benthic and epibenthic forage species habitat and the disruption and exclusion of some forage fish from the project area during construction. These impacts will be short-term as finfish prey species will return to the area immediately and benthic communities will begin to re-establish themselves shortly after construction. The loss of forage habitat would likely cause summer flounder to relocate to other feeding habitats in adjacent waters since the total aquatic habitat area impacted during construction is a small fraction of the total area available to summer flounder.

Potential cumulative impacts of construction activities will continue to be avoided and minimized wherever possible through integration of best management practices that include a time of year restriction. Cumulative impacts are expected to be minimal due to species' mobility and availability of other EFH habitat. Therefore, no more than minimal direct, indirect, and cumulative impacts are expected to summer flounder EFH by construction activities or future maintenance within LMH channel.

Windowpane Flounder (Scophthalmus aquosus):

EFH has been identified in LMH for eggs, larval, juvenile, and adult life stages of windowpane flounder. The TEH Marine Life Inventory recorded windowpane flounder in the lake from 2000-2001 and in 2005 (TEH 2014). Windowpane were caught at stations in the open waters surrounding LMH during the recent NEAMAP surveys, with 1-4 individuals caught in the fall and 20-25 individuals caught in the spring (VIMS MRG 2023, 2024).

Windowpane flounder spawning occurs during the spring and summer. Given the timing of construction, egg and larval stages are not expected to be present in the project area. Therefore, no direct, indirect, or cumulative impacts to these life stages of windowpane flounder are anticipated.

Potential indirect impacts to juvenile and adult windowpane flounder are related to bottom habitat disturbance and potential temporary loss of forage organisms in the immediate vicinity of dredging. Impacts would be short-term, as sand is expected to quickly settle out of the water column and recolonization by benthic invertebrates is expected to occur shortly after construction. A significant portion of windowpane flounder prey is pelagic. In-water construction would induce temporary avoidance behavior in most of these prey species. The resulting impact on windowpane flounder would be the need to follow their prey to other suitable habitats.

As impacts to benthic habitat will be temporary, no long-term, direct, indirect, or cumulative impacts on windowpane flounder are anticipated as a result of construction activities or future maintenance within LMH channel.

Winter Flounder (Pseudopleuronectes americanus):

EFH has been identified in LMH for the eggs, larval, juvenile, and adult life stages of winter flounder. The TEH Marine Life Inventory recorded winter flounder from 1997-2006 and in 2008 (TEH 2014). During the fall NEAMAP survey, winter flounder were abundant in the Rhode Island Sound and only 1 individual was caught at a station near to LMH. During the spring NEAMAP survey, winter flounder were abundant in

both the Block Island and Rhode Island sounds and only 1 individual was caught at a station near to LMH (VIMS MRG 2023, 2024).

Winter flounder migrate inshore in fall and early winter and spawn in late winter and early spring, with peak spawning occurring in February and March south of Cape Cod. A ten-year study in the New York Harbor reported that spawning could begin as early as January or as late as March (Wilber et al., 2013). The same study demonstrated that navigation channels are not high value spawning habitat. Given this, and the timing of construction, no direct, indirect, or cumulative significant impacts to the egg and larval stages of winter flounder are anticipated. Potential indirect impacts to winter flounder juvenile and adult EFH would include the removal and/or burial of benthic and epibenthic forage species habitat and the exclusion of some forage fish from the project area during construction. These indirect impacts are expected to be short-term as benthic communities are expected to re-establish themselves following construction. Moreover, adult winter flounder are opportunistic feeders and would locate to other feeding habitats in the surrounding waters, since the total aquatic habitat area impacted during construction is a small fraction of the total habitat available to winter flounder.

Potential cumulative impacts of construction have been avoided and minimized whenever possible through the integration of BMPs and the use of dredge windows. Therefore, minimal and temporary direct, indirect, and cumulative impacts to winter flounder EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

Winter Skate (Leucorja ocellata):

EFH has been identified in LMH for juvenile and adult winter skate. The TEH Marine Life Inventory did not have any records of winter skate within the lake (TEH 2014). Only 1-2 individual winter skates were caught in both the fall and spring NEAMAP surveys at stations near to LMH, with larger numbers present in Block Island Sound (VIMS MRG 2023, 2024).

Winter skate have been collected outside of the project area and are more prevalent in the waters of Block Island Sound. No direct impacts to winter skate are anticipated. Potential indirect impacts to winter skate EFH are related to direct impacts to benthos. These impacts are temporary and limited to the area of bottom disturbance. The potential loss of prey resources within the construction area may induce individual skates to relocate to alternative foraging areas in adjacent waters. Therefore, at most minimal indirect and cumulative impacts to winter skate are anticipated as a result of construction activities or future maintenance within LMH channel.

Yellowtail Flounder (Limanda ferruginea):

EFH has been identified in LMH for adult yellowtail flounder. The TEH Marine Life Inventory did not have any records of yellowtail flounder within the lake (TEH 2014). No yellowtail flounder were caught during the NEAMAP surveys (VIMS MRG 2023, 2024).

Yellowtail flounder are not expected to be present in the project area. Therefore, no direct, indirect, or cumulative impacts to yellowtail flounder EFH are anticipated as a result of construction activities or future maintenance within LMH channel.

6.0 HAPC Description and Assessment

The EFH Mapper identified the summer flounder SAV HAPC as potentially present in the project area. The HAPC for summer flounder is defined by the MAFMC as "all native species of microalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations within adult and juvenile summer flounder EFH is HAPC. If native species of SAV are eliminated than exotic species should be protected because of functional value, however, all efforts should be made to restore native species" (MAFMC 1998). Summer flounder was identified by the EFH Mapper for all life stages within the project area and, as noted in Section 5.0 of this assessment, are present within LMH. Additionally, there is a SAV bed (eelgrass) approximately 160 feet from the construction area within the channel. Therefore, summer flounder HAPC exists adjacent to the project area.

While there is potential summer flounder SAV HAPC present, given the number of vessels using the harbor and the regular maintenance dredging of the channel, disturbance due to construction activities would not have a significant impact. The existing SAV bed is 160 feet from the easternmost corner of the deposition basin. Turbidity is expected to be minimal due to grain size. No impacts to the SAV bed are anticipated as a result of construction. All practicable measures have been taken to avoid and minimize impacts to SAV. Therefore, impacts to summer flounder HAPC are expected to be, at most, minimal.

7.0 EFH Assessment Summary

Table 1 summarizes the level of impact to each EFH species life stage and HAPC assessed in the previous sections. No impacts to early life stages were identified. Impacts to juvenile and adult life stages were at most short-term minimal impacts.

	Impacts of Construction on Life Stage								
Species	Eggs	Larvae	Juvenile	Adult					
Albacore Tuna	N/A	N/A	No impacts	N/A					
Atlantic Butterfish	No impacts	No impacts	Minimal	Minimal					
			temporary	temporary					
			impacts	impacts					
Atlantic Cod	N/A	N/A	N/A	No impacts					
Atlantic Herring	N/A	N/A	Minimal	Minimal					
			temporary	temporary					
			impacts	impacts					
Atlantic Mackerel	No impacts	No impacts	No impacts	No impacts					
Black Sea Bass	N/A	N/A	No impacts	No impacts					
Bluefish	N/A	N/A	No impacts	No impacts					
Little Skate	N/A	N/A	Negligible	Negligible					
Longfin Inshore	No impacts	N/A	Minimal	Minimal					
Squid			temporary	temporary					
			impacts	impacts					
Red Hake	N/A	N/A	N/A	No impacts.					
Sand Tiger Shark	N/A	N/A	No impacts	N/A					
Sandbar Shark	N/A	N/A	No impacts	No impacts.					
Scup	No impacts	No impacts	Minimal	Minimal					
			temporary	temporary					
			impacts	impacts					
Skipjack Tuna	N/A	N/A	N/A	No impacts					

	Impacts of Construction on Life Stage										
Species	Eggs	Larvae	Juvenile	Adult							
Smooth Dogfish	No impacts	No impacts	No impacts	No impacts							
Spiny Dogfish	N/A	N/A	N/A	No impacts							
Summer Flounder	N/A	N/A	Minimal	Minimal							
			temporary	temporary							
			impacts	impacts							
Windowpane	No impacts	No impacts	Minimal	Minimal							
Flounder			temporary	temporary							
			impacts	impacts							
Winter Flounder	No impacts	No impacts	Minimal	Minimal							
			temporary	temporary							
			impacts	impacts							
Winter Skate	N/A	N/A									
Yellowtail	N/A	N/A	N/A	No impacts							
Flounder											

Table 1: Summary of Impacts of Construction on Identified EFH Life Stages

Given the proposed time of year of construction (October 1 through December 31), no significant impacts to the EFH of early life stages of the identified species are anticipated. Impacts to adults and juveniles are expected to be minimal and temporary at the most. Short-term, minimal impacts to foraging habitat and prey species are expected during active construction, due to the small area of work and the availability of habitat in adjacent waters. Impacts to benthic communities will be temporary, as recovery is expected shortly after construction is completed. Turbidity will be negligible, as the sand is expected to quickly settle out of the water column. Cumulative impacts to all species EFH are expected to be negligible due to species mobility.

The lack of substantial concentrations of EFH species/life stages in the project area, and the prompt recovery of the habitat to pre-dredge conditions after previous maintenance dredging, would ensure that there would be no more than minimal impact on EFH. Additionally, the proposed dredging would increase circulation in the harbor, ultimately improving the habitat.

Based on the above, the District concludes that there would be no more than minimal impact to EFH for the species and life stages listed. Construction of the project, with the implementation of a reasonable seasonal restriction of January 1 through September 30 to protect EFH habitat and permit the work to occur within one season (rather than over multiple seasons) can be conducted without the need for additional mitigation measures to protect habitat or individual species.

8.0 References

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Species Name	Maturity Stage	Water Temp (°C)	Salinity (‰)	Water Depth (m)	Seasonal Occurrence/Abundance	Comments	Fisheries Management Plan
Albacore Tuna (Thunnus alalunga)	Juvenile	15.6 – 19.4			No seasonal occurrence noted.	Offshore pelagic habitats.	Amendment 10 to the 2006 Consolidated HMS FMP
	Eggs	6.5- 21.5		<1500	No seasonal occurrence noted.	Pelagic habitats in inshore estuaries and embayments from Massachusetts Bay to the south shore of Long Island, NY, in Chesapeake Bay, and on the continental shelf and slop from Georges Bank to Cape Hatteras, NC.	Atlantic Mackerel, Squid and Butterfish Amendment 11
	Larvae	8.5- 21.5		41-350	No seasonal occurrence noted.	Pelagic habitats in inshore estuaries and embayments in Boston Harbor, from the south shore of Cape Cod to the Hudson River, and in Delaware and Chesapeake bays, and on the continental shelf from the Georges Bank to Cape Hatteras, NC.	
Atlantic Butterfish (Peprilus triacanthus)	Juvenile	6.5-27	>5	10-280	No seasonal occurrence noted.	Pelagic habitats in inshore estuaries and embayments from Massachusetts Bay to Pamlico Sound, NC, in inshore waters of the Gulf of Maine and the South Atlantic Bight, and on the inner and outer continental shelf from southern New England to SE.	
	Adult	4.5- 27.5	>5	10-250	No seasonal occurrence noted.	Pelagic habitats in inshore estuaries and embayments from Massachusetts Bay to Pamlico Sound, NC, inshore waters of the Gulf of Maine and South Atlantic Bight, on Georges Bank, on the inner continental shelf south of Delaware Bay, and on the outer continental shelf from southern New England to SC.	

Species Name	Maturity Stage	Water Temp (°C)	Salinity (‰)	Water Depth (m)	Seasonal Occurrence/Abundance	Comments	Fisheries Management Plan
Atlantic Cod (Gadus morhua)	Adult		S	30-160	No seasonal occurrence noted.	Sub-tidal benthic habitats; structurally complex hardbottom habitats composed of gravel, cobble, and boulder with and without emergent epifauna and microalgae; found on sandy substrates and frequent deeper slopes of ledges along shore.	Amendment 14 to the Northeast Multispecies FMP
Atlantic Herring (Clunea	Juvenile	3-15	S	<300		Intertidal and sub-tidal pelagic habitats	Amendment 3 to
harengus)	Adult	<10	S	<300	Summer/Fall	Sub-tidal pelagic habitats.	Atlantic Herring FMP
	Eggs	6.5- 12.5		<100		Pelagic habitats in inshore estuaries and embayments from Great Bay, NH to south	Atlantic Mackerel, Squid and
Atlantic Mackerel (Scomber scombrus)	Larvae	5.5- 11.5		21-100		shore of Long Island, NY, inshore and offshore waters of the Gulf of Maine, and on the continental shelf from Georges Bank to Cape Hatteras, NC.	Butterfish Amendment 11
	Juvenile	5-20		10-110		Pelagic habitats in inshore estuaries and embayments from Passamaquoddy Bay and Penobscot Bay, Maine to Hudson River, in the Gulf of Maine, and on the continental shelf from Georges Bank to Cape Hatteras, NC.	
	Adult	5-20		<170		Pelagic habitats in inshore estuaries and embayments from Passamaquoddy Bay, Maine to Hudson River, and on the Continental shelf from Georges Bank to Cape Hatteras, NC.	
	Juveniles	>6	>18		No seasonal occurrence noted	Demersal waters over the Continental Shelf; found in association with rough	Amendment 12 to Summer
Black Sea Bass (Centropristis striata)	Adults	>6			May - Oct	bottom, shellfish and eelgrass beds, and man-made structures in sandy-shelly areas; during wintering offshore clam beds and shell patches may be used; found in S zone in estuaries during summer and spring.	Flounder, Scup, Black Sea Bass FMP
Bluefish (Pomatomus saltatrix)	Juveniles			M, S (4)	May – Oct	Mostly pelagic waters over Continental Shelf.	Amendment 1 to Bluefish FMP

Species Name	Maturity Stage	Water Temp (°C)	Salinity (‰)	Water Depth (m)	Seasonal Occurrence/Abundance	Comments	Fisheries Management Plan
	Adults		>25		Apr – Oct	Mostly pelagic waters over Continental Shelf, highly migratory and distribution varies.	
Little Skate (Leucoraia	Juveniles			<80		Intertidal and sub-tidal benthic habitats;	Amendment 2 to
erinacea)	Adult			<100		found on sand and gravel substrates, also on mud.	Northeast Skate Complex FMP
	Eggs	10-23	30-32	<50		Inshore and offshore bottom habitats from Georges Bank to Cape Hatteras, NC. Demersal; eggs anchored to hard bottom types, SAV, sand, and mud.	Atlantic Mackerel, Squid, and Butterfish Amendment 11
Longfin Inshore Squid (Doryteuthis pealeii)	Juvenile (pre- recruits)	8.5- 24.5	28.5- 36.5	6-160		Pelagic inshore and offshore continental shelf from Georges Bank to SC, in the SW Gulf of Maine, and in embayments like Long Island Sound.	
	Adult (Recruits)	8.5-14	24-36.5	6-200		Pelagic inshore and offshore continental shelf from Georges Bank to SC, in the SW Gulf of Maine, and in embayments like Long Island Sound.	
Red Hake (Urophycis chuss)	Adult	-	S,M	50-750		Benthic habitat in outer continental shelf and slope and inshore estuaries and embayments; shell beds, soft sediment, artificial reef; found in depressions in softer sediment or shell beds, not open sandy bottom.	Amendment 14 to Northeast Multispecies FMP
Sand Tiger Shark (Carcharias taurus)	Neonate/Juvenile	19-25	23-30	2.8-7			Amendment 10 to 2006 Consolidated HMS FMP
Sandbar Shark (Carcharhinus plumbeus)	Adults					Coastal areas from southern New England to Florida Keys, from inland waters of Delaware Bay and mouth of Chesapeake Bay to the continental shelf break.	Amendment 10 to 2006 Consolidated HMS FMP
Scup (Stenotomus	Eggs	12-22	>15		May – August	Southern New England to coastal Virginia	Amendment 12
chrysops)	Larvae	12-22	>15		May - September		Summer

Species Name	Maturity Stage	Water Temp (°C)	Salinity (‰)	Water Depth (m)	Seasonal Occurrence/Abundance	Comments	Fisheries Management Plan
	Juvenile	>7	>15		Summer/Spring	Demersal waters over continental shelf; found in estuaries and bays in spring and summer between Virginia and Massachusetts in association with sands, mud, mussel, and eelgrass substrates.	Flounder, Scup, Black Sea Bass FMP
	Adult	>7	-	-		Demersal waters over the continental shelf	
Skipjack Tuna (Katsuwonus pelamis)	Adult					Coastal and offshore habitats between Massachusetts and Cape Lookout, NC	Amendment 10 to 2006 Consolidated HMS FMP
Smooth Dogfish ² (Mustelus canis)	All	6-27		<200		Demersal waters over continental shelf from Massachusetts to northern Argentina.	Amendment 10 to 2006 Consolidated HMS FMP
Spiny Deafish (Squalue	Adult (male)	7-15	32-35		Spring/Winter		Amendment 3 to
acanthias)	Sub-adult (female)	7-15	32-35		Spring/Winter	Pelagic and epibenthic habitats	Spiny Dogfish FMP
Summer Flounder	Juvenile	>3	10-30			Demersal waters over continental shelf from coast to limits of EEZ; use estuarine habitats as nurseries (salt marsh creeks, seagrass beds, mudflats, open bay areas)	Amendment 12 Summer Flounder, Scup, Black Sea Bass
(Paralichthys dentatus)	Adult					Demersal waters over continental shelf from coast to limits of EEZ; found in shallow coastal/estuarine waters in warm months and offshore in colder months	FMP
	Eggs		S, M			Pelagic habitate on the continental shelf	Amendment 14 to
Windownane Flounder	Larvae		S, M				the Northeast
Vindowpane Flounder (Scophthalmus aquosus)	Juvenile		S, M	<60		Intertidal, sub-tidal benthic habitats in estuarine, coastal marine, and continental shelf waters; found on mud and sand substrates, YOY prefer sand	Multispecies FMP

² Included as a part of the Smoothound Shark Complex; the smooth dogfish is the only species within this complex found in the Atlantic (NMFS 2017).

Species Name	Maturity Stage	Water Temp (°C)	Salinity (‰)	Water Depth (m)	Seasonal Occurrence/Abundance	Comments	Fisheries Management Plan
	Adult		S, M	<70		Intertidal, sub-tidal benthic habitats in estuarine, coastal marine, and continental shelf waters; found on mud and sand substrates	
Winter Flounder	Eggs		S, M	MLW - 5		Subtidal estuarine and coastal benthic habitats; found in mud, muddy sand, sand, gravel, macroalgae, and SAV	Amendment 14 to Northeast Multispecies FMP
Winter Flounder	Larvae		S, M	<70		Estuarine, coastal, continental shelf water	
(Pseudopieuronectes - americanus)	Juvenile			MHW - 60		Estuarine, coastal, and continental shelf	
	Adult			MHW - 70		substrates	
Winter Skate	Juvenile			<90		Sub-tidal benthic habitats and continental	Amendment 2 to
(Leucoraja ocellata)	Adult			<80		shelf; found on sand and gravel substrates, also on mud	Northeast Skate Complex FMP
Yellowtail Flounder (Limanda ferruginea)	Adult			25-90		Continental shelf; found on sand, sand with mud, shell hash, gravel, and rocks	Amendment 14 to Northeast Multispecies FMP

Table 2: Summary of EFH Descriptions for each Identified Species

Federal Interagency Comment Form

Date: January 8, 2025

Project: US Army Corps of Engineers Lake Montauk Harbor Federal Navigation Project Maintenance Dredging

Appl No.: n/a

Commenting Agency: NOAA Fisheries, Greater Atlantic Regional Fisheries Office (GARFO), Habitat and Ecosystem Services Division (HESD)

Action Agency Project Manager: Sophie Killy

Waterway: Lake Montauk

Activity: Maintenance dredge shoals in federal navigation channel with placement in nearshore (sand) and artificial reef (rock)

ESSENTIAL FISH HABITAT (EFH)

Project may adversely affect EFH.

ESSENTIAL FISH HABITAT CONSERVATION RECOMMENDATIONS: (Note: EFH CRs require a response from the federal action agency within 30 days of receipt or 10 days before a permit is issued if CRs are not included as a special condition of the permit. In addition, a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920 (j) if new information becomes available, or if the project is revised in such a manner that affects the basis for the above EFH determination or EFH conservation recommendations.)

- Continue to avoid dredging from January 1 to June 30 of each year to minimize adverse effects to winter flounder early life stages and their EFH (1/1 - 5/31) as well as migrating anadromous species including river herring (alewife Alosa pseudoharengus and blueback herring Alosa aestivalis) (3/1 -6/30), which are prey for a number of federally managed species.
- 2. There is mapped submerged aquatic vegetation (SAV) on the east side of the inlet; SAV is a Habitat Area of Particular Concern for EFH. Should dredging need to occur during the SAV growing season of any given year, a visual survey should be conducted to document presence/absence of SAV within 500 feet of any area to be dredged. A minimum buffer between dredging area(s) and the edge of any SAV bed should be maintained between April 15 and October 15 of any year. The appropriate buffer is 250 feet if the sediments are 95% sand and 500 feet if less than 95% sand. Dredging can be sequenced to accommodate this buffer.
- 3. The intakes on the dredge plant should not be turned on until the dredge head is in the sediment and should be turned off before being lifted to minimize larval entrainment in the dredge.
- 4. Use BMPs to minimize the release of suspended sediments during sand placement activities.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

See comments above.

ENDANGERED SPECIES

Threatened or endangered species under the jurisdiction of NMFS may be present in the project area. The federal action agency will be responsible for determining whether the proposed action may affect listed species. If they determine that the proposed action may affect a listed species, they should submit their determination of effects, along with justification and a request for concurrence to the attention of the Section 7 Coordinator, NMFS, Greater Atlantic Regional Fisheries Office, Protected Resources Division, 55 Great Republic Drive, Gloucester, MA 01930 or nmfs.gar.esa.section7@noaa.gov. If you have any questions regarding these comments, please contact Edith Carson-Supino (978-282-8490; Edith.Carson-supino@noaa.gov).

OTHER:

1. Comply with state permit conditions, as applicable.

2. Send NOAA Fisheries GARFO HESD a copy of the permit when issued.

Prepared by: Jessie Murray

Date: 2/19/25

Version 12-2020