US Army Corps of Engineers®
New York District

LAKE MONTAUK HARBOR, EAST HAMPTON, NEW YORK

NAVIGATION IMPROVEMENTS

FINAL ENVIRONMENTAL

ASSESSMENT October 2020

APPENDIX B:

Essential Fish Habitat Assessments

NOAA FISHERIES
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
Essential Fish Habitat (EFH) Consultation Guidance
EFH ASSESSMENT WORKSHEET

Introduction:

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) mandates that federal agencies conduct an essential fish habitat (EFH) consultation with NOAA Fisheries regarding any of their actions authorized, funded, or undertaken that may adversely affect EFH. An adverse effect means 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.

This worksheet has been designed to assist in determining whether a consultation is necessary and in preparing EFH assessments. This worksheet should be used as your EFH assessment or as a guideline for the development of your EFH assessment. At a minimum, all the information required to complete this worksheet should be included in your EFH assessment. If the answers in the worksheet do not fully evaluate the adverse effects to EFH, we may request additional information in order to complete the consultation.

An expanded EFH assessment may be required for more complex projects in order to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. While the EFH worksheet may be used for larger projects, the format may not be sufficient to incorporate the extent of detail required, and a separate EFH assessment may be developed. However, regardless of format, the analysis outlined in this worksheet should be included for an expanded EFH assessment, along with additional information that may be necessary. This additional information includes:

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

Your analysis of adverse effects to EFH under the MSA should focus on impacts to the habitat for all life stages of species with designated EFH, rather than individual responses of fish species. Fish habitat includes the substrate and benthic resources (e.g., submerged aquatic vegetation, shellfish beds, salt marsh wetlands), as well as the water column and prey species.

Consultation with us may also be necessary if a proposed action results in adverse impacts to other NOAA-trust resources. Part 6 of the worksheet is designed to help assess the effects of the action on other NOAA-trust resources. This helps maintain efficiency in our interagency coordination process. In addition, further consultation may be required if a proposed action impacts marine mammals or threatened and endangered species for which we are responsible. Staff from our Greater Atlantic Regional Fisheries Office, Protected Resources Division should be contacted regarding potential impacts to marine mammals or threatened and endangered species.

Instructions for Use:

Federal agencies must submit an EFH assessment to NOAA Fisheries as part of the EFH consultation. Your EFH assessment must include:

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

In order for this worksheet to be considered as your EFH assessment, you must answer the questions in this worksheet fully and with as much detail as available. Give brief explanations for each answer.

Federal action agencies or the non-federal designated lead agency should submit the completed worksheet to NOAA Fisheries Greater Atlantic Regional Fisheries Office, Habitat Conservation Division (HCD) with the public notice or project application. Include project plans showing existing and proposed conditions, 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 and sensitive habitats mapped, including special aquatic sites (submerged aquatic vegetation, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), hard bottom habitat areas and shellfish beds, as well as any available site photographs.

For most consultations, NOAA Fisheries has 30 days to provide EFH conservation recommendations once we receive a complete EFH assessment. Submitting all necessary information at once minimizes delays in review and keeps review timelines consistent. Delays in providing a complete EFH assessment can result in our consultation review period extending beyond the public comment period for a particular project.

The information contained on the HCD website will assist you in completing this worksheet. The HCD website contains information regarding: the EFH consultation process; Guide to EFH Designations which provides a geographic species list; Guide to EFH Species Descriptions which provides the legal description of EFH as well as important ecological information for each species and life stage; and other EFH reference documents including examples of EFH assessments and EFH consultations.

Our website also includes a link to the NOAA EFH Mapper .
We would note that the EFH Mapper is currently being updated and revised. Should you use the EFH Mapper to identify federally managed species with designated EFH in your project area, we recommend checking this list against the Guide to Essential Fish Habitat Designations in the Northeast to ensure a complete and accurate list is provided.

EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 3/2016)

PROJECT NAME: Lake Montauk Harbor, New York Federal Navigation Project

DATE: 02/21/2019

PROJECT NO.:

LOCATION (Water body, county, physical address):

The waters within the square within Lake Montauk Harbor, Town of East Hampton, Long Island, NY 41° 10.0' N 71° 50.0' W 41° 00.0' N 72° 00.0' W.

PREPARER: USACE-NAN-PLE POC Jenine Gallo

Step 1: Use the Habitat Conservation Division EFH webpage's Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest. Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. The list can be included as an attachment to the worksheet. Make a preliminary determination on the need to conduct an EFH consultation.

1. INITIAL CONSIDERATIONS

EFH Designations	Yes	No
Is the action located in or adjacent to EFH designated for eggs? **List the species:** See Table 1, Attached Supplemental	✓	
Is the action located in or adjacent to EFH designated for larvae? **List the species:** See Table 1, Attached Supplemental	✓	
Is the action located in or adjacent to EFH designated for juveniles? **List the species:** See Table 1, Attached Supplemental	✓	

Is the action located in or adjacent to EFH designated for adults or spawning adults? List the species: See Table 1, Attached Supplemental	✓	

If you answered 'no' to all questions above, then an EFH consultation is not required - go to Section 5.

If you answered 'yes' to any of the above questions, proceed to Section 2 and complete the remainder of the worksheet.

Step 2: In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Identify the sources of the information provided and provide as much description as available. These should not be yes or no answers. Please note that there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts. Project plans that show the location and extent of sensitive habitats, as well as water depths, the HTL, MHW and MLW should be provided.

2. SITE CHARACTERISTICS

Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	Subtidal, water column
What are the sediment characteristics?	Approximatley 98% sand, 2% silt.
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the SAV species and spatial extent.	Yes, adjacent to the study area of effect. See Attached Supplemental.
Are there wetlands present on or adjacent to the site? If so, describe the spatial extent and vegetation types.	Yes. Tidal wetlands in the study area are generally located around the perimeter of the Lake, or directly adjacent and hydrologically connected to the Lake. Tidal wetlands were predominantly vegetated with salt marsh cord grass (Spartina alterniflora), whereas high marsh areas included vegetation such as salt hay (Spartina patens), spike grass (Distichlis spicata), black grass (Juncus gerardi), marsh elder (Iva frutescens), and glasswort (Salicornia spp.). Tidal wetlands comprise about 75% of Lake Montauk's shoreline (Town of East Hampton 1989). This description is consistent with the current tidal wetland community in the study area, with the exception of a decrease in the amount of tidal wetlands along the Lake Montauk shoreline, due to development in the area since the 1981 survey was conducted.

Is there shellfish present at or adjacent to the project site? If so, please describe the spatial extent and species present.	Yes. Populations of bay scallop and northern quahog (Mercenaria mercenaria) are found within most of Lake Montauk, and are harvested on a commercial basis by the baymen of the Town of East Hampton. Due to the bottom substrate and the presence of eelgrass (Zostera marina), the scallop population areas are commercially more significant than the harvesting of the hard clams. Additionally, traps are also deployed around the inlet of the Lake for American lobster (Homarus americanus) and channeled whelk (Busycotypus canaliculatus).
Are there mudflats present at or adjacent to the project site? If so please describe the spatial extent.	No.
Is there rocky or cobble bottom habitat present at or adjacent to the project site? If so, please describe the spatial extent.	No.
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so for which species, what type habitat type, size, characteristics?	No
What is the typical salinity, depth and water temperature regime/range?	35ppt, -12'MLLW.
What is the normal frequency of site disturbance, both natural and man-made?	Typical estuarine disturbances (diurnal tidal currents, temperature fluctuations, resuspended sediments) compounded by anthropogenic disturbances caused by frequent (daily) marine vessel transit and cyclical maintenance of the LMH channel approximately every 3-4 years, currently.
What is the area of proposed impact (work footprint & far afield)?	Removal of an approximately 188,000 CY channel bottom and side slope within the Lake Montauk Harbor Channel, and Deposition Basin.

Step 3: This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS

Impacts	Y	N	Description
Nature and duration of activity(s). Clearly describe the activities proposed and the duration of any disturbances.			Removal/ dredging of channel and deposition basin bottom and side slope with a hydraulic cutterhead dredge, for approximately 80 days from 1 Oct- 14 Jan. in compliance with existing seasonal restrictions recommended by NMFS to protect EFH from1 January through 30 September.
Will the benthic community be disturbed? If no, why not? If yes, describe in detail how the benthos will be impacted.	☐	✓	The LMH channel is regularly maintained, and in between regular and frequent maintenance cycles required to maintain the authorized depth of -12' MLLW, the Federal channel is regularly transited by marine vessels that cause scouring and resuspension of sediments, which would also reduce or delay the likelihood or duration of Benthic recolonization.
Will SAV be impacted? If no, why not? If yes, describe in detail how the SAV will be impacted. Consider both direct and indirect impacts. Provide details of any SAV survey conducted at the site.	☐	✓	A patch of SAV is present adjacent to the channel. As it has been determined to be approximately 160' from the nearest channel edge (deposition basin) proposed for construction, and the dredged material is large grain sand twill be removed via hydraulic dredge which will not increase turbidity for any measurable duration or outside of the channel prism, it has been determined that the proposed Federal action should have no effect on the SAV bed.
Will salt marsh habitat be impacted? If no, why not? If yes, describe in detail how wetlands will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?	☐	✓	No. There will be no impacts to salt marsh since the project is deepening existing channels from -12'MLLW to maximum -17'MLLW, with no widening of the existing navigation channel (to remain at 150' wide) and widening of th deposition basin from 50' to 100' in sublittoral water depth and placing the dredged material on the adjacent down-drift beach, west of the jetty, which has been a placement site for the ongoing cycles of maintenance.

Will mudflat habitat be impacted? If no, why not? If yes, describe in detail how mudflats will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?		✓	There is no mudflat habitat at or near the project site's area of effect.
Will shellfish habitat be impacted? If so, provide in detail how the shellfish habitat will be impacted. What is the aerial extent of the impact? Provide details of any shellfish survey conducted at the site.		✓	There is no colonization of the existing channel or deposition basin prism by shellfish since they are regularly dredged to maintain the current authorized depth, and vessels transiting the channel often scour it due to silting; the dredged material is approximately 98% sand, which will not cause turbidity/resuspension during hydraulic dredging operations (ex. as opposed to mechanical dredging of silty material). Post-dredge sediments are anticipated to be of similar geology (i.e. large grain sand).
Will hard bottom (rocky, cobble, gravel) habitat be impacted at the site? If so, provide in detail how the hard bottom will be impacted. What is the aerial extent of the impact?		✓	No.
Will sediments be altered and/or sedimentation rates change? If no, why not? If yes, describe how.		✓	The sediment shoals scheduled for removal are the same sediments surrounding and underlying the maintenance material. Removing large grain (98% sand) shoaling material will have no effect on sedimentation rates or sediment characteristics.
Will turbidity increase? If no, why not? If yes, describe the causes, the extent of the effects, and the duration.		✓	The shoals scheduled for removal are comprised of approximately 98% sand and 2% silt, therefore, the sediment material is large grained and will not re-suspend beyond a very temporary and localized (immeasurable, insignificant) extent (eg. within the channel prism).

Will water depth change? What are the current and proposed depths?	✓		The existing water depth of the Federally-authorized channel is -12' MLLW. and 150' wide. The existing water depth of the deposition basin is -12'MLLW and 50' wide. The proposed project will deepen the channel to maximum -17' MLLW, and maintain the side slopes within the channel footprint to 150'; and deepen and widen the existing deposition basin from 12'MLLW to -17'MLLW and 100' wide, in surrounding sublittoral water depth.
Will contaminants be released into sediments or water column? If yes, describe the nature of the contaminants and the extent of the effects.		✓	No.
Will tidal flow, currents, or wave patterns be altered? If no, why not? If yes, describe in detail how.		✓	The removal of approximately 188,000 CY of channel bottom, side slopes and deposition basin bottom and side slopes will have no significant adverse effect on tidal, flow, currents or wave patterns of Lake Montauk Harbor, but, it is anticipated to have minor beneficial effects re: increased flushing.
Will water quality be altered? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration of the impact.		✓	The sediments scheduled for removal are large grain clean sands that will not resuspend throughout the water column, and will not, therefore, have any adverse impacts to water quality.
Will ambient noise levels change? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration and degree of impact.		✓	There will be no increase in ambient noise from the use of a cutterhead dredge since hydraulic dredges are slow moving and relatively quiet during removal of sandy sediments (no blasting, no digging, no rock removal).
Does the action have the potential to impact prey species of federally managed fish with EFH designations?	✓		The proposed dredging to remove the channel and deposition bottom, and side slope areas may remove some organisms that are prey for some EFH species, but, the area to be dredged is so disturbed by regular and frequent vessel scouring and grounding and 3-4 year maintenance cycle dredging that population of prey organisms present is potentially relatively low. The channel bottom is expected to return to pre-dredge conditions re: grain size, with the exception of the 2% silt material top layer that will be removed.

Step 4: This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species (from the list generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT

Functions and Values	Y	N	Describe habitat type, species and life stages to be adversely impacted
Will functions and values of EFH be impacted for:			
Spawning **If yes, describe in detail how, and for which species. Describe how adverse effects will be avoided and minimized.**	✓		Benthic species, such as winter flounder, may be seasonally adversely affected, therefore, a seasonal restriction is being applied to restrict dredging between 1 January through 30 September of any year of dredging,
Nursery **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**		✓	
Forage **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	✓		Impacts to the forage/prey species is possible, but, those impacts are anticipated to be minor and temporary due to the short duration of construction-related impacts and the seasonal restriction limiting construction to approximately 80 days total.
Shelter **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**		✓	

Will impacts be temporary or permanent? Please indicate in description box and describe the duration of the impacts.			Temporary. During dredging operations, which involve the removal of an approximate maximum of 200,000 CY acres of channel and deposition basin bottom and side slopes within the Lake Montauk Harbor Channel, a relatively insignificant portion of the LMH EFH will be unavailable for utilization during the approximate 80 day duration of deepening operations between October and mid-January.
Will compensatory mitigation be used? If no, why not? Describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation plan, if applicable.		✓	Compensatory mitigation will not be required since there will be no long term or permanent (significant) impacts, or irreplaceable or irretrievable commitment of resources, related to the proposed project. Mitigation will be incorporated into the project plans as BMPs, including scheduling the project to occur during the late fall-winter (between 1 October and 31 December) , so as to avoid and minimize any temporary impacts to the EFH in the project area.

<u>Step 5</u>: This section provides the federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

Please note: if information provided in the worksheet is insufficient to allow NOAA Fisheries to complete the EFH consultation additional information will be requested.

5. DETERMINATION OF IMPACT

Federal Agency's EFH Determination		
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: **(check the appropriate statement)**		**There is no adverse effect on EFH or no EFH is designated at the project site.** **EFH Consultation is not required.**
	✓	**The adverse effect on EFH is not substantial. This means that the adverse effects are either no more than minimal, temporary, or that they can be alleviated with minor project modifications or conservation recommendations.** **This is a request for an abbreviated EFH consultation.**
		The adverse effect on EFH is substantial. **This is a request for an expanded EFH consultation.**

Step 6: Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats as part of the Fish and Wildlife Coordination Act Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT

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	NA
American eel	NA
American shad	NA
Atlantic menhaden	NA
blue crab	NA
blue mussel	NA
blueback herring	NA

Eastern oyster	NA
horseshoe crab	NA
quahog	NA
soft-shell clams	NA
striped bass	NA
other species:	

Useful Links

National Wetland Inventory Maps

EPA's National Estuaries Program

Northeast Regional Ocean Council (NROC) Data

Mid-Atlantic Regional Council on the Ocean (MARCO) Data

Resources by State:

Maine
Eelgrass maps

Maine Office of GIS Data Catalog

Casco Bay Estuary Partnership

Maine GIS Stream Habitat Viewer

New Hampshire
New Hampshire's Statewide GIS Clearinghouse, NH GRANIT

New Hampshire Coastal Viewer

Massachusetts
Eelgrass maps

MADMF Recommended Time of Year 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
Eelgrass maps

Narraganset Bay Estuary Program

Rhode Island Division of Marine Fisheries

Rhode Island Coastal Resources Management Council

Connecticut

Eelgrass Maps

Long Island Sound Study

CT GIS Resources

CT DEEP Office of Long Island Sound Programs and Fisheries

CT Bureau of Aquaculture Shellfish

Maps CT River Watershed Council

New York

Eelgrass report

Peconic Estuary Program

NY/NJ Harbor Estuary

New Jersey

Submerged Aquatic Vegetation mapping

Barnegat Bay Partnership

Delaware

Partnership for the Delaware Estuary

Center for Delaware Inland Bays

Maryland

Submerged Aquatic Vegetation mapping

MERLIN

Maryland Coastal Bays Program

Virginia

Submerged Aquatic Vegetation mapping

Federal Interagency Comment Form

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

Appl. Number: Lake Montauk Harbor 2019

Commenting Agency: NOAA Fisheries / Habitat Conservation Division

Project Manager: Gallo

Waterway/Location: Lake Montauk

Activity: Dredge shoals in federal navigation channel with placement on adjacent beach.

ESSENTIAL FISH HABITAT (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 of the EFH determination or EFH conservation recommendations.

1. Avoid dredging from **January 1** to **May 31** of each year to minimize adverse effects to winter flounder early life stages and their EFH.

2. Avoid dredging from **March 1** to **June 30** of each year to minimize impacts to migrating anadromous species including river herring (alewife Alosa pseudoharengus and blueback herring Alosa aestivalis), prey species for a number of federally managed species. Project location is in a waterway with a documented spawning run of river herring.

3. There is mapped submerged aquatic vegetation (SAV) on the east side of the inlet; SAV is a Habitat Area of Particular Concern for EFH. To minimize adverse effects to SAV, in-water work in the inlet should be avoided during the eelgrass growing season from **April 15** to **October 31**. We can provide details on location of the SAV bed and advice on project sequencing as needed.

4. 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.

5. Placement of the dredged material should be on the beach and done in a manner that minimizes turbidity. All material should be placed landward of the surf zone and grading should be done in the dry to the maximum extent practicable.

FISH AND WILDLIFE COORDINATION ACT CONSERVATION RECOMMENDATIONS

See above.

ENDANGERED SPECIES ACT

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. Please be aware that we have recently provided on our website guidance and tools to assist action agencies with their description of the action and analysis of effects to support their determination. See http://www.greateratlantic.fisheries.noaa.gov/section7. After receiving a complete, accurate comprehensive request for consultation, in accordance to the guidance and instructions on our website, we would then be able to conduct a consultation under section 7 of the ESA. Should project plans change or new information

become available that changes the basis for this determination, further coordination should be pursued. 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 the requirements of the NYSDEC and NYSDOS authorizations.

SIGNATURE: Ursula Howson DATE: 6/3/19