NOAA FISHERIES
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
Greater Atlantic Region

US Army Corps of Engineers ®

GARFO ESA Section 7: NLAA Program Verification Form

(Please submit a signed version of this form, together with any project plans, maps, supporting analyses, etc., to nmfs.gar.esa.section7@noaa.gov with "**USACE NLAA Program: [Application Number]**" in the subject line)

Section 1: General Project Details

Application Number:	
Reinitiation:	No
Applicant(s):	U. S. Army Corps of Engineers New York District, Hudson River Habitat Restoration Project
Permit Type:	Civil Works/Federal Navigation
Anticipated project start date (e.g., 10/1/2020)	6/1/2025
Anticipated project end date (e.g., 12/31/2022 – if there is no permit expiration date, write "N/A")	6/1/2027

Project Type/Category (check all that apply to entire action):

☐	Aquaculture (shellfish) and artificial reef creation	☑	Mitigation (fish/wildlife enhancement or restoration)
☐	Dredging and disposal/beach nourishment	☐	Bank stabilization
☐	Piers, ramps, floats, and other structures	☑	If other, describe project type category: Two separate projects under one study: 1) Mosaic

Town/City:	Project 1: Schodack Landing, Project 2:	Zip:	12156
State:	New York	Water body:	Hudson River

Project/Action Description **and** Purpose (*include relevant permit conditions that are not captured elsewhere on form*):		
1) SCHODACK ISLAND (Project Latitude and Longitude 42.495905 -73.778360) At Schodack Island on the eastern shore of the Hudson River in Schodack Landing, NY 12156, the plan consists of tidal wetland restoration and side channel creation from upland with a tidal wetland corridor. Tidal Wetland Restoration North Approximately 2.82 acres of existing tidal habitat, dominated by invasive species such as common reed, would be treated and planted with native plant species. There will be no excavation of in-water material. There may be minor grading to convey tidal flow through vegetation. This grading will be only at the rivers edge and into the wetland. Tidal Wetland Restoration & Conversion to Side Channel Connection		
Type of Bottom Habitat Modified:	Permanent/Temporary:	Area (acres):
Silt/Mud/Clay (freshwater)	Permanent	0.70
Silt/Mud/Clay (freshwater)	Select Permanent or Temporary	
Select Type of Bottom Habitat	Select Permanent or Temporary	
Project Latitude (e.g., 42.625884)	42.495905	
Project Longitude (e.g., -70.646114)	-73.778360	
Mean Low Water (MLW)(m)	0.00	
Mean High Water (MHW)(m)	1.06	

Width (m) of water body in action area:	Stressor Category (stressor that extends furthest distance into water body – e.g., turbidity plume; sound pressure wave):	Max extent (m) of stressor into the water body:
330.00	Turbidity plume	5.00

Section 2: ESA-listed species and/or critical habitat in the action area:

☑	Atlantic sturgeon (all DPSs)	☐	Kemp's ridley sea turtle
☑	Atlantic sturgeon critical habitat Indicate which DPS : NYB	☐	Loggerhead sea turtle (NW Atlantic DPS)
☑	Shortnose sturgeon	☐	Leatherback sea turtle
☐	Atlantic salmon (GOM DPS)	☐	North Atlantic right whale
☐	Atlantic salmon critical habitat (GOM DPS)	☐	North Atlantic right whale critical habitat
☐	Green sea turtle (N. Atlantic DPS)	☐	Fin whale

* Please consult GARFO PRD's ESA Section 7 Mapper for ESA-listed species and critical habitat information for your action area at: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater.

Section 3: NLAA Determination (check all applicable fields):
If the Project Design Criteria (PDC) is met, select Yes. If the PDC is not applicable (N/A) for your project (e.g., the stressor category is not included for your project activity, or for PDC 2, your project does not occur within the range of the GOM DPS of Atlantic salmon), select N/A. If the PDC is applicable, but is not met, leave both boxes blank and provide a justification for that PDC in Section 4.

a) GENERAL PDC			
Yes	N/A	PDC #	PDC Description
☑	☐	1.	No portion of the proposed action will individually or cumulatively have an adverse effect on ESA-listed species or designated critical habitat.
☐	☑	2.	No portion of the proposed action will occur in the tidally influenced portion of rivers/streams where Atlantic salmon presence is possible from April 10–November 7. **Note**: If the project will occur within the geographic range of the GOM DPS Atlantic salmon but their presence is not expected following the best available commercial scientific data, the work window does not need to be applied (include reference in project description).
☑	☐	3.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as spawning grounds as follows: i. Gulf of Maine: April 1–Aug. 31 ii. Southern New England/New York Bight: Mar. 15–Aug. 31 iii. Chesapeake Bay: March 15–July 1 and Sept. 15–Nov. 1 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval (include reference in project description).
☑	☐	4.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as overwintering grounds, where dense aggregations are known to occur, as follows: i. Gulf of Maine: Oct. 15–April 30 ii. Southern New England/ New York Bight: Nov. 1–Mar. 15 iii. Chesapeake Bay: Nov. 1–Mar. 15 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval (include reference in project description).
☐	☑	5.	Within designated Atlantic salmon critical habitat, no portion of the proposed action will affect spawning and rearing areas (PBFs 1-7).
☑	☐	6.	Within designated Atlantic sturgeon critical habitat, no work will affect hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand) (PBF 1).

Yes	N/A	PDC #	PDC Description
☑	☐	7.	Work will result in no or only temporary/short-term changes in water temperature, water flow, salinity, or dissolved oxygen levels.
☑	☐	8.	If ESA-listed species are (a) likely to pass through the action area at the time of year when project activities occur; and/or (b) the project will create an obstruction to passage when in-water work is completed, then a zone of passage (~50% of water body) with appropriate habitat for ESA-listed species (e.g., depth, water velocity, etc.) must be maintained (i.e., physical or biological stressors such as turbidity and sound pressure must not create barrier to passage).
☐	☑	9.	Any work in designated North Atlantic right whale critical habitat must have no effect on the physical and biological features (PBFs).
☑	☐	10.	The project will not adversely impact any submerged aquatic vegetation (SAV).
☑	☐	11.	No blasting or use of explosives will occur.

b) The following stressors are applicable to the action (check all that apply – use Stressor Category Table for guidance):	
☐	Sound Pressure
☐	Impingement/Entrapment/Capture
☑	Turbidity/Water Quality
☐	Entanglement (Aquaculture)
☑	Habitat Modification
☐	Vessel Traffic

	Stressor Category					
Activity Category	Sound Pressure	Impingement/ Entrapment/ Capture	Turbidity/ Water Quality	Entanglement	Habitat Mod.	Vessel Traffic
Aquaculture (shellfish) and artificial reef creation	N	N	Y	Y	Y	Y
Dredging and disposal/beach nourishment	N	Y	Y	N	Y	Y

	Stressor Category					
Activity Category	Sound Pressure	Impingement/ Entrapment/ Capture	Turbidity/ Water Quality	Entanglement	Habitat Mod.	Vessel Traffic
Piers, ramps, floats, and other structures	Y	N	Y	N	Y	Y
Transportation and development (e.g., culvert construction, bridge repair)	Y	N	Y	N	Y	Y
Mitigation (fish/wildlife enhancement or restoration)	N	N	Y	N	Y	Y
Bank stabilization and dam maintenance	Y	N	Y	N	Y	Y

c) SOUND PRESSURE PDC

Information for Pile Driving:
If your project includes non-timber piles*, please attach your calculation to this verification form showing that the noise is below the injury thresholds of ESA-listed species in the action area. The GARFO Acoustic Tool is available as one source, should you not have other information:

https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance-greater-atlantic

*Sound pressure effects from timber and steel sheet piles were analyzed in the NLAA programmatic consultation, so no additional acoustic information is necessary.

	Pile material	Pile diameter/width (inches)	Number of piles	Installation method
a)	Select pile material			Select installation method
b)	Select pile material			Select installation method
c)	Select pile material			Select installation method
d)	Select pile material			Select installation method

Yes	N/A	PDC #	PDC Description
☐	☑	12.	If pile driving is occurring during a time of year when ESA-listed species may be present, and the anticipated noise is above the behavioral noise threshold, a "soft start" is required to allow animals an opportunity to leave the project vicinity before sound pressure levels increase. *In addition to using a soft start at the beginning of the work day for pile driving, one must also be used at any time following cessation of pile driving for a period of 30 minutes or longer.* <u>For impact pile driving</u>: pile driving will commence with an initial set of three strikes by the hammer at 40% energy, followed by a one minute wait period, then two subsequent 3-strike sets at 40% energy, with one-minute waiting periods, before initiating continuous impact driving. <u>For vibratory pile installation</u>: pile driving will be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period will be repeated two additional times, followed immediately by pile-driving at full rate and energy.
☐	☑	13.	Any new pile supported structure must involve the installation of ≤ 50 piles (below MHW).
☐	☑	14.	All underwater noise (pressure) is below (<) the physiological/injury noise threshold for ESA-species in the action area.

d) IMPINGEMENT/ENTRAINMENT/CAPTURE PDC

Information for Dredging/Disposal:			
Type of dredge:	Select type of dredge		
Maintenance dredging?:	Select Yes or No	If "Yes", how many acres?	
If maintenance, when was the last dredge cycle?			
New dredging:	Select Yes or No	If "Yes", how many acres?	
Estimated number of dredging events covered by permit:			
ESA-species exclusion measures required (e.g., cofferdam, turbidity curtain):	Select Yes or No		
If no exclusion measures required, explain why:	Select reason why no exclusion measures are required		
Information for Intake Structures:			
Mesh screen size (mm) for temporary intake:			

Yes	N/A	PDC #	PDC Description
☐	☑	15.	Only mechanical, cutterhead, and low volume hopper (e.g., CURRITUCK, ~300 cubic yard maximum bin capacity) dredges may be used.
☐	☑	16.	No new dredging in Atlantic sturgeon or Atlantic salmon critical habitat (maintenance dredging still must meet all other PDCs). New dredging outside Atlantic sturgeon or salmon critical habitat is limited to one time dredge events (e.g., burying a utility line) and minor (≤ 2 acres) expansions of areas already subject to maintenance dredging (e.g., marina/harbor expansion).
☐	☑	17.	Work behind cofferdams, turbidity curtains, or other methods to block access of animals to dredge footprint is required when operationally feasible or beneficial and ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, exclusion methods are not necessary).
☐	☑	18.	Temporary intakes related to construction must be equipped with appropriate sized mesh screening (as determined by GARFO section 7 biologist and/or according to Chapter 11 of the NOAA Fisheries Anadromous Salmonid Passage Facility Design) and must not have greater than 0.5 fps intake velocities, to prevent impingement or entrainment of any ESA-listed species life stage.
☐	☑	19.	No new permanent intake structures related to cooling water, or any other inflow at facilities (e.g. water treatment plants, power plants, etc.).

e) TURBIDITY/WATER QUALITY PDC

Information for Turbidity Producing Activity (excluding disposal):	
ESA-species turbidity control measures required (e.g., turbidity curtain):	Yes
If no turbidity control measures required, explain why:	Select reason why no turbidity control measures are required
Information for Dredged Material Disposal:	
Disposal site:	Select disposal site
Estimated number of trips to disposal site:	
Relevant disposal site permit/special conditions required (NAE: for offshore disposal, include Group A, B, C, or relevant Long Island Sound consultation):	

Yes	N/A	PDC #	PDC Description
☑	☐	20.	Work behind cofferdams, turbidity curtains, or other methods to control turbidity is required when operationally feasible or beneficial and ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, turbidity control methods are not necessary).
☐	☑	21.	In-water offshore disposal may only occur at designated disposal sites that have been the subject of ESA section 7 consultation with NMFS, where a valid consultation is in place and appropriate permit/special conditions are included.

Yes	N/A	PDC #	PDC Description
☑	☐	22.	Any temporary discharges must meet state water quality standards (e.g., no discharges of substances in concentrations that may cause acute or chronic adverse reactions, as defined by EPA water quality standards criteria).
☐	☑	23.	Only repair, upgrades, relocations and improvements of existing discharge pipes or replacement in-kind are allowed; no new construction of untreated discharges.
	f) ENTANGLEMENT PDC		

Information for Aquaculture Projects:

Approximate distance from shore (MHW)(m):	
Grow season begins (approximate):	
Grow season ends (approximate):	
Total number of vertical lines:	
Total number of horizontal lines:	
Is any gear seasonally removed from the water? If yes, which parts and when?	

	Aquaculture Gear	Acreage (total permit footprint)	Type of Shellfish Cultivated
a)	Select aquaculture gear		Select type of shellfish cultivated
b)	Select aquaculture gear		Select type of shellfish cultivated
c)	Select aquaculture gear		Select type of shellfish cultivated

Yes	N/A	PDC #	PDC Description
☐	☑	24.	Shell on bottom <50 acres with maximum of 4 corner marker buoys;
☐	☑	25.	Cage on bottom with no loose floating lines <5 acres and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
☐	☑	26.	Floating cages in <3 acres in waters and shallower than -10 feet MLLW with no loose lines and minimal vertical lines (1 per string of cages, 4 corner marker buoys);
☐	☑	27.	Floating upweller docks in >10 feet MLLW.
☐	☑	28.	Any in-water lines, ropes, or chains must be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Lines can be enclosed in a rigid sleeve.
	g) HABITAT MODIFICATION PDC		

Yes	N/A	PDC #	PDC Description
☑	☐	29.	No conversion of habitat type (soft bottom to hard, or vice versa) for aquaculture or reef creation.

	h) VESSEL TRAFFIC PDC	
Information for Vessel Traffic:		
	Temporary Project Vessel Type	Number of Vessels
a)	Select temporary vessel type	
b)	Select temporary vessel type	
c)	Select temporary vessel type	
	Type of Non-Commercial or Aquaculture Vessels Added – *only include if there is a net increase directly/indirectly resulting from project*)	Number of Vessels (*if sum > 2, PDC 33 is not met and justification required in Section 4*)
a)	Select type of non-commercial or aquaculture vessels	
b)	Select type of non-commercial or aquaculture vessels	
	Type of Commercial Vessels Added (*only include if there is a net increase directly/indirectly resulting from project*)	Number of Vessels (*if > 0, PDC 33 is not met and justification required in Section 4*)
a)		
b)		
If no temporary/permanent vessel traffic, briefly explain (e.g., all land-based work, no net increase in vessel traffic)	There will be no water vessels used as all work will be land-based.	

Yes	N/A	PDC #	PDC Description
☐	☑	30.	Maintain project vessels operating within the action area to speed limits below 10 knots and dredge vessel speeds of 4 knots maximum, while dredging.
☐	☑	31.	Maintain a 1,500-foot buffer between project vessels and ESA-listed whales and a 150-foot buffer between project vessels and sea turtles unless the vessel is navigating to an in-water disposal site/activity. If the vessel is navigating to an in-water disposal site/activity, refer to and include the conditions contained in the appropriate GARFO-USACE/EPA consultation for the disposal site.
☐	☑	32.	The number of project vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
☐	☑	33.	The permanent net increase in vessels resulting from a project (e.g., dock/float/pier/boating facility) must not exceed two non-commercial vessels. A project must not result in the permanent net increase of any commercial vessels (e.g., a ferry terminal).

Section 4: Justification for Review under the NLAA Program

If the action is not in compliance with all of the General PDC and appropriate stressor PDC, but you can provide justification and/or special conditions to demonstrate why the project still meets the NLAA determination and is consistent with the aggregate effects considered in the programmatic consultation, you may still certify your project through the NLAA program using

this verification form. Please identify which PDC your project does not meet (e.g., PDC 9, PDC 15, PDC 22, etc.) and provide your rationale and justification for why the project is still eligible for the verification form.

To demonstrate that the project is still NLAA, you must explain why the effects on ESA-listed species or critical habitat are **insignificant** (i.e., too small to be meaningfully measured or detected) or **discountable** (i.e., extremely unlikely to occur). **Please use this language in your justification.**

PDC#	Justification
PDC #	
PDC #	
PDC #	

PDC #	

Section 5: USACE Verification of Determination

☑	In accordance with the NLAA Program, USACE has determined that the action complies with all applicable PDC and is not likely to adversely affect listed species.
☐	In accordance with the NLAA Program, the USACE has determined that the action is not likely to adversely affect listed species per the justification and/or special conditions provided in Section 4.

USACE Signature:		Date:
WEPPLER.PETER.M.1228647353	Digitally signed by WEPPLER.PETER.M.1228647353 Date: 2020.06.01 13:28:45 -04'00'	06/01/2020

Section 6: GARFO Concurrence

☑	In accordance with the NLAA Program, GARFO PRD concurs with USACE's determination that the action complies with all applicable PDC and is not likely to adversely affect listed species or critical habitat.
☐	In accordance with the NLAA Program, GARFO PRD concurs with USACE's determination that the action is not likely to adversely affect listed species or critical habitat per the justification and/or special conditions provided in Section 4.
☐	GARFO PRD does not concur with USACE's determination that the action complies with the applicable PDC (with or without justification), and recommends an individual Section 7 consultation to be completed independent from the NLAA Program.

GARFO Signature:		Date:
CARSON-SUPINO.EDITH.ELEANOR.1404702722	Digitally signed by CARSON-SUPINO.EDITH.ELEANOR.1404702722 Date: 2020.06.09 13:36:14 -04'00'	06/09/2020