# Appendix Correspondence





GARFO ESA Section 7: 2017 NLAA Program Verification Form (Please submit a signed version of this form, together with any project plans, maps, supporting analyses, etc., to <a href="mailto:nmfs.gar.esa.section7@noaa.gov">nmfs.gar.esa.section7@noaa.gov</a> with "2017 NLAA Program" in the subject line)

# Section 1: General Project Details

Application Number:			2020-01BI			
Appli	icant(s):	U.S. A	Army Corps of Engineers			
	it Type (e.g. NWP, LOP, RGP, IP, it Modification):	Section	Section 401 CWA Water Quality Certification			
	pipated project start date 9/1/2017)	05/01	/2020			
(e.g.,	sipated project end date 3/14/2018 – if there is no permit ation date, write "N/A")	06/30/2020				
Proje	ct Type/Category (check all that apply	to enti	re action):			
	Aquaculture (shellfish) and artificial reef creation		Transportation and development (e.g., culvert construction, bridge repair)			
$\checkmark$	Routine maintenance dredging and disposal/beach nourishment		Mitigation (fish/wildlife enhancement or restoration)			
	Piers, ramps, floats, and other structures		Bank stabilization and dam maintenance			
$\checkmark$	If other, describe project type/categor beneficial placement (>90% sand) in	the nea				
	Project/Action Description and Purpose (include town/city/state and water body where project is occurring; relevant permit conditions that aren't captured elsewhere on form):					
The WRDA Section 1122 program authorizes USACE (nation-wide) to establish a pilot program to carry out 10 projects for the beneficial use of dredged material. The projects must maximize the beneficial placement of dredged material from federal and non-federal navigation channels and ensure that the use of dredged material is consistent with all applicable environmental laws. These projects must provide storm damage reduction; promote public safety; protect, restore or create aquatic ecosystems; promote recreation; enhance shorelines; civic improvement; or other innovative uses and placement alternatives that produce public economic or environmental benefits. One of these 10 projects selected is "Beneficial Use						

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GARFO ESA Section 7 consultation form submitted to NMFS.

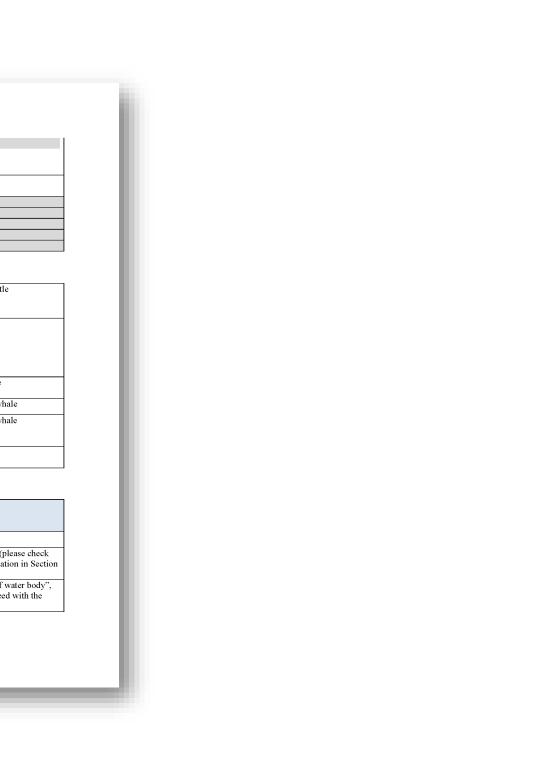
Type of Habitat Modified	Area (acres):
(e.g., sand, cobble, silt/mud/clay):	,
sand	41.30
Project Latitude (e.g., 42.625884)	39.763545
Project Longitude (e.g., -70.646114)	-74.101149

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

<b>✓</b>	Atlantic sturgeon (all DPSs) If not all DPSs, list which here:	<b>V</b>	Kemp's ridley sea turtle
	Atlantic sturgeon critical habitat (proposed or designated) Indicate which DPS (GOM, NYB, Chesapeake Bay DPSs):	<b>√</b>	Loggerhead sea turtle (NW Atlantic DPS)
	Shortnose sturgeon	V	Leatherback sea turtle
	Atlantic salmon (GOM DPS)		North Atlantic right whale
	Atlantic salmon critical habitat (GOM DPS)		North Atlantic right whale critical habitat
$\checkmark$	Green sea turtle (N. Atlantic DPS)		Fin whale

# Section 3: NLAA Determination (check all applicable fields):

a) GENERAL PDC					
$\checkmark$	Yes, my project meets all of the General PDC.				
	No, my project does not meet all the General PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):				
	<b>Information for PDC 8</b> (if "max extent of stressor" exceeds "width of water body", PDC 8 is NOT met, and a justification in Section 4 is required to proceed with the verification form)				



	Width (m)		Stressor Category Max extent (m)				
	of w	ater body in	(stressor that extends furthest distance	of stressor into the			
	actio	n area:	into water body - e.g., turbidity plume;	water body:			
			sound pressure wave):				
		465.00	turbidity	35.00			
	1.	No work will in	dividually or cumulatively have an adverse	effect on ESA-listed			
		species or desig	nated critical habitat; no work will cause a	dverse modification or			
		destruction to p	roposed critical habitat.				
$\Box$	2.	No work will o	ccur in the tidally influenced portion of rive	ers/streams where			
	Atlantic salmon presence is possible from April 10–November 7.			aber 7.			
	3.	No work will o	ccur in Atlantic or shortnose sturgeon spaw	ning grounds as			
		follows:					
		i. New E	England: April 1-Aug. 31				
		ii. New	York/Philadelphia: March 15-August 31				
		iii. Balti	more/Norfolk: March 15-July 1 and Sept.	15–Nov. 1			
	4.	No work will o	ccur in shortnose sturgeon overwintering gr	ounds as follows:			
		i. New E	England District: October 15-April 30				
		ii. New	York/Philadelphia: Nov. 1-March 15				
			more: Nov. 1-March 15				
$\Box$	5.	Within designat	ed Atlantic salmon critical habitat, no work	will affect spawning			
		and rearing area					
	6.	Within propose	d/designated Atlantic sturgeon critical habi	tat, no work will			
—		affect hard botto	om substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.)				
		in low salinity v	vaters (i.e., 0.0-0.5 parts per thousand) (PB	F 1).			
	7.	Work will not e	hange temperature, water flow, salinity, or	dissolved oxygen			
		levels.					
	8.		for ESA-listed species to pass through the a				
—			propriate habitat for ESA-listed species (e.				
			nust be maintained (i.e., physical or biologic				
			und pressure must not create barrier to pass				
	9.		signated North Atlantic right whale critical	habitat must have no			
			ysical and biological features (PBFs).				
	10.	The project will	not adversely impact any submerged aqua	tic vegetation (SAV).			
	11. No blasting will occur.						
Щ	l						
b) The	follo	wing stressors ar	e applicable to the action				
			Stressor Category Table for guidance):				
(CII	111	appry use	successive and successive for guidance).				
	Sou	nd Pressure					
H	Impi	ingement/Entrapr	ment/Capture				
片井			*				
<u> </u>		oidity/Water Qual	шу				
	Entanglement						

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<b>✓</b>	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
Routine maintenance dredging and disposal/beach nourishment	N	Y	Y	N	Y	Y
Piers, ramps, floats, and other structures	Y	N	Y	Y	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							
		Yes, my project meets all of the Sound Pressure PDC below.						
		No, my project does not meet all the Sound Pressure PDC as indicated below (please check the PDC the action does NOT comply with below, and provide justification in Section 4 of this form):						
ı		Info	ormation for PDC 14 (ref	fer to SOPs for guid	lance):			
			Pile material (e.g., steel pipe, timber, concrete)	Pile diameter/width (inches)	Number of piles	Installation method (e.g., impact hammer, vibratory start and then impact hammer to depth)		
		a)						
		h)						

	c)				
	d)				
	12.	be present, and the antic	ipated noise is above SOPs), a 20 minut	ve the beha te "soft star	hen ESA-listed species may vioral noise threshold of t" is required to allow for sure increases.
	13.	Any new pile supported (below MHW).	structure must invo	olve the ins	tallation of ≤ 50 piles
	14.	All underwater noise (pre threshold for ESA-listed piles, or non-steel piles > with this form).	species in the actio	n area (if p	roject involves steel
d) IM		GEMENT/ENTRAINMEN			
<b>✓</b>		my project meets all of the			
	indi	my project does not meet cated below (please check ride justification in Section	the PDC the action		nent/Capture PDC as Γ comply with below, and
	Info	rmation for Dredging:			
	mult	edging permit/authorizati tiple years of maintenance nated number of dredging	, include		and 4 estimated post-storm dredging events.
		rmation for PDC 18 (ref		lance):	
		h screen size (mm) for ter			
	15.	Only mechanical, cutterl dredges may be used.		me hopper	(e.g., CURRITUCK)
	16.	critical habitat (maintend dredging outside Atlanti dredge events (e.g., bury	nnce dredging still a c sturgeon or salmo ring a utility line) a	must meet on critical b nd minor (	nabitat is limited to one time
	17.	Work behind cofferdams animals to dredge footpr listed species may be pro	int is required whe		methods to block access of nally feasible and ESA-
	18.	Temporary intakes relate sized mesh screening (as according to Chapter 11 Facility Design) and mu prevent impingement or	s determined by GA of the NOAA Fish st not have greater	ARFO secti eries Anad than 0.5 fp	on 7 biologist and/or romous Salmonid Passage s intake velocities, to
	19.		e structures related	to cooling	water, or any other inflow
e) TU		DITY/WATER QUALITY	Y PDC		

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	No, my project does not meet all the Turbidity/Water Quality PDC as indicated below					
—	(please check the PDC the action does NOT comply with below, and provide					
	justi	justification in Section 4 of this form):				
	20.	<ol> <li>Work behind cofferdams, turbidity curtains, or other methods to control turbidity are required when operationally feasible and ESA-listed species may be present.</li> </ol>				
$\Box$	21.	In-water offshore disposal may only occur at des				
		already been consulted on with GARFO.				
	22.	Any temporary discharges must meet state water	quality standards; no discharges			
		of toxic substances.				
	23.	Only repair of existing discharge pipes allowed;	no new construction.			
	•					
f) El	NTAN	IGLEMENT PDC				
П	Yes.	my project meets all of the Entanglement PDC be	elow.			
H	No	my project does not meet all the Entanglement PE	C as indicated below (please			
$  \sqcup  $		the PDC the action does NOT comply with below				
		ion 4 of this form):	w, and provide justification in			
	_	ormation for Aquaculture Projects:				
	IIII	Type of Aquaculture (e.g., cage on bottom)	Acreage			
	a)	Type of Aquaeutture (e.g., eage on bottom)	Acreage			
	b)					
	c)					
$\vdash$	24.	Shell on bottom <50 acres with maximum of 4 c	amar markar huaya			
	24.	Shell off bottom <50 acres with maximum of 4 c	office marker buoys,			
	25.	Cage on bottom with no loose floating lines <5 a	cres and minimal vertical lines			
=		(1 per string of cages, 4 corner marker buoys);				
	26.	Floating cages in <3 acres in waters and shallow				
		loose lines and minimal vertical lines (1 per strin	g of cages, 4 corner marker			
Н	27.	buoys); Floating upweller docks in >10 feet MLLW.				
⊦ <del>⊢</del>	20	· ·	0			
	28.	Any in-water lines, ropes, or chains must be mad				
		manner (properly spaced) to minimize the risk of				
		taut or using methods to promote rigidity (e.g., si	neatned or weighted lines that do			
		not loop or entangle).				
g) H.	ABIT.	AT MODIFICATION PDC				
7	Yes.	my project meets all of the Habitat Modification	PDC below.			
H	No	my project does not meet all the Habitat Modifica	tion PDC as indicated below			
		my project does not meet all the Habitat Modifica ase check the PDC the action does NOT comply w				

	29.	<ol> <li>No conversion of habitat type (soft bottom to hard, or vice versa) for aquaculture or reef creation.</li> </ol>			
h) VI		L TRAFFIC PDC			
	Yes	, my project meets all of the Vessel Traffic PD	OC below.		
	chec	my project does not meet all the Vessel Traffick the PDC the action does NOT comply with ion 4 of this form):			
	Info	ormation for PDC 33 (refer to SOPs for guida	nce):		
		Temporary Project Vessel Type (e.g., work barge, tug, scow, etc.)	Number of Vessels		
	a)	hopper dredge	1		
	b)				
	c)				
		Type of Non-Commercial Vessels Added (e.g., 20' recreational motor boat – 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)				
	b)				
		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)				
	30.	Speed limits below 10 knots for project vess- listed species (1,500 feet for right whales).			
	31.	While dredging, dredge buffers of 300 feet in (1,500 feet for right whales), with speeds of	4 knots maximum.		
	32.	The number of project vessels must be limite appropriate to size and scale of project.	ed to the greatest extent possible, as		
	33.	The permanent net increase in vessels resulti dock/float/pier/boating facility) must not exc project must not result in the permanent net i	eed two non-commercial vessels. A		

# Section 4: Justification for Review under the 2017 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

_			

# Section 5: USACE Verification of Determination

In accordance with the 2017 NLAA Programmatic Consultation, the Corps has determined that the action complies with all applicable PDC and is not likely to adversely affect listed species.							
In accordance with the 2017 NLAA Programmatic Consultation, the Corps 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:							
ILIN.BARBARA. 29064718	03/05/2020						

# Section 6: GARFO Concurrence

<b>✓</b>	In accordance with the 2017 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 2017 NLAA Program, GARFO	PRD concurs with USACE's					
	determination that the action is not likely to adversely a	affect listed species or critical					
	habitat per the justification and/or special conditions pr	ovided in Section 4.					
	GARFO PRD does not concur with USACE's determine	nation that the action complies					
	with the applicable PDC (with or without justification), and recommends an						
	individual Section 7 consultation to be completed indep	pendent from the 2017 NLAA					
	Program.						
	GARFO Signature: Date:						
	JOHNSEN.PETER.B Digitally signed by JOHNSEN.PETER.BERULF.1376615851						
ERUI	_F.1376615851 Date: 2020.03.0517:04:46-05'00'						

----Original Message-----

From: Conlin, Barbara E CIV USARMY CENAP (USA)

Sent: Tuesday, February 25, 2020 9:21 AM

To: Keith Hanson - NOAA Federal <keith.hanson@noaa.gov> Subject: Barnegat Inlet O&M dredging and beneficial use

Hello Keith,

I'm attaching an EFH Worksheet (the newest version) for the Barnegat Inlet O&M Dredging Beneficial Use under the WRDA Section 1122 Program and some figures.

Just to recap what Monica explained to me (background info on this new Section 1122 program): It authorizes USACE (nation-wide) to establish a pilot program to carry out 10 projects for the beneficial use of dredged material. The projects must maximize the beneficial placement of dredged material from federal and non-federal navigation channels and ensure that the use of dredged material is consistent with all applicable environmental laws.

The 10 selected pilot projects must meet a requirement such as providing storm damage reduction; promoting public safety; protecting, restoring and creating aquatic ecosystems; promoting recreation; enhancing shorelines; civic improvement; or other innovative uses and placement alternatives that produce public economic or environmental benefits.

The Headquarters evaluation board made a preliminary recommendation for 10 projects and provided that list and supporting documentation to the Assistant Secretary of the Army for Civil Works for a decision. One of the 10 pilot projects selected is this one (the only one in the Philadelphia District: "Beneficial Use Placement Opportunities in the State of New Jersey using Navigation Channel Sediments" in the Barnegat Inlet region. There is likely to be another beneficial use placement as part of this program (but not part of the current EFH assessment).

Regarding the attached EFH Worksheet: some of the boxes (starting on page 6) don't allow for text wraparound so the first sentence runs off the page. So instead I put my responses to those boxes on an extra sheet (also attached). I was wondering if others have this problem? Both Rachel and I had this problem (her Sturgeon Island Worksheet). I even went back to the NMFS EFH webpage for Mid Atlantic and downloaded another blank copy of the worksheet and it did the same thing for those three text boxes.

Since O&M dredging of authorized nav channels occurs annually, I'm hoping that this EFH Assessment/consultation can be applicable to multiple years of O&M dredging. For two projects in Delaware (Roosevelt Inlet and Mispillion Inlet, DNREC agreed to permit a 10-year period. Is that acceptable to you for EFH consultations, with the caveat that should the project change (new placement site e.g., or new federally-managed species be identified) the EFH consultation would be redone.

If you have any questions, let me know.

Barb Conlin Environmental Resources Branch US Army Corps of Engineers Philadelphia District

#### EFH ASSESSMENT WORKSHEET

#### **General Project Information**

Date Submitted:	
Project/Application Number:	
Project Name: Beneficial Use Plac	ement Barnegat Inlet Maintenance Dredging
Project Sponsor/Applicant: US Arm	y Corps of Engineers
Federal Action Agency (if state agen	cy acting as delegated):
Fast-41 or One Federal Decision Pro	ject: Yes 📝 No
Action Agency Contact Name: Barb	ara E. Conlin
Contact Phone: 215-656-6557	Contact Email: Barbara.E.Conlin@usace.army.mil
Latitude: 39.46'0"N	Longitude: 75.56'18"W
Address, City/Town, State:	
Barnegat Inlet to Harvey Cedars,	Long Beach Island, New Jersey
Body of Water: Barnegat Inlet and	Atlantic Ocean
Project Purpose:	
•	State of New Jersey, intends to use navigation arnegat Inlet beneficially to supplement the beach
Project Description:	

The purpose of this pilot project is to maintain authorized depths of the Barnegat Inlet federal navigation channel while beneficially using the dredged sand to provide nourishment to an authorized shore protection project. The effort will be monitored in support of future beneficial use projects utilizing clean sand. This proposed effort is similar to beneficial use projects that have been implemented at Cape May, NJ and Lewes, DE. This pilot project is expected to improve coastal system resilience along areas of accelerated erosion along Long Beach Island and provide important monitoring information on the efficacy of the beneficial use of high quality dredged material for habitat enhancement and/or storm risk reduction. The project is one of 10 nationwide that was selected under Section 1122 of WRDA 2016 and titled: "Beneficial Use Placement Opportunities in the State of New Jersey using Navigation Channel Sediments."

Anticipated Duration of In-Water Work or Start/End Dates:

May-June 2020 or August-September 2020, then annually thereafter.

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# **Habitat Description**

EFH includes the biological, chemical, and physical components of the habitat. This includes the substrate and associated biological resources (e.g., benthic organisms, submerged aquatic vegetation, shellfish beds, salt marsh wetlands), the water column, and prey species.
Is the project in designated EFH <sup>2</sup> ? Yes No
Is the project in designated HAPC $^2$ ? Yes $ ightharpoonup$ No
Is this coordination under FWCA only? Yes No
${\it Total\ area\ of\ impact\ to\ EFH\ (indicate\ sq\ ft\ or\ acres):\ \textbf{0.3\ mil\ sq\ ft\ dredging;\ 1.5\ mil\ sq\ ft\ placed}}$
Total area of impact to HAPC (indicate sq ft or acres): 0
Current water depths: 10-15 ft Salinity: 30-32 ppt Water temperature range: 45-79 F
Sediment characteristics <sup>3</sup> : large grained sand
What habitat types are in or adjacent to the project area and will they be permanently impacted? Select all that apply. Indicate if impacts will be temporary, if site will be restored, or if permanent conversion of habitat will occur. A project may occur in overlapping habitat types.

	Habitat Type	Total impact (sq ft <del>/acres)</del>	Impacts are temporary	Restored to pre-existing conditions	Permanent conversion of all or part of habitat
$\checkmark$	Marine	1.8 mil	yes		no
	Estuarine				
	Riverine (tidal)				
	Riverine (non-tidal)				
	Intertidal				
<b>√</b>	Subtidal	1.8 mil	yes		no
$\checkmark$	Water column	1.8 mil	yes		no
	Salt marsh/ Wetland (tidal)				
П	Wetland (non-tidal)				

 $<sup>^2</sup>$  Use the tables on pages 7-9 to list species with designated EFH or the type of designated HAPC present.  $^3$  The level of detail is dependent on your project – e.g., a grain size analysis may be necessary for dredging.

	Habitat Type	Total impact (sq ft/ <del>acres</del> )	Impacts are temporary	Restored to pre-existing conditions	Permanent conversion of all or part of habitat
	Rocky/hard bottom4:				
$\checkmark$	Sand	1.8 mil	yes		no
	Shellfish beds or oyster reefs				
	Mudflats				
	Submerged aquatic vegetation (SAV) <sup>5</sup> , macroalgae, epifauna				
	Diadromous fish (migratory or spawning habitat)				

# N/A

# Project Effects

Select all that apply	Project Type/Category
	Hatchery or Aquaculture
	Agriculture
	Forestry
	Military (e.g., acoustic testing, training exercises)
<b>V</b>	Mining (e.g., sand, gravel)
	Restoration or fish/wildlife enhancement (e.g., fish passage, wetlands, beach renourishment, mitigation bank/ILF creation)

Indicate type(s). The type(s) of rocky habitat will help you determine if the area is cod HAPC.
 Indicate species. Provide a copy of the SAV report and survey conducted at the site, if applicable.

Select all that apply	Project Type/Category							
	Infrastructure/transportation port)	Infrastructure/transportation (e.g., culvert construction, bridge repair, highway, port)						
	Energy development/use							
	Water quality (e.g., TMDL,	, w	astewater,	sediment	remediation)			
<b>✓</b>	Dredging/excavation and d	isp	osal					
	Piers, ramps, floats, and oth	ıer	structures					
	Bank/shoreline stabilization	1 (e	e.g., living	shoreline	, groin, breakwater, bulkhead)			
	Survey (e.g., geotechnical,	geo	physical,	habitat, fi	sheries)			
	Other							
Select all that apply	Potential Stressors Caused by the Activity		Select all that apply and if temporary or permanent		Habitat alterations caused by the activity			
<b>✓</b>	Underwater noise		Temp	Perm				
V	Water quality/turbidity/ contaminant release		<b>V</b>		Water depth change			
	Vessel traffic/barge grounding				Tidal flow change			
<b>V</b>	Impingement/entrainment <sup>6</sup>		V		Fill			
	Prevent fish passage/spawning				Habitat type conversion			
<b>✓</b>	Benthic community disturbance				Other:			
<b>✓</b>	Impacts to prey species				Other:			

<sup>&</sup>lt;sup>6</sup> Entrainment is the voluntary or involuntary movement of aquatic organisms from a water body into a surface diversion or through, under, or around screens and results in the loss of the organisms from the population. Impingement is the involuntary contact and entrapment of aquatic organisms on the surface of intake screens caused when the approach velocity exceeds the swimming capability of the organism.

Details: project impacts and mitigation

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.

Describe how the project would impact each of the habitat types selected above. Include temporary and permanent impact descriptions and direct and indirect impacts.

The proposed action involves two USACE authorized projects: the Barnegat Inlet navigation channel and the Barnegat Inlet to Little Egg Inlet Storm Damage Reduction Project. The initial project intends to bring the navigation channel back to authorized depths. An impact evaluation on the effects on natural resources due to noise, turbidity, impingement/entrainment, and on benthic communities and prey species is presented as an attachment.

What specific measures will be used to avoid impacts, including project design, turbidity controls, acoustic controls, and time of year restrictions? If impacts cannot be avoided, why not?

Response is provided in attachment due to this entry box not being set to wrap around.

What specific measures will be used to minimize impacts?

Response is provided in attachment due to this entry box not being set to wrap around.

Is compensatory mitigation proposed?

es 🗸 No

If no, why not? If yes, describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation and monitoring plan, if applicable.

Response is provided in attachment due to this entry box not being set to wrap around.

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

#### EFH and HAPC designations<sup>8</sup>

Use the EFH mapper to determine if EFH may be present in the project area and enter all species and lifestages 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. We recommend this for larger projects to help you determine what your impacts are.

Species	EFH is	designa	Habitat		
	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/ spawning adults	present based on text description (optional)
winter flounder	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	
little skate			<b>√</b>	<b>✓</b>	
ocean pout	V			<b>✓</b>	
Atlantic herring			<b>✓</b>	<b>V</b>	

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

<sup>&</sup>lt;sup>8</sup> Within the Greater Atlantic Region, EFH has been designated by the New England, Mid-Atlantic, and South Atlantic Fisheries Management Councils and NOAA Fisheries.

Species	EFH is	designa	Habitat		
	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/ spawning adults	present based on text description (optional)
red hake	<b>✓</b>	$\checkmark$	<b>✓</b>	$\checkmark$	
silver hake	<b>√</b>	$\checkmark$			
yellowtail flounder	<b>✓</b>	$\checkmark$	<b>✓</b>	$\checkmark$	
monkfish	<b>✓</b>	$\checkmark$			
windowpane flounder	<b>V</b>	$\checkmark$	$\checkmark$	$\overline{\checkmark}$	
winter skate			<b>✓</b>	$\checkmark$	
clearnose skate			<b>√</b>	<b>✓</b>	
white hake				$\checkmark$	
pollack		$\checkmark$			
bluefin tuna			<b>√</b>		
common thresher shark*	<b>V</b>	<b>V</b>	<b>√</b>	<b>V</b>	
dusky shark*		$\checkmark$			
sandbar shark*		$\checkmark$	<b>✓</b>		
skipjack tuna				$\checkmark$	
tiger shark			<b>√</b>	$\overline{\checkmark}$	
white shark*		$\checkmark$			
smoothhound shark*	<b>√</b>	$\checkmark$	<b>√</b>	$\checkmark$	
sand tiger shark*		<b>√</b>	<b>✓</b>		
longfin inshore squid	<b>V</b>		<b>√</b>	<b>✓</b>	
Atlantic mackerel	<b>V</b>				
bluefish			<b>√</b>	<b>V</b>	
Atlantic butterfish			<b>✓</b>	$\overline{\mathbf{V}}$	

TT	A	$\mathbf{D}_{\mathbf{f}}$

Select all that are in your action area.

Summer flounder: SAV <sup>9</sup>		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		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	$\Box$	Wilmington Canyon

<sup>&</sup>lt;sup>9</sup> Summer flounder HAPC is defined as all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, within adult and juvenile summer flounder EFH. In locations where native species have been eliminated from an area, then exotic species are included. Use local information to determine the locations of HAPC.

#### More information

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) mandates that federal agencies conduct an essential fish habitat (EFH) consultation with NOAA Fisheries on any actions they authorize, fund, or undertake that may adversely affect EFH. 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.

We designed this worksheet to help you to prepare EFH assessments. 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. It 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.

This worksheet should be used as your EFH assessment or as a guide to develop your EFH assessment. At a minimum, 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. If your answers in the worksheet and supplemental information you attach do not fully evaluate the adverse effects to EFH, we may request additional information to complete the consultation.

You may need to prepare an expanded EFH assessment for more complex projects to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. While the EFH assessment 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, you should include an analysis as outlined in this worksheet for an expanded EFH assessment, along with any additional necessary information. 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 that could avoid or minimize the adverse effects on EFH.

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

#### Useful Links

National Wetland Inventory Maps

https://www.fws.gov/wetlands/

EPA's National Estuary Program (NEP)

https://www.epa.gov/nep/local-estuary-programs

Northeast Regional Ocean Council (NROC) Data Portal

https://www.northeastoceandata.org/

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

http://portal.midatlanticocean.org/

#### Resources by State

Maine Office of GIS Data Catalog

https://geolibrary-maine.opendata.arcgis.com/datasets#data

Town shellfish information including shellfish conservation area maps

https://www.maine.gov/dmr/shellfish-sanitation-

management/programs/municipal/ordinances/towninfo.html

State of Maine Shellfish Sanitation and Management

https://www.maine.gov/dmr/shellfish-sanitation-management/index.html

Eelgrass maps

https://www.maine.gov/dmr/science-research/species/eelgrass/index.html

Casco Bay Estuary Partnership

https://www.cascobayestuary.org/

Maine GIS Stream Habitat Viewer

https://www.arcgis.com/home/item.html?id=5869c2d20f0b4c3a9742bdd8abef42cb

#### New Hampshire

NH's Statewide GIS Clearinghouse, NH GRANIT

http://www.granit.unh.edu/

NH Coastal Viewer

http://www.granit.unh.edu/nhcoastalviewer/

State of NH Shellfish Program

https://www.des.nh.gov/organization/divisions/water/wmb/shellfish/

#### Massachusetts

MA Shellfish Sanitation and Management Program

https://www.mass.gov/shellfish-sanitation-and-management

MassGIS Data, Including Eelgrass Maps

http://maps.massgis.state.ma.us/map ol/oliver.php

MA DMF Recommended TOY Restrictions Document

https://www.mass.gov/files/documents/2016/08/ry/tr-47.pdf

Massachusetts Bays National Estuary Program

https://www.mass.gov/orgs/massachusetts-bays-national-estuary-program

Buzzards Bay National Estuary Program

http://buzzardsbay.org/

Massachusetts Division of Marine Fisheries

https://www.mass.gov/orgs/division-of-marine-fisheries

Massachusetts Office of Coastal Zone Management

https://www.mass.gov/orgs/massachusetts-office-of-coastal-zone-management

#### Rhode Island

RI Shellfish and Aquaculture

http://www.dem.ri.gov/programs/fish-wildlife/marine-fisheries/shellfish-aquaculture.php

RI Shellfish Management Plan

http://www.shellfishri.com/

Eelgrass Maps

 $\underline{http://edc.maps.arcgis.com/apps/View/index.html?appid=db52bb689c1e44259c06e11fd24895f8}$ 

RI GIS Data

http://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=87e104c8adb449eb9f905e5f

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Narragansett Bay Estuary Program

http://nbep.org/

Rhode Island Division of Marine Fisheries

http://www.dem.ri.gov/programs/fish-wildlife/marine-fisheries/index.php

Rhode Island Coastal Resources Management Council

http://www.erme.ri.gov/

#### Connecticut

CT Bureau of Aquaculture

https://www.ct.gov/doag/cwp/view.asp?a=3768&q=451508&doagNav=

CT GIS Resources

https://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\_GID=1707

Natural Shellfish Beds in CT

https://cteco.uconn.edu/viewer/index.html?viewer=aquaculture

Eelgrass Maps

https://www.fws.gov/northeast/ecologicalservices/pdf/wetlands/2012 CT Eelgrass Final Repor

t\_11\_26\_2013.pdf Long Island Sound Study

http://longislandsoundstudy.net/

CT GIS Resources

http://cteco.maps.arcgis.com/home/index.html

CT DEEP Office of Long Island Sound Programs and Fisheries

https://www.ct.gov/deep/site/default.asp

CT River Watershed Council

https://www.ctriver.org/

# New York

Eelgrass Report

http://www.dec.ny.gov/docs/fish\_marine\_pdf/finalseagrassreport.pdf

Peconic Estuary Program

https://www.peconicestuary.org/

NY/NJ Harbor Estuary

https://www.hudsonriver.org/estuary-program

# New York GIS Clearinghouse

https://gis.ny.gov/

#### New Jersey

Submerged Aquatic Vegetation Mapping

http://www.crssa.rutgers.edu/projects/sav/

Barnegat Bay Partnership

https://www.barnegatbaypartnership.org/

NJ GeoWeb

https://www.nj.gov/dep/gis/geowebsplash.htm

NJ DEP Shellfish Maps

https://www.nj.gov/dep/landuse/shellfish.html

#### Pennsylvania

Delaware River Management Plan

https://www.fishandboat.com/Fish/Fisheries/DelawareRiver/Documents/delaware\_river\_plan\_ex

PA DEP Coastal Resources Management Program

 $\overline{https://www.dep.pa.gov/Business/Water/Compacts\%20 and\%20 Commissions/Coastal\%20 Resour}$ 

ces%20Management%20Program/Pages/default.aspx

PA DEP GIS Mapping Tools

https://www.dep.pa.gov/DataandTools/Pages/GIS.aspx

#### <u>Delaware</u>

Partnership for the Delaware Estuary

http://www.delawareestuary.org/ Center for Delaware Inland Bays

http://www.inlandbays.org/

Delaware FirstMap

http://delaware.maps.arcgis.com/home/index.html

#### Maryland

Submerged Aquatic Vegetation Mapping

http://web.vims.edu/bio/sav/

**MERLIN** 

http://dnrweb.dnr.state.md.us/MERLIN/

Maryland Coastal Bays Program

https://mdcoastalbays.org/

#### Virginia

Submerged Aquatic Vegetation mapping

http://www.mrc.virginia.gov/regulations/Guidance for SAV beds and restoration final appro

ved by Commission 7-22-17.pdf

VDGIF Time of Year Restrictions (TOYR) and Other Guidance

https://www.dgif.virginia.gov/wp-content/uploads/VDGIF-Time-of-Year-Restrictions-Table.pdf



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE GREATER ATLANTIC REGIONAL FISHERIES OFFICE 55 Great Republic Drive Gloucester, MA 01930-2276

March 23, 2020

Peter Blum, Chief Planning Division Philadelphia District U.S. Army Corps of Engineers Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390

RE: Barnegat Inlet Maintenance Dredging and Beneficial Use/Placement Project; under Section 1122 of the Water Resources Development Act of 2016

Dear Mr. Blum:

We have reviewed the information provided in your email, essential fish habitat (EFH) assessment (worksheet), and the attached documents dated February 25, 2020, for the proposed Barnegat Inlet Dredging and Beneficial Use/Placement project in Ocean County, New Jersey. The U.S. Army Corps of Engineers, Philadelphia District (District), is proposing to dredge the Barnegat Inlet federal navigation channel within and beyond the existing jetties between Long Beach Island (LBI) and Sedge Island in Harvey Cedars, New Jersey for a period of ten years. The District is also proposing to beneficially place the material in the nearshore zone in the Atlantic Ocean offshore of Harvey Cedars. Barnegat Inlet is an authorized navigation channel that has been maintained by the District since 1940. The channel is 300 feet wide by 8 feet deep, measured at mean low water (MLW). The channel shoals significantly, approximately 100,000 cubic yards (cy)/year, and is typically dredged twice annually. The District also maintains a storm risk reduction (beach fill) project extending 18 miles along LBI. The area fronting the community of Harvey Cedars has been identified as an erosion "hotspot," by the District.

One large, extended dredging event is proposed for the summer/fall of 2020, with additional, smaller events taking place once per year (on average) for the following nine years. The District proposes to initially dredge approximately 200,000 cy of material to return the channel back to its authorized depth. This initial event is expected to reduce the frequency of future maintenance dredging to once/year and significantly reduce the quantity to approximately 50,000 cy/year. Dredging will be conducted using a split-hull hopper dredge and the material will be placed in the nearshore zone within the depth of closure of the beach fill project to provide a supplemental sand source to the eroded area. Recent grain size analyses indicate the material to be dredged is coarse grained sand. The dredged material will be placed in an area approximately 5,000 feet from the shore of Long Beach Island. The initial operation is expected to take 45-60 days, which



the District is proposing to undertake during the May - June or August - September time frame, depending on availability of the dredge. Dredging will be performed by the U.S. Army Corps of Engineers-owned shallow-draft, split-hull hopper dredge Currituck. Another shallow-draft, split-hull hopper dredge Murden, is also capable for conducting the work, and has been used on similar projects.

The District has determined the adverse effect on essential fish habitat (EFH) or federally managed fisheries is not substantial, and effects can be alleviated with minor project modifications or EFH conservation recommendations. We agree with this determination and outline the EFH conservation recommendations are listed below. Should the project schedule or other project elements change, re-initiation of consultation and a revaluation of the potential impacts to NOAA-trust resources will be necessary. The Fish and Wildlife Coordination Act (FWCA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA) require you to consult with us on projects such as this that may affect EFH and other aquatic resources. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, we provide the following comments and recommendations pursuant to the authorities of the MSA and FWCA.

#### Fish and Wildlife Coordination Act (FWCA)

The Fish and Wildlife Coordination Act (FWCA), as amended in 1964, requires that all federal agencies consult with us when proposed actions might result in modifications to a natural stream or body of water. The FWCA also requires that federal agencies consider effects that these projects would have on fish and wildlife and must also provide for improvement of these resources. Under this authority, 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.

The Barnegat Inlet provides access to the Barnegat Bay-Little Egg Harbor estuary complex for many aquatic species including both state and federally managed species and their forage, including bluefish (Pomatomus saltatrix), summer flounder (Paratichthys dentatus), scup (Stenotomus chrysops), black sea bass (Centropristis striata), Atlantic butterfish (Peprilus triacanthus), winter flounder (Pseudopleuronectes americanus), windowpane flounder (Scophthalmus aquosus), weakfish (Cyanoscion regalis), striped bass (Morone saxatilis), tautog (Tautoga ontits), spot (Leiostomus xanthurus), alewitic (Alosa pseudoharengus), blueback herring (Alosa aestivalis), Atlantic croaker (Micropogonias undulatus), blue crab (Callinectes sapidus), Atlantic menhaden (Brevortia tyrannus), killifish (Fundulus spp.), Atlantic silversides (Menidia menidia), bay anchovies (Anchoa mitchilli) and other assorted baitfishes and shrimps (e.g., Neomysis americana, Mysidopsis bigelovi). The Barnegal Inlet supports strong recreational fishing from April to November for numerous species, including bluefish, striped bass and weakfish.

Anadromous species such as alewife, blueback herring, and striped bass transit the inlet to reach spawning and nursery habitat in numerous streams and rivers, including Westecunk Crock, Cedar Creek, Kettle Creek, Polhemus Creek, Toms River and its tributaries including Mill Creek, Jakes Branch, and others, as well as the tributaries to Little Egg Harbor Bay such as Tuckerton Creek.

The New Jersey Department of Environmental Protection's (NJDEP) Bureau of Freshwater Fisheries has confirmed spawning runs of alewife and blueback herring, collectively known as river herring, in these waterways (NJDEP 2005). Alewife and blueback herring have complex lifecycles where individuals spend most of their lives at sea then migrate great distances to return to freshwater rivers to spawn during the late winter and spring. Alewife and blueback herring are also believed to be repeat spawners, generally returning to their natal rivers to spawn (Collette and Klein-MacPhee 2002).

In the Mid-Atlantic, landings of alewife and blueback herring, collectively known as river herring, have declined dramatically since the mid-1960s and have remained very low in recent years (ASFMC 2017). The 2012 river herring benchmark stock assessment found that of the 52 stocks of alewife and blueback herring assessed, 23 were depleted relative to historic levels, one was increasing, and the status of 28 stocks could not be determined because the time-series of available data was too short (ASMFC 2012). The 2017 stock assessment update indicates that river herring remain depleted at near historic lows on a coast wide basis. Total mortality estimates over the final three years of the data time series (2013-2015) are generally high and exceed region-specific reference points for some rivers (ASMFC 2017). The "depleted" determination was used in 2012 and 2017 instead of "overfished" to indicate factors besides fishing have contributed to the decline, including habitat loss, habitat degradation and modification (including decreased water quality), and climate change (ASMFC 2017). Because landing statistics and the number of fish observed on annual spawning runs indicate a drastic decline in alewife and blueback herring populations throughout much of their range since the mid-1960s, river herring have been designated as Species of Concern by NOAA. Species of Concern are those about which we have concerns regarding their status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act (ESA). We wish to draw proactive attention to these species.

A significant contributing factor to the dramatic declines in river herring populations is decreases in water quality, channelization, dredging, and in-water construction (ASMFC 2010; ASMFC 2017). Anthropogenic-induced elevated levels of turbidity and sedimentation, above background (e.g., natural) levels, can lead to various adverse impacts on diadromous fish and their habitats. Increases in turbidity due to the resuspension of sediments into the water column during activities such as dredging can degrade water quality, lower dissolved oxygen levels, and potentially release chemical contaminants bound to the fine- grained sediments (Johnsen et al. 2008). Suspended sediment can also mask pheromones used by migratory fishes to reach their spawning grounds and impede their migration and can smother immobile benthic organisms and demersal newly-settle juvenile fish (Auld and Schubel 1978; Breitburg 1988; Newcombe and MacDonald 1991; Burton 1993; Nelson and Wheeler 1997). Additionally, other effects from suspended sediments may include (a) lethal and non-lethal damage to body tissues, (b) physiological effects including changes in stress hormones or respiration, or (c) changes in behavior (Kjelland et al. 2015). Furthermore, dredging can result in the impingement and entrainment of eggs, larvae and free swimming diadromous fish, which can lead to injury and mortality (Thrush and Dayton 2002).

Noise from the construction activities may also result in adverse effects to various fish species. Our concerns about noise effects come from an increased awareness that high-intensity sounds

have the potential to adversely impact aquatic vertebrates (Fletcher and Busnel 1978; Kryter 1984; Popper 2003; Popper et al. 2004). Effects may include (a) lethal and non-lethal damage to body tissues, (b) physiological effects including changes in stress hormones, hearing capabilities, or sensing and navigation abilities, or (c) changes in behavior (Popper et al. 2004).

Understanding how the inlet environment and the geomorphic features (e.g., shoreline, nearshore wetlands, and shoals) associated with it function to provide habitat is the product of complex interactions between biological processes and physical factors. There is potential for physical, biological, and chemical impacts from dredging habitat in the Barnegat Inlet. Potential impacts caused by dredging include physical removal of benthic faunal communities and disturbance of foraging, nursery, and migratory habitat for fish and invertebrates. Dredging can also affect benthic communities by altering sediment transport characteristics, sediment texture, depth and vertical relief, and overall community structure. Systematic disturbances such as repeated dredging may result in cumulative and chronic changes in habitat quantity and quality. Therefore, initial dredging should be limited to the minimum amount necessary to complete the project purpose and maintenance dredging should be limited to the minimum amount necessary to maintain operations. Additionally, in order to minimize the adverse impacts to anadromous fishes including alewife, blueback herring and striped bass, as well as federally managed species, their prey, and other aquatic resources under our purview, dredging and other in-water activities should be avoided from March 1 to June 1 of any given year.

#### Magnuson Stevens Fishery Conservation and Management Act (MSA)

The Barnegat Inlet, Barnegat Bay, Atlantic Ocean, and the surrounding coastal bays, creeks, marshes, submerged aquatic vegetation, shellfish, and mudflats have been designated EFH for various life stages of species managed by the New England Fishery Management Council (NEFMC), Mid-Atlantic Fishery Management Council (MAFMC), South Atlantic Fishery Management Council (SAFMC), and NOAA Fisheries. These areas provide feeding, spawning, resting, nursery, and staging habitat for a variety of commercially, recreationally, and ecologically important species. Species for which EFH has been designated in the project area include, but are not limited to, Atlantic butterfish, bluefish, black sea bass, scup, summer flounder, windowpane flounder, winter flounder, clearnose skate (Raja eglanteria), little skate (Leucoraja erinacea), and winter skate (Leucoraja ocellata). These areas are also designated EFH for several Atlantic highly migratory species (tuna, swordfish, billfish, small and large coastal sharks, and pelagic sharks) including, but not limited to, sandbar shark (Carcharhimus plumbeus) and sand tiger shark (Carcharias taurus). The sand tiger shark has been listed as a Species of Concern by NOAA. The project area is also designated as EFH for Spanish mackerel (Scomberomorus maculatus) and king mackerel (Scomberomorus cavalla).

The dredging of sand from the highly dynamic Barnegat Inlet has the potential to impact aquatic resources, including species and their habitats, in a variety of ways. As discussed above, dredging can damage fishery resources and their habitats through direct impingement of eggs and larvae, through the creation of elevated suspended sediment levels in the water column, and through deposition of sediments on immobile eggs and early life stages. Sustained water column turbulence can reduce the feeding success of sight-feeding fish such as winter flounder and summer flounder, as well as black sea bass and tautog. Dredging can also remove the substrate

used by federally managed species as spawning, refuge and forage habitat. Benthic organisms that are food sources for federally managed species may also be removed during the dredging. These impacts may be temporary in nature if the substrate conditions return to preconstruction condition and benthic community recovers with the same or similar organisms. The impacts may be permanent if the substrate is altered in a way that reduces its suitability as habitat, if the benthic community is altered in a way that reduces its suitability as forage habitat, or if the dredging occurs so often that the area does not have time to recover.

#### Sandbar and Sand Tiger Sharks

The proposed project area has also been designated EFH for sandbar shark and sand tiger shark. Neonate (young-of-year) and juvenile (ages one and over) sand tiger sharks use the area of the proposed project during late spring and summer, occupying the nursery grounds until migration to warmer waters in the fall, while sandbar sharks of all age and size classes use the area of the proposed project, primarily during spring, summer, and fall months (Springer 1960; McCandless et al. 2002; Rechisky & Wetherbee 2003). The June 2009 Amendment 1 to the Consolidated Highly Migratory Species (HMS) Fisheries Management Plan (NOAA 2009) states that non-fishing activities such as mining for sand and gravel (e.g., dredging) in estuarine and coastal waters have adverse impacts to sandbar and sand tiger shark EFH due to water column effects, such as changing circulation patterns, increasing turbidity, and decreasing oxygen concentrations. The 2009 amendment also include a number of general conservation recommendations for dredging projects proposed within EFH for highly migratory species. These general recommendations include, but are not limited to:

- Sand mining [and beach nourishment] should not be allowed in HMS EFH during seasons when HMS are using the area, particularly during spawning and pupping seasons.
- Sand and gravel extraction operations should be managed to avoid or minimize impacts
  to the bathymetric structure in estuarine and nearshore areas.
- Planning and design of mining activities should avoid significant resource areas important as HMS EFH.

Avoiding dredging from March 1 to June 1 will aid in minimizing impacts to highly migratory species, including sandbar and sand tiger sharks.

#### Summer flounder

Summer flounder is one of the most economically important species in the Great Atlantic Region due to its role in commercial and recreational fisheries (Collette and Klein-MacPhee 2002). Able et al. (1990) reported that transforming summer flounder larvae have been collected in most of the major inlets along the New Jersey coast including Shark River Inlet, Manasquan River Inlet, Little Egg Inlet, Absecon Inlet, Corson Inlet and the Maurice River. The movement of transforming individuals through inlets in New Jersey occurs primarily from October through December, but larvae have been collected as late as February in Little Sheepshead Creek inside Little Egg Inlet, March and May in the Maurice River, March in the Manasquan River Inlet and Corson Inlet and March and April in Absecon Inlet (Able et al. 1990.) Festa (1974) also studied the distribution of young and larval summer flounder in New Jersey estuaries, and found that larvae enter New Jersey estuaries from at least early October to late January in most years and as

5

late as March is certain years. Additionally, Able et al. (2011) analyzed summer flounder larvae ingress time-series data spanning three decades (1989-2006) and found that the majority of larval summer flounder ingress occurs from October to February in the Little Egg Inlet, with peak ingress between November and January. The Barnegat Inlet likely shows similar patterns of ingress, as it is the only other inlet connecting the Barnegat Bay-Little Egg Harbor Estuary to the Atlantic Ocean and is only separated from Little Egg Inlet by 21 miles.

These early life stages of summer flounder, and other smaller pelagic life stages, are not capable of moving away from a dredge, especially if the suction is on while the dredge head is moving through the water column. Entrainment of these early life stages can be reduced by ensuring that the suction on the dredge is not turned on until the dredge head is at or near the bottom and that it is turned off before the head is lifted up through the water column when dredging ceases. Avoiding dredging from March 1 to May 31 will also aid in minimizing impacts to summer flounder, as well as other federally managed species. Furthermore, because the ingress of summer flounder larvae peaks in the fall in the Barnegat Bay-Little Egg Harbor area, dredging should also be avoided from November 1 to December 31 of any given year. Avoiding dredging during this time of the year will also reduce impacts to adult winter flounder migrating in through the inlet to spawn in the estuary in the mid to late winter and early spring.

#### Prev Species

The dredging of the Barnegat Inlet will also adversely impact EFH through impacts to prey species. The EFH final rule states that the loss of prey may be an adverse effect on EFH and managed species because the presence of prey makes waters and substrate function as feeding habitat and the definition of EFH includes waters and substrate necessary to fish for feeding. Therefore, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat may also be considered adverse effects on EFH.

As discussed above, anadromous fish such as alewife, blueback herring and striped bass migrate through the Barnegat Inlet and use the Barnegat Bay-Little Egg Harbor and their tributaries as spawning, nursery and forage habitat. Water quality degradation, increased turbidity, noise and vibrations from dredging operations may impede the migration of anadromous fish through the inlets to their upstream spawning grounds. Alosine fish, such as alewife and blueback herring, are important forage for several species managed by the NEFMC and MAFMC as they provide trophic linkages between inshore and offshore systems. Buckel and Conover (1997) in Fahey et al. (1999) report that diet items of juvenile bluefish include Alosa species such blueback herring and alewife as well as bay anchovy, silversides and other fish species. Additionally, juvenile Alosa species have all been identified as prey species for summer flounder, windowpane flounder, and winter skate in Steimle et al. (2000). Avoiding dredging at certain times of year will avoid and minimize impacts to various prey species.

#### Mid-Atlantic Fisheries Management Council Policies

A number of the federally managed species for which EFH has been designated in the project area are managed by the MAFMC. MAFMC has developed a policy statement on dredging activities that may affect federally managed species under their purview including summer flounder, scup, black sea bass, monkfish and butterfish. These policies are intended to articulate

the MAFMC's position on various development activities and facilitate the protection and restoration of fisheries habitat and ecosystem function. Some of the MAFMC's policies on dredging include:

- Avoid sand mining in areas containing sensitive fish habitats (e.g., spawning and feeding sites, hard bottom, cobble/gravel substrate, shellfish beds).
- Avoid mining sand from sandy ridges, lumps, shoals, and rises that are named on maps.
   The naming of these is often the result of the area being an important fishing ground.
- Seasonal restrictions and spatial buffers on sand mining should be used to limit negative
  impacts during fish spawning, egg development, young-of-year development, and
  migration periods, and to avoid secondary impacts to sensitive habitat areas such as SAV.
- Bathymetric and biological monitoring should be conducted before and after beach nourishment to assess recovery in beach borrow and nourishment areas.

In addition to the EFH conservation recommendations provided below, the MAMFC's policies should be incorporated, as appropriate, into the District's project plans.

#### **Essential Fish Habitat Conservation Recommendations**

Pursuant to Section 305 (b) (4) (A) of the MSA, we recommend the following EFH conservation recommendations be incorporated into the project:

- To avoid and minimize the impacts of dredging on aquatic habitat, eggs, larvae, free swimming fish, and invertebrates, dredging should be avoided from March 1 to June 1, and from November 1 to December 31, of any given year.
- Dredging heads/drag heads should not be turned on/activated until the head is at or on the bottom and should be turned off/deactivated prior to being lifted through the water column.

Please note that Section 305 (b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH conservation recommendations, including the measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305 (b) (4) (B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate or offset such effect pursuant to 50 CFR 600.920 (k).

We look forward to continued coordination with your office on this project as it moves forward. Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920 G) if new information becomes available, or if the project is revised in such a manner that affects the basis for the EFH determination, including a change in project schedule

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As required by Section 305 (b)(4)(B) of the Magnuson Stevens Fishery Conservation and Management Act, a detailed written response to the EFH Conservation Recommendations is provided below, dated 20 June 2020.

or timing. If you have any questions or need additional information, please do not hesitate to contact Keith Hanson in our Annapolis, MD field office at <a href="mailto:keith.hanson@noaa.gov">keith.hanson@noaa.gov</a> or Karen Greene in our Highlands, NJ field office at <a href="mailto:karen.greene@noaa.gov">karen.greene@noaa.gov</a> or (732) 872-3023 or (978) 559 9871.

Sincerely,

CHIARELLA.LOU Digitally signed by CHIARELLALOUIS.A.1365828756 Date: 2020.03.23 17:13:55 -04'00'

Louis A. Chiarella Assistant Regional Administrator for Habitat Conservation

cc: ACOE – B. Conlin
PRD – M. Murray-Brown, P. Johnsen
FWS- E. Schrading, S. Mars
NJDEP – S. Biggins, K. Dacanay
MAFMC – C. Moore
NEFNC – T. Nies
ASMFC – L. Havel

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# DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3390

MAR 1 2 2020

Environmental Resources Branch

Katherine Marcopul, PhD
Deputy State Historic Preservation Officer
Mail Code 501-04B
State of New Jersey
Department of Environmental Protection
Historic Preservation Office
PO Box 420
Trenton, NJ 08625-0420

Dear Dr. Marcopul:

The US Army Corps of Engineers, Philadelphia District (USACE) are proposing to perform maintenance dredging within the Barnegat Inlet Federal Navigation Channel and to use the material to create a nearshore placement adjacent to Harvey Cedars on Long Beach Island under the National Regional Sediment Management Program under Water Resources Development Act (WRDA) Section 1122: Beneficial Use Pilot Project.

Section 1122 of WRDA requires the USACE to establish a pilot program to carry out ten projects for the beneficial use of dredged material. One of the 10 pilot projects selected is located in USACE's Philadelphia District and is the subject of this Environmental Assessment: Beneficial Use Pilot Project Barnegat Inlet, New Jersey. The purpose of this pilot project is to: 1) maintain the Barnegat Inlet Federal Navigation Channel; 2) to use the dredged material to construct a beneficial use shore protection project (nearshore berm at Harvey Cedars); and, 3) to use the results of testing and monitoring to develop and support beneficial use projects in the future.

The berm would be constructed offshore between the -10 foot and -20 foot NAVD88 contours adjacent to the southern half of Harvey Cedars, roughly bounded by Sussex Avenue to the north and Bergen Avenue to the south. Barnegat Inlet would be dredged to the authorized depth by the USACE-owned shallow-draft, split-hull, hopper dredge Murden, which would deposit the dredged material within each 500-ft by 300-ft cell (Figure 2). It is anticipated that the placement of 200,000 CY of sand within these cells. The targeted dimensions of the nearshore placement are approximately one mile long, 300 feet wide and about 3 feet thick. Because this is an innovative pilot project using a Government-owned dredge with operational flexibility, the exact drop locations will depend on maximizing placements to retain the material within the littoral zone where it is most needed, and will depend on surf, wind, and tide conditions at the time of the

USACE scoping letters submitted to natural resource agencies.

discharges. If the pilot project proves beneficial, the USACE is proposing to implement this nearshore beneficial use of dredged material from Barnegat Light south to Harvey Cedars.

The shoreline and nearshore area has been previously surveyed in 1999 for the Barnegat Inlet to Little Egg Inlet (Long Beach Island) Storm Damage Reduction Project and the results are found in the report titled, Phase I Submerged and Shoreline Cultural Resources Investigations and Hydrographic Survey, Long Beach Island, Ocean County, New Jersey prepared for the USACE by Hunter Research, Inc. dated 1999. A subsequent investigation was conducted in 2001 and is titled, Supplemental Phase IB and Phase II Cultural Resources Investigations, New Jersey Atlantic Coast, Long Beach Island, Ocean County, New Jersey prepared by Dolan Research. Two of the five underwater targets proved to be shipwreck sites (Targets 4:735 and 9:643), and none of the six shoreline anomalies proved to be a historic property. The two shipwreck sites are located to the south of this proposed project and will not be impacted by the proposed nearshore placement of dredged material (Figure 3).

Since the Barnegat Inlet Navigation Channel will only be dredged to its previously authorized depth, and since the placement of dredged material within this nearshore location will not impact the two recorded shipwrecks, the USACE has determined that the proposed action will have *No Effect* on historic properties eligible for or listed on the National Register of Historic Places pursuant to 36CFR800.4(d)(1).

We request your review of the proposed project and your concurrence with our *No Effect* determination. If you have any questions or comments please contact our District Cultural Resource Specialist, Nikki Minnichbach via email at <a href="Micole.c.minnichbach@usace.army.mil">Micole.c.minnichbach@usace.army.mil</a> or by phone at 215-656-6556. Thank you for your participation in the Section 106 review process.

Sincerely,

Peter R. Blum, P.E. Chief, Planning Division

Peter Blum

Enclosures

Figure 1 - Sand source and pilot project location

Figure 2 - Dredged Material Placement Cells

Figure 3 - Pilot and Future Proposed location



Figure 1. The red area is the existing Barnegat Inlet Federal Navigation Channel (sand source). The green area indicates one of the approved sand placement areas for the authorized Coastal Storm Management Project (LBI). The light blue rectangle is the proposed one-mile long nearshore beneficial use placement area adjacent to Harvey Cedars.



Figure 2. Close up of one-mile nearshore berm sand placement cells, approximately 500 ft x 300 ft each.



Figure 3: Beneficial Use of Dredged Material from the Maintenance of Barnegat Inlet, including the location of the pilot project, the additional nearshore area for future placement and the location of two shipwreck sites

#### ----Original Message-----

From: Marcopul, Kate [mailto:Kate.Marcopul@dep.nj.gov]

Sent: Wednesday, April 15, 2020 10:18 AM

To: Blum, Peter R CIV CPMS (USA) <Peter.R.Blum@usace.army.mil>

Cc: Minnichbach, Nicole C CIV USARMY CENAP (USA) < Nicole.C.Minnichbach@usace.army.mil>; Baratta, Meghan < Meghan.Baratta@dep.nj.gov>; West-Rosenthal, Jesse < Jesse.West-Rosenthal@dep.nj.gov> Subject: [Non-DoD Source] Maintenance Dredging of Barnegat Inlet and Nearshore Placement (HPO Project # 20-0916-1)

\*\*This e-mail serves as the official correspondence of the New Jersey Historic Preservation Office as we switch to a temporary remote work environment in response to the ongoing novel coronavirus (COVID-19) outbreak\*\*

HPO Project # 20-0916-1 HPO-D2020-082

Dear Mr. Blum:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published with amendments in the Federal Register on 6 July 2004 (69 FR 40544-40555), I am providing Consultation Comments for the following proposed undertaking:

Ocean County, Harvey Cedars Borough Maintenance Dredging and Nearshore Placement Barnegat Inlet United States Department of the Army, Corps of Engineers

#### 800.4 Identification of Historic Properties

Thank you for providing the Historic Preservation Office (HPO) the opportunity to review and comment on the potential for the proposed dredging of the Barnegat Inlet Federal Navigation Channel and nearshore placement to affect historic properties. According to information in the documentation submitted, both the inlet and the nearshore area of Harvey Cedars Borough in Ocean County have been previously surveyed for historic properties. Two shipwrecks were previously identified south of the area of potential effects for the proposed project. Since the inlet will be dredged to it's previously authorized depth and there are no previously identified historic properties within the placement area, the United States Department of the Army, Corps of Engineers is recommending that no historic properties will be affected by the proposed undertaking.

The HPO has reviewed the documentation submitted. I concur with your finding that there will be no historic properties affected by the proposed undertaking within the project's area of potential effects. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Additional Comments

Thank you for providing the opportunity to review and comment on the potential for the above-referenced project to affect historic properties. Please do not hesitate to contact Jesse West-Rosenthal of my staff at Jesse. West-Rosenthal@dep.nj.gov with any questions regarding archaeology. Please reference the HPO project number 20-0916, in any future calls, emails, or written correspondence to help expedite your review and response.

Sincerely,

Katherine J. Marcopul, Ph.D., CPM

Administrator and

Deputy State Historic Preservation Officer Historic Preservation Office NJ Department of Environmental Protection

501 East State Street, Trenton, NJ 08625 kate.marcopul@dep.nj.gov <mailto:kate.marcopul@dep.nj.gov> T (609) 984-0176 | F (609) 984-0578

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CLASSIFICATION: UNCLASSIFIED



## DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3390

April 3, 2020

**Environmental Resources Branch** 

Mr. Louis Chiarella Assistant Regional Administrator For Habitat Conservation NOAA Fisheries Greater Atlantic Region National Marine Fisheries Service 55 Great Republic Drive Gloucester, MA 01930-2276

Dear Mr. Chiarella:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Division of Coastal Engineering will serve as the non-Federal sponsor.

USACE letters providing notice to the availability of the draft Environmental Assessment, requested review and comment. The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for implementing NEPA and *U.S. Army Corps of Engineers Procedures for Implementing NEPA*, *Engineering Regulation (ER) 200-2-2.* The EA evaluates existing environmental, cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

The EA can be downloaded from our District website: http://www.nap.usace.army.mil/Missions/CivilWorks/PublicNoticesReports.aspx

USACE has initiated consultation with your office pursuant to the Magnuson Stevens Fishery Conservation and Management Act and submitted a NOAA Fisheries Greater Atlantic Regional Fisheries Office Essential Fish Habitat (EFH) Assessment & Fish and Wildlife Coordination Act (FWCA) Worksheet for the proposed project. We concluded that the effect on EFH is not substantial and that any adverse effects are no more than minimal and temporary. Your office provided a response dated March 23, 2020 and we will be providing our response in a separate letter, pursuant to the MSA section 305(b)(4).

Pursuant to the NEPA, and the FWCA, we request your review and comments on the draft report within 30 days of the date of this letter.

If you have any questions please contact Ms. Barbara Conlin at (215-656-6557) Barbara.E.Conlin@usace.army.mil or Ms. Monica Chasten at (215-656-6683) Monica.A.Chasten@usace.army.mil). Thank you for your attention to this matter.

Sincerely,

BLUM.PETER.R BLUM.PETER.R 1228677120 .1228677120 Date: 2020.04.06 12:13:21 -04'07

Peter R. Blum, P.E. Chief, Planning Division

cc: Louis Chiarella lou.chiarella@noaa.gov



### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3330

April 3, 2020

Environmental Resources Branch

Ms. Colleen Keller, Director
Coastal Land Use Planning
Division of Land Use Management
New Jersey Department of Environmental Protection
P.O. Box 420
501 E. State Street, Second Floor
Trenton, NJ 08609

Dear Ms. Keller:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Division of Coastal Engineering will serve as the non-Federal sponsor.

The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for

-2-

implementing NEPA and *U.S. Army Corps of Engineers Procedures for Implementing NEPA, Engineering Regulation (ER) 200-2-2.* The EA evaluates existing environmental, cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

In accordance with Section 102 of the National Environmental Policy Act, the Corps is requesting your review and comment on the draft report within 30 days of the date of this letter. Based on a review of all applicable regulations and policies in N.J.A.C. 7:75 Coastal Zone Management Rules, it is the Corps' finding that the proposed action, as described in the report, complies with New Jersey's approved coastal management program and will be conducted in a manner consistent with the program, and is not expected to violate N.J. water quality standards. Our review of these Rules is provided as an attachment to this letter. We request your concurrence with our consistency determination pursuant to New Jersey's Coastal Zone Management Program and Section 401 Water Quality Certification, pursuant to the Clean Water Act.

The EA can be downloaded from our District website: http://www.nap.usace.army.mil/Missions/CivilWorks/PublicNoticesReports.aspx

The public has been invited to comment on the draft EA.

If you have any questions please contact Ms. Barbara Conlin at (215-656-6557) <u>Barbara E. Conlin@usace.army.mil</u> or Ms. Monica Chasten at (215-656-6683) <u>Monica A. Chasten@usace.army.mil</u>). Thank you for your attention to this matter.

Sincerely,

BLUM.PETER. Digitally signed by BLUM.PETER. 1228677120 BLUM.PETER. 1228677120 Digitally signed by BLUM.PETER. 1

Peter R. Blum, P.E. Chief, Planning Division

Enclosures

cc: Colleen Keller colleen.keller@dep.nj.gov

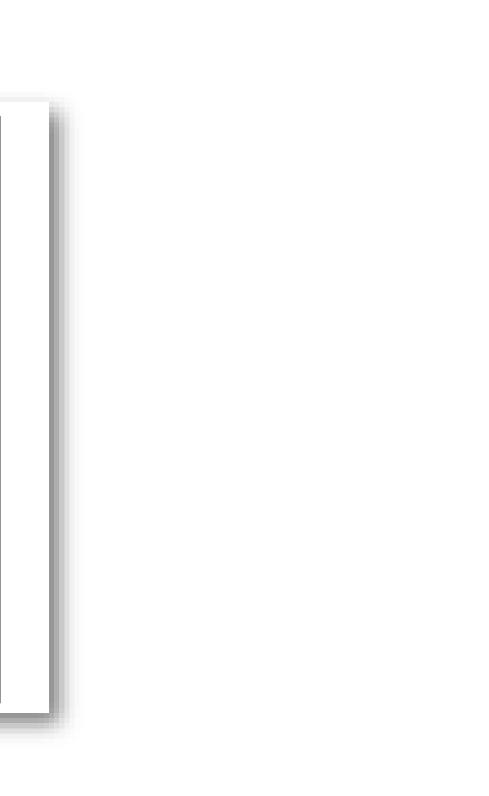
RULE	APPLICABLE SECTIONS
SUBCHAPTER 9 - SPECIAL AREAS	
7:7-9.2 SHELLFISH HABITAT	Policies a, f
7:7-9.3 SURF CLAM AREAS	Policies a, b
7:7-9.4 PRIME FISHING AREAS	Policies a,
7:7-9.5 FINFISH MIGRATORY PATHWAYS	Policies a, b, c
7:7-9.6 SUBMERGED VEGETATION HABITAT	Policies a, b
7:7-9.7 NAVIGATION CHANNELS	Policies a, b
7:7-9.8 CANALS	N/A
7:7-9.9 INLETS	Policies a, b
7:7-9.10 MARINA MOORINGS	N/A
7:7-9.11 PORTS	N/A
7:7-9.12 SUBMERGED INFRASTRUCTURE ROUTES	N/A
7:7-9.13 SHIPWRECK AND ARTIFICIAL REEF HABITATS	N/A
7:7-9.14 WET BORROW PITS	N/A
7:7-9.15 INTERTIDAL AND SUBTIDAL SHALLOWS	Policies a
7:7-9:16 DUNES	N/A
7:7-9.17 OVERWASH AREAS	N/A
7:7-9.18 COASTAL HIGH HAZARD AREAS	N/A
7:7-9.19 EROSION HAZARD AREAS	N/A
7:7-9:20 BARRIER ISLAND CORRIDOR	N/A
7:7-9.21 BAY ISLANDS	N/A
7:7-9.22 BEACHES	N/A
7:7-9.23 FILLED WATER'S EDGE	N/A
7:7-9.24 EXISTING LAGOON EDGES	N/A
7:7-9.25 FLOOD HAZARD AREAS	N/A
7:7-9.26 RIPARIAN ZONES	N/A
7:7-9.27 WETLANDS	N/A
7:7-9.28 WETLAND BUFFERS	N/A
7:7-9.29 COASTAL BLUFFS	N/A
7:7-9.30 INTERMITTENT STREAM CORRIDORS	N/A
7:7-3.31 FARMLAND CONSERVATION AREAS	N/A
7:7-9.32 STEEP SLOPES	N/A
7:7-9.33 DRY BORROW PITS	N/A

BENEFICIAL USE PILOT PROJECT				
RULE	APPLICABLE SECTIONS			
7:7-9.34 HISTORIC AND ARCHAEOLOGICAL RESOURCES	Policies a, b			
7:7-9.35 SPECIMEN TREES	N/A			
7:7-9.36 ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITATS	Policies a, b			
7:7-9.37 CRITICAL WILDLIFE HABITATS	Policies a, b			
7:7-9.38 PUBLIC OPEN SPACE	N/A			
7:7-9.39 SPECIAL HAZARD AREAS	N/A			
7:7-9.40 EXCLUDED FEDERAL LANDS	N/A			
7:7-9.41 SPECIAL URBAN AREAS	N/A			
7:7-9.42 PINELANDS NATIONAL RESERVE AND PINELANDS PROTECTED AREA	N/A			
7:7-9.43 MEADOWLANDS DISTRICT	N/A			
7:7-9.44 WILD AND SCENIC RIVER CORRIDORS	N/A			
7:7-9.45 GEODETIC CONTROL REFERENCE MARKS	N/A			
7:7-9.46 HUDSON RIVER WATERFRONT AREA	N/A			
7:7-9.47 ATLANTIC CITY	N/A			
7:7-9.48 LANDS AND WATERS SUBJECT TO PUBLIC TRUST RIGHTS	Policies a, b			
SUBCHAPTER 10 - STANDARDS FOR BEACH AND DUNE AG	CTIVITIES			
7:7-10.1 PURPOSE AND SCOPE	N/A			
7:7-10.2 STANDARDS APPLICABLE TO ROUTINE BEACH MAINTENANCE	N/A			
7:7-10.3 STANDARDS APPLICABLE TO EMERGENCY POST- STORM BEACH RESTORATION	N/A			
7:7-10.4 STANDARDS APPLICABLE TO DUNE CREATION AND MAINTENANCE	N/A			
7:7-10.5 STANDARDS APPLICABLE TO THE CONSTRUCTION OF BOARDWALKS	N/A			
SUBCHAPTER 11 – STANDARDS FOR CONDUCTING AND R THREATENED WILDLIFE OR PLANT SPECIES HABITAT IN THREATENED WILDLIFE SPECIES HABITAT EVALUATION	IPACT ASSESSMENT AND/OR ENDANGERED OR			
7:7-11.1 PURPOSE AND SCOPE	Policies a, b, d			
7:7-11.2 STANDARDS FOR CONDUCTING ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITAT IMPACT ASSESSMENTS	Policies a, b, c			
7:7-11.3 STANDARDS FOR CONDUCTING ENDANGERED OR THREATENED WILDLIFE SPECIES HABITAT EVALUATIONS	N/A			
7:7-11.4 STANDARDS FOR REPORTING THE RESULTS OF IMPACT ASESSMENTS AND HABITAT EVALUATIONS	Policies a, c			



RULE	APPLICABLE SECTIONS
SUBCHAPTER 12 - GENERAL WATER AREAS	
7:7-12.1 PURPOSE AND SCOPE	Policies a, b
7:7-12.2 SHELLFISH AQUACULTURE	N/A
7:7-12.3 BOAT RAMPS	N/A
7:7-12.4 DOCKS AND PIERS FOR CARGO AND	N/A
COMMERCIAL FISHERIES	
7:7-12.5 RECREATIONAL DOCKS AND PIERS	N/A Policies a, b
7:7-12.6 MAINTENANCE DREDGING 7:7-12.7 NEW DREDGING	N/A
7:7-12.8 ENVIRONMENTAL DREDGING	N/A
7:7-12.9 DREDGED MATERIAL DISPOSAL	Policies a
7:7-12.10 SOLID WASTE OR SLUDGE DUMPING	N/A
7:7-12.11 FILLING	Policies a, d, g, h
7:7-12.12 MOORING	N/A
7:7-12.13 SAND AND GRAVEL MINING	N/A
7:7-12.14 BRIDGES	N/A N/A
7:7-12.15 SUBMERGED PIPELINES 7:7-12.16 OVERHEAD TRANSMISSION LINES	N/A
7:7-12.17 DAMS AND IMPOUNDMENTS	N/A
7:7-12.18 OUTFALLS AND INTAKES	N/A
7:7-12.19 REALIGNMENT OF WATER AREAS	N/A
7:7-12.20 VERTICAL WAKE OR WAVE ATTENUATION	N/A
STRUCTURES	277
7:7-12.21 SUBMERGED CABLES	N/A N/A
7:7-12.22 ARTIFICIAL REEFS 7:7-12.23 LIVING SHORELINES	N/A Policies a, b
7:7-12.24 MISCELLANEOUS USES	N/A
7:7-13.1 PURPOSE AND SCOPE	N/A
7:7-13.2 DEFINITIONS	N/A
7:7-13.3 IMPERVIOUS COVER REQUIREMENTS THAT APPLY TO SITES IN THE UPLAND WATERFRONT DEVELOPMENT AND CAFRA AREAS	N/A
7:7-13.4 VEGETATIVE COVER REQUIREMENTS THAT APPLY TO SITES IN THE UPLAND WATERFRONT DEVELOPMENT AND CAFRA AREAS	N/A
7:7-13.5 DETERMINING IF A SITE IS FORESTED OR UNFORESTED	N/A
7:7-13.6 UPLAND WATERFRONT DEVELOPMENT AREA REGIONS AND GROWTH RATINGS	N/A
7:7-13.7 ENVIRONMENTAL SENSITIVITY	N/A
7:7-13.8 DEVELOPMENT POTENTIAL	N/A
7:7-13.9 DEVELOPMENT POTENTIAL FOR A RESIDENTIAL OR MINOR COMMERCIAL DEVELOPMENT SITE	N/A
7:7-13.10 DEVELOPMENT POTENTIAL FOR A MAJOR COMMERCIAL OR INDUSTRIAL DEVELOPMENT SITE	N/A
7:7-13.11 DEVELOPMENT POTENTIAL FOR A CAMPGROUND DEVELOPMENT SITE	N/A
7:7-13.12 DEVELOPMENT INTENSITY	N/A
7:7-13.13 IMPERVIOUS COVER LIMITS FOR A SITE IN THE UPLAND WATERFRONT DEVELOPMENT AREA	N/A
7:7-13.14 VEGETATIVE COVER PERCENTAGES FOR A SITE IN THE UPLAND WATERFRONT DEVELOPMENT AREA	N/A
7:7-13.15 COASTAL PLANNING AREAS 7:7-13.16 BOUNDARIES FOR COASTAL PLANNING AREAS,	N/A N/A

DENEFICIAL USI	E PILOT PROJECT
RULE	APPLICABLE SECTIONS
CAFRA CENTERS, CAFRA CORES, AND CAFRA NODES;	
NON-MAINLAND COASTAL CENTERS 7:7-13.17 IMPERVIOUS COVER LIMITS FOR A SITE IN THE	N/A
CAFRA AREA 7:7-13.18 VEGETATIVE COVER PERCENTAGES FOR A SITE	N/A
IN THE CAFRA AREA	N/A
7:7-13.19 MAINLAND COASTAL CENTERS	N/A
SUBCHAPTER 14 - GENERAL LOCATION RULES	
7:7-14.1 RULE ON LOCATION OF LINEAR DEVELOPMENT	N/A
7:7-14.2 BASIC LOCATION RULE	Policies a, b
7:7-14.3 SECONDARY IMPACTS	Policies a, b
SUBCHAPTER 15 - USE RULES	
	1
7:7-15.1 PURPOSE AND SCOPE	N/A
7:7-15.2 HOUSING	N/A
7:7-15.3 RESORT/RECREATIONAL	N/A
7:7-15.4 ENERGY FACILITY	N/A
7:7-15.5 TRANSPORTATION	N/A
7:7-15.6 PUBLIC FACILITY	N/A
7:7-15.7 INDUSTRY	N/A
7:7-15.8 MINING	N/A
7:7-15.9 PORT	N/A
7:7-15.10 COMMERCIAL FACILITY	N/A
7:7-15.11 COASTAL ENGINEERING	Policies a, b
7:7-15.12 DREDGED MATERIAL PLACEMENT ON LAND	N/A
7:7-15.13 NATIONAL DEFENSE FACILITIES	N/A
7:7-15.14 HIGH-RISE STRUCTURES	N/A
SUBCHAPTER 16 - RESOURCE RULES	
	ı
7:7-16.1 PURPOSE AND SCOPE	N/A
7:7-16.2 MARINE FISH AND FISHERIES	Policies a, b, c
7:7-16.3 WATER QUALITY	Policies a, b
7:7-16.4 SURFACE WATER USE	N/A
7:7-16.5 GROUNDWATER USE	N/A
7:7-16.6 STORMWATER MANAGEMENT	N/A
7:7-16.7 VEGETATION	N/A
7:7-16.8 AIR QUALITY	Policies a, b
7:7-16.9 PUBLIC ACCESS	N/A
I San I	



RULE	APPLICABLE SECTIONS
7:7-16.10 SCENIC RESOURCES AND DESIGN	N/A
7:7-16.11 BUFFERS AND COMPATIBILITY OF USES	N/A
7:7-16.12 TRAFFIC	N/A
7:7-16.13 SUBSURFACE SEWAGE DISPOSAL SYSTEMS	N/A
7:7-16.14 SOLID AND HAZARDOUS WASTE	N/A

### CONSISTENCY REVIEW OF APPLICABLE NEW JERSEY COASTAL ZONE MANAGEMENT POLICIES

(N.J.A.C. 7:7 as amended 15 July 2019)

NATIONAL REGIONAL SEDIMENT MANAGEMENT (RSM) PROGRAM

WRDA 2016 Section 1122 BENEFICIAL USE PILOT PROJECT

BARNEGAT INLET, NJ

#### 7:7-9.2 SHELLFISH HABITAT

(a) The project area is not located in shellfish habitat.

#### 7:7-9.3 SURF CLAM AREAS

- (a) The project area does not contain surf clam coastal waters which can be demonstrated to support significant commercially harvestable quantities of surf clams (*Spisula solidissima*), or areas important for recruitment of surf clam stocks.
- (b) The project would not result in the destruction, condemnation, or contamination of surf clam areas. Any impacts to surf clam habitat will be temporary in nature.

#### 7:7-9.4 PRIME FISHING AREAS

- (a) The project does not occur in prime fishing areas.
- (b) The project does not entail sand or gravel submarine mining which would alter existing bathymetry to a significant degree so as to reduce the high fishery productivity of these areas. Furthermore, this project does not entail disposal of domestic or industrial wastes.

#### 7:7-9.5 FINFISH MIGRATORY PATHWAYS

- (a) The project does not occur in a waterbody designated as finfish migratory pathway. Fish utilize inlets as a pathway from the ocean to backbay areas, however Barnegat Inlet is a large/wide inlet and strong currents flush the minor turbidity created by the draghead.
- (b-c) The project would not create a physical barrier to the movement of fish. There would also be no adverse impact to water quality. Turbidity will increase during construction (deposition of dredged material) in the nearshore placement zone however this will be temporary due to ocean currents. Turbidity is naturally high in the nearshore zone due to cresting waves. At the dredging location within the inlet, due to the nature of the material being large-grained sand, the material will settle quickly and inlet currents flush turbidity swiftly.

#### 7:7-9.6 SUBMERGED VEGETATION HABITAT

- (a) There are no existing Submerged Aquatic Vegetation (SAV) beds in the footprint of the proposed dredging or placement areas.
- (b) Maintenance dredging of the existing, authorized Barnegat Inlet Federal navigation channel is acceptable. There are no SAV beds within the footprint of the channel.

#### 7:7-9.7 NAVIGATION CHANNELS

(a-b) The Barnegat Inlet is a Federal navigation channel. The dredging is authorized, ongoing, and would improve navigation and is acceptable. The dredging is in compliance with 7:7-12.6 Maintenance Dredging and Appendix G.

#### 7:7-9.9 INLETS

(a-b) The project does occur in an inlet, but does not entail filling in an inlet or development of submerged infrastructure.

#### 7:7-9.15 INTERTIDAL AND SUBTIDAL SHALLOWS

(a) The depth of the project area is greater than 4 feet below mean low water and is therefore, not defined as intertidal and subtidal shallows.

#### 7:7-9.34 HISTORIC AND ARCHAEOLOGICAL RESOURCES

(a) The Barnegat Inlet will only be dredged to its previously authorized depth. There are no known archaeological resources within one mile of the project area. Therefore, a preliminary determination has been made that the proposed action will have *No Effect* on historic properties eligible for or listed on the National Register of Historic Places pursuant to 36CFR800.4(d)(1).

### 7:7-9.36 ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITATS

(a-b) The project is being coordinated with the New Jersey Division of Fish and Wildlife, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service (NMFS) pursuant to the Federal Endangered Species Act.

The project will not result in any adverse impact to Federal or state listed endangered or threatened wildlife or plant species or their habitats as described in Section 6.5 of the attached Environmental Assessment. The impacts of dredging for the proposed nearshore placement at Harvey Cedars alternative would be identical to the current practice (maintenance dredging and placement south of the south jetty). While Atlantic

sturgeon, sea turtles, and whales have the potential to occur in the vicinity, it is unlikely during the operation in the nearshore zone. The species are highly mobile and able to avoid the dredge and areas of temporarily elevated turbidity due to operations. Any effects from placement of sand or an increase in turbidity would be insignificant and temporary. Additionally, the dredge crew would continually keep watch for protected marine species and employ all required NMFS vessel avoidance measures to avoid interactions with protected marine species.

The intent of the project is to monitor sediment placement with the goal of shoreline protection, which would provide indirect benefits to seabeach amaranth and federal and state-listed birds and migratory birds.

#### 7:7-9.37 CRITICAL WILDLIFE HABITATS

(a-b) The project area provides important foraging habitat for migratory birds and sea turtles and Atlantic sturgeon may occasionally transit through the area. Maintenance dredging in the Barnegat Inlet navigation channel and nearshore placement of material would not adversely impact the habitat.

#### 7:7-9.48 LANDS AND WATERS SUBJECT TO PUBLIC TRUST RIGHTS

(a-b) Lands and waters subject to public trust rights are tidal waterways and their shores. Development that adversely affects lands and waters subject to public trust rights is discouraged. The project would not adversely affect public trust rights or public access to lands or waterways.

7:7-11 STANDARDS FOR CONDUCTING AND REPORTING THE RESULTS OF AN ENDANGERED OR THREATENED WILDLIFE OR PLANT SPECIES HABITAT IMPACT ASSESSMENT AND/OR ENDANGERED OR THREATENED WILDLIFE SPECIES HABITAT EVALUATION

(a,b,d) Transient threatened and endangered species have the potential to occur in the project area but are unlikely to occur during the operation. An Environmental Assessment has been prepared and includes an endangered or threatened wildlife or plant species impact assessment (in accordance with 7:7-11.4 (b,d)).

#### 7:7-12.1 GENERAL WATER AREAS PURPOSE AND SCOPE

(a-b) General Water Areas include all water areas located below the spring high water line. General Water Areas are divided into eight categories. The project area is included in 7:7E-4.1(b) 1 "Atlantic Ocean" and 7 "Semi-enclosed and back bays."

#### 7:7-12.6 MAINTENANCE DREDGING

(a-c) The project will continue authorized maintenance dredging and is in compliance with the standards in (c). Previous testing and maintenance dredging efforts indicate that shoaling in the inlet is greater than 90 percent sand and presumed to be free of chemical contamination. Sediment testing is not required. Due to a larger mean grain size (>0.0625 mm) and insignificant smaller fines content, the sand is expected to be more stable and produce less turbidity in the nearshore environment.

#### 7:7-12.9 DREDGED MATERIAL DISPOSAL

(a-b) The project includes dredged material placement in the nearshore of the Atlantic Ocean in waters (10-20 feet MLW). It is a beneficial use project with placement for the purposes of protection of barrier island habitat. Pursuant to 7:7-12.9 (a), dredged material disposal does not include the beneficial use of dredged material.

#### 7:7-12.11 FILLING

The purpose of the project is not to create land areas. Filling is the deposition of material including, but not limited to, sand, soil, earth, and dredged material, into water areas for the purpose of raising water bottom elevations to create land areas. Pursuant to 7:7-12.11 (a), this rule is not applicable.

#### 7:7-12.23 LIVING SHORELINES

(a-c) In addition to gaining practical insight into innovative methods, this project addresses the barrier island habitat protection. This project will evaluate strategic placement of sediment in order to maximize beneficial use of maintenance dredged sand to provide additional protection to shorelines. This project is consistent with 7:7-12.23 (b-c) and complies with Appendix G.

#### 7:7-14.2 BASIC LOCATION RULE

(a-b) This project does not pose a threat to the public, natural resources, property, or the environment. This project is designed to benefit the environment and to advance practice and improve techniques to implement habitat enhancement projects more effectively.

#### 7:7-14.3 SECONDARY IMPACTS

(a-b) Dredging for maintenance of the Barnegat Inlet Federal navigation channel, and nearshore placement of the dredged material to protect barrier island habitat, will not result in any additional development. The proposed project will not result in any secondary impacts.

#### 7:7-15.11 COASTAL ENGINEERING

(a-b) Placement of dredged material to create nesting habitat is considered a hybrid shore protection measure and it not this project's purpose.

#### 7:7-16.2 MARINE FISH AND FISHERIES

(a-c) Dredging for maintenance of the Barnegat Inlet Federal navigation channel, and nearshore placement of the dredged material will not result in any adverse impacts to marine fish or fisheries.

#### 7:7-16.3 WATER QUALITY

(a-b) Proper precautions will be taken to ensure that the proposed project will not violate any applicable Federal or state water quality requirements in New Jersey. Previous testing and maintenance dredging efforts indicate that shoaling in the inlet is greater than 90 percent sand and presumed to be free of chemical contamination. Sediment testing is not required. Due to a larger mean grain size (>0.0625 mm) and insignificant smaller fines content, the sand is expected to be more stable and produce less turbidity in the nearshore environment.

#### 7:7-16.8 AIR QUALITY

(a-b) Based on a conformity analysis, the proposed project conforms to the New Jersey State Implementation Plan (SIP). The selected plan complies with Section 176 (c)(1) of the Clean Air Act Amendments of 1990.



## DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3930

April 3, 2020

Environmental Resources Branch

Ms. Mary A. Colligan Assistant Regional Administrator for Protected Resources National Marine Fisheries Service Northeast Region One Blackburn Drive Gloucester, MA 01930-2298

Dear Ms. Colligan:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Division of Coastal Engineering will serve as the non-Federal sponsor.

The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for implementing NEPA and *U.S. Army Corps of Engineers Procedures for Implementing NEPA*, *Engineering Regulation (ER) 200-2-2*. The EA evaluates existing environmental, cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

The EA can be downloaded from our District website: http://www.nap.usace.army.mil/Missions/CivilWorks/PublicNoticesReports.aspx

USACE prepared a GARFO NLTAA Verification Form for this initial phase of the Section 1122 Pilot program with respect to potential impacts to Federally-threatened and endangered species in the study area. The form was signed by Mr. Peter Johnsen of your staff March 5, 2020 in concurrence with our determination that the proposed action complies with all applicable Project Design Criteria (PDC) and is not likely to adversely affect listed species or critical habitat.

The draft EA addresses potential impacts to the Atlantic sturgeon, sea turtles, and whales that may occur in the vicinity. We request your review and comments on the draft report within 30 days of the date of this letter. If you have any questions please contact Ms. Barbara Conlin at (215 656-6557) <a href="mailto:Barbara.E.Conlin@usace.army.mil">Barbara.E.Conlin@usace.army.mil</a> or Ms. Monica Chasten at (215-656-6683) <a href="mailto:Monica.A.Chasten@usace.army.mil">Monica.A.Chasten@usace.army.mil</a>. Thank you for your attention to this matter.

Sincerely,

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Peter R. Blum, P.E. Chief, Planning Division

cc: Mary Colligan mary.colligan@noaa.gov



### DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3930

April 3, 2020

Environmental Resources Branch

Katherine Marcopul
Deputy State Historic Preservation Office
Mail Code 501-043
New Jersey Department of Environmental Protection
Historic Preservation Office
PO Box 420
Trenton, NJ 08625-0420

Dear Dr. Marcopul:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Division of Coastal Engineering will serve as the non-Federal sponsor.

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The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for implementing NEPA and *U.S. Army Corps of Engineers Procedures for Implementing NEPA*, *Engineering Regulation (ER) 200-2-2*. The EA evaluates existing environmental, cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

The EA can be downloaded from our District website: http://www.nap.usace.army.mil/Missions/CivilWorks/PublicNoticesReports.aspx

The public has been invited to comment on the draft EA. We request your comments within 30 days of the date of this letter.

If you have any questions please contact Ms. Nicole Minnichbach at (215 656-6556) Nicole.C.Minnichbach@USACE.army.mil or Ms. Monica Chasten at (215-656-6683) Monica.A.Chasten@usace.army.mil). Thank you for your attention to this matter.

#### Sincerely,

BLUM.PETER Digitally signed by BLUM.PETER.122867712 712 0 Date: 20020406 0 120922-04000 Peter R. Blum, P.E. Chief, Planning Division

cc: Katherine Marcopul kate.marcopul@dep.nj.gov



## DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7th FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3390

April 3, 2020

Environmental Resources Branch

Ms. Grace Musumeci, Chief Environmental Review Section Strategic Planning and Multi-Media Programs Branch USEPA Region II 290 Broadway New York, NY 10007-1866

Dear Ms. Musumeçi:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Division of Coastal Engineering will serve as the non-Federal sponsor.

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The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for implementing NEPA and *U.S. Army Corps of Engineers Procedures for Implementing NEPA*, *Engineering Regulation (ER) 200-2-2*. The EA evaluates existing environmental, cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

The EA can be downloaded from our District website: http://www.nap.usace.army.mil/Missions/CivilWorks/PublicNoticesReports.aspx

The public has been invited to comment on the draft EA. We request your comments within 30 days of the date of this letter.

If you have any questions please contact Ms. Barbara Conlin at (215) 656-6557 <a href="mailto:Barbara.E.Conlin@usace.army.mil">Barbara.E.Conlin@usace.army.mil</a> or Ms. Monica Chasten at (215-656-6683) <a href="mailto:Monica.A.Chasten@usace.army.mil">Monica.A.Chasten@usace.army.mil</a>. Thank you for your attention to this matter.

Sincerely,

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Peter R. Blum, P.E. Chief, Planning Division

cc:
Grace Musumeci
Musumeci.grace@epa.gov



## DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS 100 PENN SQUARE EAST, 7" FLOOR WANAMAKER BUILDING PHILADELPHIA, PENNSYLVANIA 19107-3390

April 3, 2020

Environmental Resources Branch

Mr. Eric Schrading Field Supervisor U.S. Fish and Wildlife Service 4 East Jimmie Leeds Road, Suite 4 Galloway, NJ 08205-4465

Dear Mr. Schrading:

This letter is to notify you that the Philadelphia District, U.S. Army Corps of Engineers (USACE) has prepared a draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey.

Section 1122 of WRDA requires USACE to establish a pilot program to implement nationwide ten projects for the beneficial use of dredged material. The Barnegat Inlet Beneficial Use Pilot Project was selected as one of ten nationwide projects from a field of 95 proposals, based on the criteria of having a high likelihood of delivering environmental, economic, and social benefits. The initial phase of this Pilot Project entails dredging the authorized Barnegat Inlet navigation entrance channel to authorized depth utilizing a split-hull hopper dredge and placing the high quality sand in the nearshore zone of the ocean beach fronting the community of Harvey Cedars, a known erosional hotspot. Subsequent maintenance dredging quantities and frequency of dredging are anticipated to be significantly reduced and placed in the nearshore zone where best needed along the nearshore zone between the inlet and Harvey Cedars to supplement the nourishment needs of the authorized Barnegat Inlet to Little Egg Inlet (LBI) Storm Damage Reduction project. The New Jersey Department of Environmental Protection's (NJDEP) Divison of Coastal Engineering will serve as the non-Federal sponsor.

The draft EA was prepared in accordance with National Environmental Policy Act (NEPA) regulations, the Council on Environmental Quality's regulations for implementing NEPA and U.S. Army Corps of Engineers Procedures for Implementing NEPA, Engineering Regulation (ER) 200-2-2. The EA evaluates existing environmental,

cultural, and socio-economic conditions in the study area, and the effects of the project on existing resources in the immediate and surrounding areas.

The EA can be downloaded from our District website: http://www.nap.usace.armv.mil/Missions/CivilWorks/PublicNoticesReports.aspx

Pursuant to the Endangered Species Act we request informal consultation with your office for the proposed project. The listed species identified as potentially occurring in the project area vicinity under your jurisdiction include: seabeach amaranth (Amaranthus pumilus), piping plover (Charadrius melodus), roseate tern (Sterna dougallii), and red knot (Calidrus canutus). We determined that the proposed beneficial use of high quality sand dredged from the inlet, placed in the littoral zone of the oceanfront of LBI may effect but not likely to adversely impact the continued existence of the aforementioned species. All project activities will occur in-water. Dredging will occur within the authorized channel more than 1,100 feet from the nearest known potential nesting sites at Barnegat Lighthouse State Park and placement will occur in the nearshore zone in waters 10-20 feet deep MLLW on the oceanfront where no known beach nesting or foraging by listed species occurs.

In accordance with the Fish and Wildlife Coordination Act (FWCA), USACE requests your review and comment on the draft EA. Steps proposed to be taken in order to reduce potential adverse impacts to natural resources are presented in the report. All necessary permits and approvals issued by the regulatory agencies will be obtained prior to construction. USACE is committed to continuing to work closely with Federal and State resource agencies, prior to and during project construction

We request your review and comments on the draft report within 30 days of the date of this letter. If you have any questions please contact Ms. Barbara Conlin at (215 656-6557) Barbara.E.Conlin@usace.army.mil or Ms. Monica Chasten at (215-656-6683) Monica.A.Chasten@usace.army.mil). Thank you for your attention to this matter.

Sincerely,

BLUM.PETER.R BLUMPETER.1228677120
-Date: 2020.04.06 12:14:07
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Peter R. Blum, P.E. Chief, Planning Division

Eric Schrading Eric Schrading@fws.gov ----Original Message-----

From: Marcopul, Kate [mailto:Kate.Marcopul@dep.nj.gov]

Sent: Wednesday, April 15, 2020 10:18 AM

To: Blum, Peter R CIV CPMS (USA) < Peter.R.Blum@usace.army.mil>

Cc: Minnichbach, Nicole C CIV USARMY CENAP (USA) < Nicole.C.Minnichbach@usace.army.mil>; Baratta, Meghan < Meghan.Baratta@dep.nj.gov>; West-Rosenthal, Jesse < Jesse.West-Rosenthal@dep.nj.gov> Subject: [Non-DoD Source] Maintenance Dredging of Barnegat Inlet and Nearshore Placement (HPO Project # 20-0916-1)

\*\*This e-mail serves as the official correspondence of the New Jersey Historic Preservation Office as we switch to a temporary remote work environment in response to the ongoing novel coronavirus (COVID-19) outbreak\*\*

HPO Project # 20-0916-1 HPO-D2020-082

Dear Mr. Blum:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published with amendments in the Federal Register on 6 July 2004 (69 FR 40544-40555), I am providing Consultation Comments for the following proposed undertaking:

Ocean County, Harvey Cedars Borough Maintenance Dredging and Nearshore Placement Barnegat Inlet United States Department of the Army, Corps of Engineers

800.4 Identification of Historic Properties

Thank you for providing the Historic Preservation Office (HPO) the opportunity to review and comment on the potential for the proposed dredging of the Barnegat Inlet Federal Navigation Channel and nearshore placement to affect historic properties. According to information in the documentation submitted, both the inlet and the nearshore area of Harvey Cedars Borough in Ocean County have been previously surveyed for historic properties. Two shipwrecks were previously identified south of the area of potential effects for the proposed project. Since the inlet will be dredged to it's previously authorized depth and there are no previously identified historic properties within the placement area, the United States Department of the Army, Corps of Engineers is recommending that no historic properties will be affected by the proposed undertaking.

The HPO has reviewed the documentation submitted. I concur with your finding that there will be no historic properties affected by the proposed undertaking within the project's area of potential effects. Consequently, pursuant to  $36\,\mathrm{CFR}\,800.4(d)(1)$ , no further Section  $106\,\mathrm{consultation}$  is required unless additional resources are discovered during project implementation pursuant to  $36\,\mathrm{CFR}\,800.13$ .

Additional Comments

Thank you for providing the opportunity to review and comment on the potential for the above-referenced project to affect historic properties. Please do not hesitate to contact Jesse West-Rosenthal of my staff at Jesse. West-Rosenthal@dep.nj.gov with any questions regarding archaeology. Please reference the HPO project number 20-0916, in any future calls, emails, or written correspondence to help expedite your review and response.

Sincerely,

Katherine J. Marcopul, Ph.D., CPM

Administrator and

Deputy State Historic Preservation Officer Historic Preservation Office NJ Department of Environmental Protection

501 East State Street, Trenton, NJ 08625 kate.marcopul@dep.nj.gov <mailto:kate.marcopul@dep.nj.gov> T (609) 984-0176 | F (609) 984-0578

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protection/?viewAsMember=true> <Blockedhttps://www.nj.gov/dep/instagram.html>

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CLASSIFICATION: UNCLASSIFIED

----Original Message-----

From: Mars, Steve [mailto:steve\_mars@fws.gov]

Sent: Thursday, April 16, 2020 5:51 PM

To: Conlin, Barbara E CIV USARMY CENAP (USA) <Barbara.E.Conlin@usace.army.mil> Cc: Walsh, Wendy <a href="www.ewendy\_walsh@fws.gov">walsh@fws.gov</a>; Popowski, Ron <a href="www.ewendy\_walsh@fws.gov">ron\_popowski@fws.gov</a>; Chasten, Monica A CIV (US) <a href="www.ewendy.ewe

Hi Barbara:

We have reviewed the Corps EA on the subject application and your email of February 26, 2020.

Some issues to consider for this consultation.

The Service recommends that the subject consultation should be only for the 2020 cycle; if the Corps desires a multi-year project we will recommend a programmatic approach with an expected conclusion for a programmatic consultation that will likely go into 2021. The Corps should consider a Tier 2 review process for each individual action during the ten-year period to ensure species baseline information is updated and that any conservation measures are adhered to.

There is not an active beach management plan (plan) with Harvey Cedars. It has expired and the Borough has not finalized a new one. The project is to benefit the municipality. The Service recommends that the plan should be finalized ASAP should federal listed species be identified in the Project's action area.

No equipment on the beach should occur (survey equipment, personnel, any staging equipment) during the shorebird beach nesting season (March 15 thru September 30). The Service recommends a seasonal restriction be included in the Corp's project description if piping plovers initiate nesting within 1,000 m of the release sites. The seasonal restriction is not only for disturbance but also due to potential impacts to their principle food source (benthic organisms).

Currently the nearest locations were:

Piping Plover

2019 - Loveladies (1) and Holgate (29)

2018 - Barnegat Light (3) and Holgate (18)

2017 - Barnegat Light (5) and Long Beach Twp (1)

For Seabeach Amaranth

2019 - Long Beach Twp (29) and Holgate (35)

2018 - Harvey Cedars (1)

2017 - Harvey Cedars (3)

Please identify the previous dredging cycles, volumes, and disposal locations for the Barnegat Inlet for the past ten years.

Have you consulted with the New Jersey State ENSP regarding the subject application? If so what is their view on potential disturbance for listed species under their jurisdiction, including the REKN and pip ?

Use of the Atlantic Ocean by the REKN needs further clarification.

There is little published information on the effects of dredged material placed in the surf zone via a hopper dredge. Can the Corps further elaborate on the potential effects on benthic species and confirm the anticipated frequency of the project over the course of a ten years (once a year).

The Service understands that this practice of using a hopper dredge and placement in the surf zone was used off of Assateague Island. Was there any wildlife monitoring or benthic sampling taken during the Assateague project? And what was the frequency and duration of the project?

Once we have additional information on the above the Service will continue coordinating the Project in accordance with the ESA. Please contact Steven Mars, Sr. Biologist of the New Jersey Field Office at 609-226-5152 (c) and 609-382-5267 (o).

Steve Mars Senior Biologist USFWS/NJFO 609-382-5267

"Mountains are not stadiums where I satisfy my ambition to achieve, they are the cathedrals where I practice my religion." -Anatoli Boukreev

#### -----Original Message-----

From: Conlin, Barbara E CIV USARMY CENAP (USA)

Sent: Friday, April 24, 2020 1:45 PM

To: Mars, Steve <steve mars@fws.gov>

Cc: Walsh, Wendy <wendy\_walsh@fws.gov>; Popowski, Ron <ron\_popowski@fws.gov>; Chasten, Monica A CIV (US) <Monica.A.Chasten@usace.army.mil>; Kolk, Meghan M <meghan\_kolk@fws.gov> Subject: Barnegat Inlet Section 1122 Pilot Project - Harvey Cedars Nearshore

#### Steve,

This replies to your email below (and follows our telephone discussion on 17 April with Monica). I am providing a summary of information (as an attachment) that also responds to your issues of concern as they relate to informal Section 7 ESA consultation for the Section 1122 Pilot project at Barnegat Inlet.

#### 1. ESA Consultation:

USACE is requesting that Section 7 consultation be applicable to a ten year period of maintenance dredging at Barnegat Inlet. USACE has been dredging Barnegat Inlet for more than 40 years and typically twice annually. We anticipate that the initial dredging under this pilot project to authorized depth will reduce maintenance dredging need to one time/year in most years, barring any significant storm events, as well as reduce subsequent required quantities. Nevertheless, USACE recognizes that in the event that any future maintenance dredging operations were to deviate from that described in the NEPA report, USACE would re-initiate Section 7 ESA consultation for any such year's maintenance dredging.

#### 2. Harvey Cedars Borough Beach Management Plan:

Thank you for bringing our attention to the expired BMP at Harvey Cedars. The BMP is required for the Barneget Inlet to Little Egg Inlet Storm Damage Reduction project (LBI beachfill). I have notified the LBI Project Manager Keith Watson and he has followed-up with NJDEP in their responsibility as the non-Federal sponsor for the beachfill project to ensure that the BMP is updated.

#### 3. Beach Equipment:

The proposed Section 1122 in-water placement of dredged sand in the nearshore zone (10-20 feet MLW) does not entail any equipment on the beach for placement operations. However, one of the primary purposes of the Section 1122 pilot project is to monitor the placement operation (pre-, during, and post-placement) at the in-water placement site as well pre- and post-placement surveys extending onto the beach berm to provide valuable information as to the efficacy of sand placement within the littoral zone. USACE coordinates with NJDEP for their annual beach survey work to identify the location of beach nesting birds and seabeach amaranth plants. Should either species be identified in the vicinity of Harvey Cedars during placement operations between March 15 through September 30, USACE will ensure that appropriate USFWS-recommended buffer distances are established prior to any surveying.

#### 4. Past Maintenance Dredging Practices:

Barnegat Inlet's navigation channel has been maintained for over 40 years using the government-owned shallow draft split-hull hopper dredges. The portion of the Federal Navigation Channel through Barnegat Inlet is currently dredged twice each year for approximately 20 days per year (i.e., approximately 10 days per event), removing 75,000-100,000 cy as funding permits. The dredge removes just critical shoaling from the navigation channel. The channel has not been maintained to full authorized depth.

When fully loaded, the dredge requires 8-10 feet of draft, depending on weather conditions. The current practice has been to place the material downdrift of the ebb shoal on the south side of the inlet at Barnegat Light to keep the material within the littoral system to feed downdrift beaches. The beach at Barnegat Lighthouse State Park is expansive and accreting. Harvey Cedars exhibits a known erosional hotspot and has required emergency truckfill replenishments in the past.

Current maintenance dredging keeps the channel minimally navigable. Critical limiting depths of 3 to 4 feet MLW are still present in portions of the federal channel, creating life safety concerns for vessel operators and the US Coast Guard. Significant shoaling typically requires dredging to be conducted two times per year as funding allows, but current dredging operations are not sufficient to clear the 300-foot wide channel to authorized depth. Beach nesting birds, including Piping plovers, nest at Barnegat Lighthouse State Park adjacent to the current ebb shoal placement site outside the south jetty. Hopper dredges working in the inlet and material placement in the nearshore zone do not appear to disturb birds on the shoreline. The vessels are a significant distance away from the beach, slow-moving with low engine vibration that is difficult to detect with the surrounding ambient sounds of waves crashing and wind.

#### 5. NJDEP ENSP coordination:

Yes, the draft EA was made available to NJDEP in March 2020 and we are currently awaiting their feedback.

#### 6. Red Knots:

Agree. There is very little information available on red knot usage of the New Jersey Atlantic Ocean coast. USACE receives and reviews the annual NJ bird monitoring reports on beach nesting birds and maintains direct contact with the Conserve Wildlife Foundation of New Jersey staff. USACE also employs bird observers for beachfill projects and these reports acknowledge that red knot usage on the ocean coast is not significant during the observed periods.

#### 7. Little published information on nearshore sand placement effects:

Agree. There are numerous studies of the effects of turbidity and placement operations for large beachfill projects with significant funding but little data is available on small inlet dredging and placement operations in the nearshore littoral zone placements. The attachment to this email (and the draft EA) provides some information (and references) of some studies that have addressed these type of in-water placements. Small inlet maintenance dredging operations have significantly lower funding than large beachfill projects. One of the Section 1122 project objectives is to provide valuable information on these type of small operations.

After conducting a thorough evaluation in preparation of the draft Environmental Assessment and subsequent follow-up to address your April 16th questions herein, USACE has concluded based on the available information, that the proposed pilot project may affect but is not likely to adversely affect the Federally-listed endangered species piping plover, red knot, and seabeach amaranth known to occur in the near vicinity. We are requesting your concurrence with our conclusion.

Barbara Conlin Environmental Resources Branch USACE, Philadelphia District

### Barnegat Inlet Section 1122 Beneficial Use Placement in Nearshore Harvey Cedars Section 7 ESA consultation information for USFWS

Section 1122 of the Water Resources Development Act (WRDA) 2016 authorizes the U.S. Army Corps of Engineers (USACE) to establish a pilot program to beneficially use dredged material from federal and non-federal navigation channels consistent with all applicable environmental laws. The purpose of this project is to maintain the Barnegat Inlet Federal Navigation Channel to authorized depth by dredging sand from the shoaled portions of the channel and using the material beneficially by placing it in the littoral zone near an erosional hotspot fronting Harvey Cedars to support the shore protection project along Long Beach Island. The Philadelphia District USACE seeks to implement innovative approaches for the beneficial use of dredged material for habitat restoration and storm risk reduction purposes. There is considerable opportunity within the sediment-rich Barnegat Inlet complex to use dredged sediments from state and federal channels for beneficial use through placement on adjacent beaches, for marsh enhancement, and island creation. Such projects would improve overall coastal system resilience within the Barnegat Inlet region and other regions of New Jersey.

#### Potential Impacts to Threatened and Endangered Species

Barrier islands such as Long Beach Island provide important resting, feeding, and nesting habitat for many migratory and resident species of birds although birds tend to prefer foraging and nesting on reaches less populated with humans, such as at Barnegat Light at the northern end or the Holgate area at the southern end of the island. The area may provide foraging habitat for the Federally-listed endangered red knot and foraging and nesting habitat for the Federally-listed endangered piping plover. However, no piping plover are known to have nested in Harvey Cedars in the past 10 years. No Federally-listed seabeach amaranth plants were observed in the Harvey Cedars area in 2019, however, one plant was found in the area in 2018 and 3 plants in 2017.

<u>Terrestrial Habitat</u>. With the proposed action, there would be no adverse impacts to existing terrestrial habitats from dredging the inlet channel or from nearshore in-water placement of the dredged material. Overall the project would result in beneficial effects associated with potential added protection of beach habitat with a supplemental sand source in the littoral zone. The proposed action, using a government-owned dredge, is designed to allow

some operational flexibility to determine where nearshore placement is most needed to protect these habitats. Wildlife species that may potentially benefit include the red knot, least tern, and piping plover, as well as the state-listed black skimmer as these species utilize the beaches in the nearby vicinity for foraging and in some areas nesting. The eastern black rail, proposed for listing, occurs primarily in saltmarshes in backbay areas and is not likely to occur in the project area.

Previous projects have utilized dredged material for nearshore placements with success. Work and Otay (1997) demonstrated that a nearshore submerged placement of dredged material in front of a nourished beach did not migrate inshore, but redistributed wave energy along the shoreline and 84 percent of the initial volume of nourished material remained in the beach fill. In 2009, an elongated, submerged material placement behind a small natural bar using approximately 200,000 cubic yards of mixed material resulted in coarse material being transported onshore and fine material offshore (Brutsche et al. 2015). Monitoring showed that the material continually migrated and the beach remained stable, even after the constructed bar split in two after a hurricane. Beach erosion was minimal compared to the control beach. After four years, the beach grew approximately 50 feet wide (Brutsche et al. 2015). In 2012, a swash zone placement of material at Perdido Key was completed with the intent of mobilizing sediments to nourish downdrift beaches. The material eroded and deposited sand on the beach immediately and through a tropical storm and hurricane. Some of the sand was accounted for in the nearshore area of the control beaches (Brutsche et al. 2015). Both projects were successful in that they added sediment to the littoral system without directly impacting the terrestrial (beach and dune) habitat. The addition of sand to the littoral zone served to protect the beach from storm impacts, and equilibrated with the natural dynamic system making the placement site sustainable for future placements.

The NJDEP Endangered Nongame Species Program surveys the New Jersey coastline annually for beach nesting birds as well as seabeach amaranth and directly coordinates their findings with USACE. The plants establish primarily on accreting areas (non-eroding beaches) and lower foredunes. While the proposed dredging and placement operation occurs entirely inwater, one of the objectives of the Section 1122 program is to monitor the action to better understand the benefits of nearshore placement to the beach and innovatively inform the design for application to future shoreline protection projects. USACE plans to conduct single beam hydrographic pre- and post-placement condition surveys, consisting of 25 lines running perpendicular to the shore from the beach seaward to the placement area. Typically these

survey lines would begin from the seaward toe of the dunes to about 300 feet offshore to include the placement area. However, if seabeach amaranth plants are identified at Harvey Cedars, the survey lines will be modified to begin further down the beach berm away from the foredune area to establish a necessary buffer zone for the plants between 15 March and 30 September.

Aquatic Habitat. The Philadelphia District USACE has been dredging the authorized navigation channel within Barnegat Inlet for over 40 years. Current practice entails utilizing a split hull hopper dredge twice each year for approximately 20 days per year. The dredged sand has typically been placed in-water just outside of the south jetty and has contributed to an accreting beach at The Barnegat Lighthouse State Park offers expansive habitat for foraging shorebirds including the red knot and beach nesters including piping plovers, oyster catchers, least terns, and the New Jersey state listed endangered black skimmer. The proposed plan to dredge the channel to authorized depth may allow for the frequency of maintenance dredging to be reduced to one event/year with the initial dredge cycle to authorized depth under the propose pilot project. Weather conditions, specifically the frequency of significant storm events, also play a key factor in maintenance dredging needs.

Significant impacts to water quality are not anticipated from implementation of the selected plan. Short-term, temporary, and localized impacts to water quality in the form of turbidity are anticipated to occur from maintenance dredging and deposition of sand in the nearshore area from south of the nodal point along Long Beach Island to Harvey Cedars. Any potential effects would be short-lived and localized and would be limited to the immediate vicinity of the dredging site and the small areas that receive dredged material. Large-grained sediments settle quickly with larger grains settling out on the uppermost reaches of the intertidal zone and finer, smaller grain sizes in the deeper nearshore zone. Eventually tidal currents and inlet circulation would negate any impacts from turbidity. The sediments dredged from the inlet are expected to be greater than 90 percent sand and assumed to be clean with respect to chemical contamination. Impacts to benthic prey organisms (macroinvertebrates) due to the proposed activities are short-term and negligible with a temporary and localized increase in turbidity and disturbance of the bottom substrate through removal at the dredging site and deposition of sand at the placement site. These are high energy areas and tidal currents and waves nearly negate any impacts from turbidity which would last on the order of minutes. Benthic organisms in the placement area are subject to burial although the hopper load

placements are small quantities (250-300 cy/load) and occupy small areas once released. Many benthic organisms are capable of migrating through the material, and natural currents distribute the material. Benthic species typically recolonize dredged and deposition areas through recruitment from nearby undisturbed areas more rapidly due to the small hopper placements, as compared to large beachfill projects. The nearshore placement area is naturally subjected to turbulence in the ebb shoal and littoral zones. Benthic organisms are continually exposed to burial and exposure as bottom sediments are transported by natural currents and wave action. Channel dredging within the inlet is an ongoing activity, however a significant portion of the inlet is outside the authorized channel boundaries and do not incur adverse effects due to the significant flushing action between the two jetties.

Hopper dredges working in the inlet and material placement in the nearshore zone do not appear to disturb birds on the shoreline. The vessels are a significant distance away from the beach, slow-moving with low engine vibration that is difficult to detect with the surrounding ambient sounds of waves crashing and wind. Prey species in the intertidal zone, where shorebirds such as the piping plover and red knot forage, would not be impacted by placement of sand in the nearshore 10-20 ft MLW depth zone. Foraging shorebirds feed on the foreshore and intertidal zone of Atlantic Ocean beaches of New Jersey. This zone contains beach wrack, which is composed of drying seaweed, tidal marsh plant debris, and decaying marine animals. The beach wrack creates a moist micro-habitat suitable for crustceans such as amphipods (Family: Amphipoda): Orchestia spp. And Talorchestia spp., (beach fleas) (USFWS, 2001). Although there is annual variability and there can be some overlap among species, the primary benthic invertebrate species composition in the nearshore placement zone (10-20 feet MLW) differs from that which occurs in the intertidal zone, and are not available to beach foraging birds in the subtidal zone. Patterns in benthic species composition, distribution, and abundance are primarily influenced by natural sources of environmental variation (i.e., depth, sediment type, and levels of total organic carbon). An assessment of benthic communities in New Jersey nearshore marine coastal waters in 2007-2009 (Ramey et al., 2011) observed the following dominant taxa/species: polycheates Polygordius spp., Prionospio pygmaeus, Tharyx sp. A, and Aricidea catherinae; the oligochaetes Naidinae sp. 2, Grania longiducta, Peosidrilus coeloprostatus, and Tubificoides sp. 1; the amphipod Protohaustorius deichmannae; and the bivalve Nucula proxima.

The Section 1122 pilot project proposes to beneficially use high quality clean sand dredged from the inlet navigation channel to supplement the shore through placement in the littoral zone. The practice has been implemented at other beaches and shown to provide protection to the existing beach, adjacent infrastructure and coastal habitat important to resting, feeding, and nesting habitat for Federal and state listed species. Best Management Practices would be used and may be mandated by conditions contained in State approvals (i.e., 401 Water Quality Certification and Coastal Zone Management regulations) to minimize impacts to water quality and benthic invertebrates during project implementation. The proposed project intends to place clean sand in the nearshore marine environment just south of the current placement location, from a large and accreting beach at Barnegat Light to an erosional area of beach at Harvey Cedars approximately 3 miles south. Based on the available information, USACE has concluded that the proposed project may affect but is not likely to adversely affect

the continued existence of the aforementioned Federally-listed endangered species known to occur in the near vicinity.

## References

- Ramey, P.A., M.J. Kennish, and R.M. Petrecca, 2011. Benthic Index Development: Assessment of Ecological Status of Benthic Communities in New Jersey Marine Coastal Waters

  December 2011 Prepared for: US Environmental Protection Agency and New Jersey

  Department of Environmental Protection. Institute of Marine and Coastal Sciences,

  Rutgers University, New Brunswick, NJ. 08901.
- USFWS, 2001. FISH AND WILDLIFE COORDINATION ACT SECTION 2(b) REPORT

  MANASQUAN INLET TO BARNEGAT INLET FEASIBILITY STUDY OCEAN COUNTY,

  NEW JERSEY Prepared for: U.S. Anny Corps of Engineers Philadelphia, Pennsylvania
  19107-3390 Prepared by: U.S. Fish and Wildlife Service Ecological Services, Region 5

  New Jersey Field Office Pleasantville, New Jersey 08232
- Work, P.A. and E.N. Otay. 1997. Influence of Nearshore Berm on Beach Nourishment. Chapter 287. Available online: <a href="https://ascelibrary.org/doi/pdf/10.1061/9780784402429.287">https://ascelibrary.org/doi/pdf/10.1061/9780784402429.287</a>.
  Accessed on November 21, 2019.
- Brutsche, K.E., P. Wang, J.D. Rosati, C.E. Pollock. 2015. Engineering with Nature: Nearshore
  Berm Placements at Fort Myers Beach and Perdido Key, Florida, U.S.A.
- Ramey, P.A., M.J. Kennish, and R.M. Petrecca, 2011. Benthic Index Development: Assessment of Ecological Status of Benthic Communities in New Jersey Marine Coastal Waters

  December 2011 Prepared for: US Environmental Protection Agency and New Jersey

  Department of Environmental Protection. Institute of Marine and Coastal Sciences,

  Rutgers University, New Brunswick, NJ. 08901.
- USFWS, 2001. FISH AND WILDLIFE COORDINATION ACT SECTION 2(b) REPORT

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  NEW JERSEY Prepared for: U.S. Anny Corps of Engineers Philadelphia, Pennsylvania
  19107-3390 Prepared by: U.S. Fish and Wildlife Service Ecological Services, Region 5

  New Jersey Field Office Pleasantville, New Jersey 08232

----Original Message-----

From: Conlin, Barbara E CIV USARMY CENAP (USA)

Sent: Thursday, May 7, 2020 1:12 PM

To: Mars, Steve <steve\_mars@fws.gov>

Cc: Walsh, Wendy <wendy\_walsh@fws.gov>; Popowski, Ron <ron\_popowski@fws.gov>; Chasten, Monica A CIV (US) <Monica.A.Chasten@usace.army.mil>; Kolk, Meghan M <meghan\_kolk@fws.gov>; Chasten, Monica A CIV (US) <Monica.A.Chasten@usace.army.mil>

Subject: Barnegat Inlet Section 1122 Pilot Project - Harvey Cedars Nearshore ESA continued consultation

HI Steve,

- 1. Regarding distances, please see Figure 6 in the draft EA. It has a distance scale. It looks to me that the placement box is anywhere from 400-600 feet from where the water hits the beach. The Currituck, when loaded will need about 10-12 feet of draft and that distance will vary based on tidal cycle stage. Based on the latest survey data, the placement boxes were selected to provide the required draft depth.
- 2. Yes, the Corps maintains regular contact with ENSP of NJDEP/ Conserve Wildlife Foundation of New Jersey on endangered species as well as beach nesters that are not Federally-listed.

Yes, we can check in with Wendy Walsh or Meghan Kolk later in the season (and prior to operation) for the potential of seabeach amaranth plants.

I have requested that the PM of the LBI beachfill project advise NJDEP to contact Meghan Kolk regarding preparation of their beach management plan.

Barb Conlin Environmental Resources Branch Philadelphia District USACE

----Original Message-----

Hi Barbara. Thanks for our continued consultation of the Project. Couple questions that we need further clarification to conclude consultation.

1) what is the closest distance do you think the dredge will come to the shoreline when unloading into the surf zone? We recognize that this figure may change due to the changing underwater bathometry of the project disposal site.

2) with regards to conducting beach surveys to monitor effectiveness of project - you are correct that the Corps should contact ENSP of NJDEP to determine PIPL usage of the beaches during the breeding season to determine presence and potential best management activities to avoid impacts to the species. We are assuming this is non-mechanized surveying?

However, for Seabeach Amaranth, the appropriate contact is USFWS. For the time being please contact Wendy Walsh or Meghan Kolk of my office to determine the presence of Seabeach Amaranth during the growing season in the action area. A 10 foot buffer is required from any known plant if surveys are proposed during the growing season.

Beach Management Plan - Please have the appropriate contacts of NJDEP contact Meghan Kolk once they have reached out to the municipality to begin finalizing the BMP.

Thank you again for your assistance with regards to these matters.

Steve Mars Senior Biologist USFWS/NJFO 609-382-5267

"Mountains are not stadiums where I satisfy my ambition to achieve, they are the cathedrals where I practice my religion." -Anatoli Boukreev



# State of New Jersey

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Gov DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Permit Coordination and Environmental Review
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Trenton, New Jersey 08625-0420
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CATHERINE R. McCABE Commissioner

May 1, 2020

Peter Plum, Chief
Department of the Army
Philadelphia District, Army Core of Engineers
100 Penn Square East, 7<sup>th</sup> Floor
Philadelphia, Pennsylvania 19107

RE: \*\*Green Acres addition to April 30, 2020 Comments\*\* on the NEPA Draft Environmental Assessment (EA)
National Regional Sediment Management Program
Water Resources Section 1122
Beneficial Reuse Pilot Project, Barnegat Inlet

#### Dear Peter Plum:

The New Jersey Department of Environmental Protection's (Department) Office of Permit Coordination and Environmental Review (PCER) distributed, for review and comment, the National Environmental Policy Act (NEPA) required Environmental Review for National Regional Sediment Management Program Water Resources Section 1122 Beneficial Reuse Pilot Project, Barnegat Inlet

In response to your request for a determination as to whether the proposal will have any adverse impacts to land use, historical or cultural resources, threatened and endangered species and migratory birds, or whether there are any impacts to Green Acres-encumbered parkland held by the State, local government units and/or nonprofit organizations, the Department offers the following comments for your consideration:

## **Green Acres**

A review of the Draft Environmental Assessment National Regional Sediment Management (RSM) Program WRDA 2016 Section 1122 Beneficial Use Pilot Project Barnegat Inlet, along with the supplemental materials provided, has led to the determination that while there does not appear to be Green Acres Program encumbrance within the sediment placement areas, the sediment placement may result in an indirect impact on Green Acres encumbered parkland. Due to the proposed locations for placement of sediment and to the described currents in the project area, there is likely to be an indirect impact on Green Acres encumbered parkland – Harvey Cedars Borough, Block 43 Lot 9.01. This riparian grant parcel is owned and managed by Harvey Cedars Borough and is roughly 200 to 250 feet northeast of the most northern planned sediment placement site. In addition, there are various beach parcels that are Green Acres encumbered within Harvey Cedars Borough for which the Draft Environmental Assessment specifies an anticipated indirect effect. However, as described in the Draft Environmental Assessment, the effects on these parcels would be considered park improvements as there is an anticipated overall beneficial

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impact on the recreation and conservation value of the parkland, and there is expected to be a reduction in storm damage and erosion on the Green Acres encumbered parkland and surrounding beaches. It also appears from Figure 1 and Figure 2 of the Draft Environmental Assessment that dredging may affect Berkeley Township, Block 1750 Lot 1, which is a portion of Island Beach State Park. Please refer to NJDEP state owned lands for their comments in regard to this activity.

While the Draft Environmental Assessment states that construction is anticipated to occur in the Summer of 2020, consideration should be given to the timing in which this work will be done, both initially and in subsequent dredging and sediment placement, to provide minimal adverse impact to the recreational use of this area since sediment placement is planned for nearshore areas. Precautions should be taken to ensure that the public is able to safely use the beaches for permitted recreational uses during the construction time frame. If any part of construction directly or indirectly impacts safe recreational use of Green Acres encumbered parkland and beaches, notice should be given to the public and appropriate action should be taken to mitigate these impacts. This recommendation does not take into account ecological concerns or activity by local recreational and commercial fisheries, which should also be taken into consideration in regards to the timing of construction activities. As the project states that subsequent sediment placement may include other nearshore areas of Harvey Cedars Borough, Long Beach Township, and Barnegat Light Borough, please consult Green Acres prior to subsequent dredging and sediment placement and allow for a review of proposed plans.

The proposed restoration and construction activities do not constitute a diversion of parkland since the purpose of the project is for enhancement and restoration of these areas. Therefore, these activities are consistent with Green Acres regulations at N.J.A.C. 7:36. If use of Green Acres encumbered parkland is required during construction, the parkland needs to be restored to pre-construction conditions and any dredge material that may be used on the Green Acres encumbered parcel should be clean and acceptable for the property's public use in order to avoid impacts to the public's future use of the parkland as a result of this project.

If you have any questions regarding this information, please contact Mackenzie Piggot at mackenzie.piggot@dep.ni.gov.

Thank you for giving the New Jersey Department of Environmental Protection the opportunity to comment on the Natural Resources Review for the proposed project. Please contact David Pepe at (609) 292-3600 if you have any additional questions or concerns.

Sincerely,

Megan Brunatti, Manager

Permit Coordination and Environmental Review

As noted in the EA, there will be no dredged material placed on the beach and no construction activities impacting Green Acres parkland. For future placements, dredged material from the inlet navigation channel will be periodically placed in the natural sediment system in 10 to 20 ft MLW with no direct impacts to parkland. All potential future sediment releases will occur in the nearshore between the inlet and Harvey Cedars, as described in the EA. See Figure 1.



PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Gov DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Permit Coordination and Environmental Review
401 East State Street, Mail Code 401-07J, P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 292-3600 Fax: (609) 292-1921
www.nj.gov/dep/pcer

CATHERINE R. McCABE Commissioner

April 30, 2020

Peter Plum, Chief
Department of the Army
Philadelphia District, Army Core of Engineers
100 Penn Square East, 7th Floor
Philadelphia, Pennsylvania 19107

E: Comments on the NEPA Draft Environmental Assessment (EA)
National Regional Sediment Management Program
Water Resources Section 1122
Beneficial Reuse Pilot Project, Barnegat Inlet

Dear Peter Plum:

The New Jersey Department of Environmental Protection's (Department) Office of Permit Coordination and Environmental Review (PCER) distributed, for review and comment, the National Environmental Policy Act (NEPA) required Environmental Review for National Regional Sediment Management Program Water Resources Section 1122 Beneficial Reuse Pilot Project, Barnegat Inlet

In response to your request for a determination as to whether the proposal will have any adverse impacts to land use, historical or cultural resources, threatened and endangered species and migratory birds, or whether there are any impacts to Green Acres-encumbered parkland held by the State, local government units and/or nonprofit organizations, the Department offers the following comments for your consideration:

## Marine Fisheries

Please see attached memorandum.

If you have any questions regarding the comments, please contact Jessica Daher at <a href="mailto:Jessica.Daher@dep.nj.us">Jessica.Daher@dep.nj.us</a>.

## **Historic and Cultural Resources**

The HPO previously had the opportunity to review and comment on the proposed project through consultation with the United State Department of the Army, Corps of Engineers (Corps), pursuant to their obligations under the National Historic Preservation Act. Through this consultation it was determined that there would be no historic properties affected by the proposed project. As a result, the Corps is consistent to the maximum extent practicable with New Jersey's Coastal Zone Management Program and no further consultation is necessary as part of this project.

If you have any questions regarding this information, please contact Meghan Baratta at (609) 984-0176 or <a href="mailto:meghan.baratta@dep.ni.gov">meghan.baratta@dep.ni.gov</a>.

### **Land Use Permitting**

The Division of Land Use Regulation is currently reviewing a federal consistency for Phase 1 of the Barnegat Inlet Section 1122 Pilot Project that is also the subject of EA. The FC was submitted on April 3, 2020 and our 60-day

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decision date is 6/1/2020. The application is currently going through a required 15-day comment period that will end 4/30/2020. We will be reviewing all the comments submitted by other DEP programs on the EA in our review of the FC. To that end, if you receive any comments on the EA, it is requested that you forward them to my attention

If the project requires a coastal permit and the work is situated below mean high water line, it will not be required to demonstrate compliance with the Flood Hazard Area Control Act Rules as per N.J.A.C. 7:7-9.25. If the project does not require a costal permit, a flood hazard area individual permit will be required. Into tase, the project should comply with the requirements set forth under "Subchapter 11" and at section "N.J.A.C. 7:13-12.15 Requirements for sediment and debris removal from a regulated water" of the Flood Hazard Area Control Act Rules

If the project impact Freshwater Wetlands, transition areas, and/or State open waters that are regulated under the FWPA, then the appropriate permits (or equivalency authorizations) shall be required prior to conducting regulated activities.

If you have any questions regarding Land Use permitting, please contact Suzanne Biggins at Suzanne.Biggins@dep.nj.gov

# Air Conformity

## 1.) 3.1 Location

In section 3.1, the Environmental Assessment states, "This Environmental Assessment adder=sses Phase 1 of the pilot project. The study area extends approximately 3,800 feet within Barnegat Inlet between the north and south jettles and a 1-mile length of Atlantic Ocean beachfront at Harvey Cedars with subsequent year placements along eroded areas from Barnegat Light south to Harvey Cedars on Long Beach Island, Ocean County, New Jersey (Figure 1). Phase 2 of the pilot project will address maintenance dredging needs and potential beneficial use of dredged material for the Oyster Creek portion of the authorized navigation channel in Barnegat Bay and will be evaluated in a separate report, pursuant to the NEPA."

## Comment #1

Please clarify if construction activities will take place during Phase 1 of the project. If construction activities are taking place, please describe the activities. If construction activities are taking place, these activities, if not exempt, should be included in the General Conformity Applicability Analysis or Conformity Determination if needed. Please clarify what construction activities will take place during Phase 2 of the project. The USEPA's General Conformity guidance: Questions and Answers (July 13, 1994) indicates when preparing a General Conformity Applicability analysis and Conformity Determination, a project cannot be broken into segments in order to be below the de minimis levels in the Federal General Conformity regulation. All reasonably foreseeable emissions must be included for the project as a whole in determining applicability. The General Conformity Applicability Analysis should include the air emissions, unless exempt, from both phases of the project. Please revise the General Conformity Applicability Analysis and Conformity Determination, if required, to include these air emissions. Please provide a construction schedule for the project.

#### 2.) 5.1 Air Quality

In section 5.1, the Environmental Assessment states, "The entire state of New Jersey is in non-attainment and is classified as being "Marginal." A "Marginal" classification is applied when an area has a design value of 0.085 ppm up to but not including 0.092 ppm (NIDEP 2012 Ozone Summary as cited in USACE 2014).

#### Comment #2

Please note that the entire state of New Jersey is no longer classified as "marginal". As of September 23, 2019, the USEPA reclassified the northern nonattainment area of New Jersey (New York-Northern New Jersey-Long Island, NY-NJ-CT) as "serious" for the 2008 8-hour ozone standard. The de minimis level for NOx or VOC's in a serious nonattainment area is 50 tons per year.

The Phase 1 construction activities that fall under the Section 1122 program and evaluated in this report include dredging and in-water placement. Phase 2 activities are a separate dredging and placement operation in a different location, also included under the Section 1122 authority, and will be evaluated in a separate NEPA document. Phase 1 will be completed in late summer 2020 and Phase 2 has not been developed to date.

The USEPA classification has been corrected in the Final EA.

#### 3.) 6.1.1 General Conformity Rule

In section 6.1.1, the Environmental Assessment states, "Maintenance dredging is excluded from General Conformity requirements under 40 Code of Federal Regulation (CFR) Section 153 (c) (ix). The additional air emissions estimated to result from the dredge traveling the additional 1-3 miles to the beneficial use placement site is below de minimis levels for each annual dredging event."

#### Comment #3

Please provide further detail on the additional air emissions resulting from the dredge traveling the additional 1-3 miles to the beneficial use placement site, including the estimated amount of air emissions in tons per year (NOx, VOC, PMZ-S and precursors) that would occur from this activity.

If you have any questions, please contact Connor Miller at Connor.Miller@dep.nj.gov

#### Stormwater Management

Based on the information provided, it does not appear that more than one acre will be disturbed during the construction of this communication tower. If more than one acre will be disturbed, a general permit for Construction Activities, (5G3) may be required. The permit application process is available online at <a href="http://www.state.ni.us/dep/DWO/5G3.htm">http://www.state.ni.us/dep/DWO/5G3.htm</a>. If you have any additional questions, please contact Eleanor Krukowski at (609) 633-9286 or <a href="mailto:eleanor.krukowski@dep.ni.gov">eleanor.krukowski@dep.ni.gov</a>.

Thank you for giving the New Jersey Department of Environmental Protection the opportunity to comment on the Natural Resources Review for the proposed project. Please contact David Pepe at (609) 292-3600 if you have any additional questions or concerns.

Sincerely,

Megan Brunatti, Manager

Permit Coordination and Environmental Review

Megan Burnatte

As noted in the EA, maintenance dredging is exempt from the General Conformity Applicability Analysis. The proposed placement/disposal location is located approximately 3 miles south along the Atlantic Ocean from the historical placement site in the Atlantic Ocean just outside of the inlet. Placement activities are part of the maintenance dredging operation and do not require the use of any additional land-based equipment typical of a beach nourishment project, such as dozers, trucks, or booster pumps. The additional emissions from the dredge to travel 3 miles were determined to be minimal for a dredging and placement operation approximately 10 days in length.

	ittal Form	oment Permit Review
Date	4/30/2020	Pre-Submittal Comments
Applicant	USACE	☐ JPP Comments
Project Description	Barnegat Inlet Section 1122 Pilot Project - Phase I	Request More Info Final Comments
DLUR File#		Review Request from DLUR:
Easting	Northing	
Project Location	Barnegat Inlet, N & S jetties & 1 mile Atlantic Ocean, Ha	arvey Cedars
Waterway	Atlantic Ocean and Barnegat Inlet	
Block(s)	N/A Lot(s) N/A	
Municipality	Harvey Cedars/LBI County Ocean	
MFA Reviewer(s)	Scott Stueber (BSF) and Samantha MacQuesten (BMF	
☐ Shellfish Aquacu ☐ Shellfish Habitat ☐ Surf Clam Areas ☐ Prime Fishing Are ☐ Finfish Migratory ☐ No Concerns	□ Shipwreck and Artificial Reef Habi □ Endangered or Threatened Wildlif eas □ Marine Fisheries	
■ Anadromous I N	reement Feb 1 - May 31 Notify Lease Holders	☐ Blue Crab December 1 - March 31☐ Oyster Bed July 15 - Sept 15☐ June 30☐
Please see attache	d memo	

The Marine Fisheries Administration (the Administration) is comprised of the Bureau of Marine Fisheries and the Bureau of Shellfisheries. Both Bureaus are charged with reviewing permits within the context of all of the species they regulate, the habitat of said species, and the user groups associated with those species and habitats. The Administration is submitting comments based on the documentation that was provided by the applicant. The Administration cannot assume that the applicant will perform any activities outside of the ones prescribed in the application. Therefore, if the applicant deviates from the activities in this application, these comments are no longer valid and the Administration requests that the applicant submit such changes with ample time to review and comment prior to anticipated commencement

USACE will avoid dredging and placement operations during the recommended time restriction. At any future time under emergency conditions or mission critical assignments for the navigation channel, if dredging is required during this period due to safety concerns or east coast scheduling requirements, USACE will reinitiate coordination with NJDEP.



Marine Fisheries Administration Nacote Creek Field Station Port Republic, NJ (609) 748-2021

## MEMORANDUM

TO: David Pepe, Environmental Specialist, Office of Permit Coordination and

Environmental Review

FROM: Jessica Daher, Marine Fisheries Administration (MFA)

DATE: April 30, 2020

SUBJECT: USACE Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, Phase I

Thank you for providing the Marine Fisheries Administration an opportunity to review and comment on phase one of the USACE Section 1122 Beneficial Use Pilot Project in Barnegat Inlet. In response to your email, dated April 6, 2020, requesting comments for the review of the USACE's Draft Environmental Assessment, MFA offers the following comments:

## Bureau of Shellfisheries

The Bureau of Shellfisheries supports the development and implementation of well-designed habitat improvement and shoreline protection projects. These projects can protect eroding shorelines and improve or create viable marine habitat, while providing an avenue to keep valuable sediment from routine dredging operations, in the marine system. The Bureau has reviewed the draft Environmental Assessment (EA) entitled "National Sediment Resource Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use of Dredge Material Pilot Program, Barnegat Inlet, New Jersey" that involves the dredging of Barnegat Inlet and placement of material off the coast of Harvey Cedars. Comments on the project can be found below.

The EA is consistent with the measures listed in the New Jersey Coastal Zone Management Rules (N.J.A.C 7:7). Due to the dynamic environmental conditions within the project area and the nature of the habitats described in the request, the Bureau anticipates any impacts to shellfish habitat will be minimal and does not have any immediate concerns regarding material placement in the described area.

The Bureau recommends that the monitoring described in the EA be adhered to and well-documented, as the monitoring will help to further understand the best practices for sediment management and shoreline protection for future projects.

Bureau of Marine Fisheries

Barnegat Inlet is the entrance point for herring migrating to a system of rivers/streams that empty into Barnegat Bay. The inlet and the channel within the project area are a migratory finfish pathway, and the Bureau of Marine Fisheries would recommend an anadromous timing restriction from March 1-June 30 for any work that is going to result in the suspension of sediment within Barnegat Inlet.

The project area is listed as essential fish habitat (EFH) for a multitude of commercially, recreationally, and ecologically important species including black sea bass, summer flounder, winter flounder, bluefish, and a host of federally managed species.

cc. Dave Golden, Director, DFW
Joseph Cimino, Administrator, MFA
Maryellen Gordan, BMF
Jeff Normant, BSF
Kira Dacanay, BSF
Suzanne Biggins, DLUR

USACE will schedule maintenance dredging operations outside of the recommended March 1 – June 30 herring migration period.

# United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office 4 E. Jimmie Leeds Road, Suite 4 Galloway, New Jersey 08205 Tel: 609/646 9310 www.fws.gov/northeast/njfieldoffice/



In reply refer to: 2020-I-1043

May 14, 2020

Peter R. Blum, Chief U.S. Army Corps of Engineers, Planning Division 100 Penn Square East Philadelphia, Pennsylvania 19107-3390 Attention: Barbara.E.Conlin@usace.army.mil

Reference: National Regional Sediment Management Program, Water Resources Development Act 2016, Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey; placement of dredged material as a pilot project in the vicinity of the Borough of Harvey Cedars, Ocean County, New Jersey.

The U.S. Fish and Wildlife Service (Service) has reviewed the above-referenced proposed project pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA) to ensure the protection of federally listed endangered and threatened species. The following comments do not address all Service concerns for fish and wildlife resources and do not preclude separate review and comment by the Service as afforded by other applicable environmental legislation. The subject consultation is for dredging, with ten-year maintenance, of approximately 200,000 cubic yards of material from Barnegat Inlet by the U.S Army Corps of Engineers, Philadelphia District (Corps), with the resultant dredged material placed in the near shore "oceanfront" environment off of or in the vicinity of the Borough of Harvey Cedars, Ocean County, New Jersey.

A known occurrence or potential habitat for the following federally listed or candidate species is located on or near the project's impact area. However, the Service concurs that the proposed project is not likely to adversely affect federally listed or candidate species for the reasons listed below.

Species	Basis for Determination	
Red knot (Calidris canulus rufa), threatened	Only minor project activities are proposed in red knot habitat (beach surveys), thus habitat and disturbance impacts are expected to be minimal. In addition, Tetra Tech (2017) found minimal use of this action area by red knots during fall migration. Therefore, impacts are expected to be insignificant and/or discountable.	
Piping plover (Charadrius melodus) and seabeach amaranth (Amaranthus pumilus), threatened	There will be minor activities (Corps beach surveys) undertaken on beaches, dunes, or ocean-side inter-tidal areas to determine the effectiveness of the in-shore placement of dredged material. The surveys will occur before, during and after project completion. The staging of equipment will be prohibited from entering the dune, fore-dune, or beach areas at any time during construction. The Corps has agreed to the implement the conservation measures via emails dated April 24, 2020; and May 7, 2020.	

Except for the above-mentioned species, no other federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the proposed project's impact area. Therefore, no further consultation pursuant to the ESA is required. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

Please refer to this office's web site at <a href="http://www.fws.gov/northeast/njfieldoffice/Endangered/">http://www.fws.gov/northeast/njfieldoffice/Endangered/</a> for further information including federally listed and candidate species lists, procedures for requesting ESA review, the National Bald Eagle Management Guidelines, and contacts for obtaining information from the New Jersey Natural Heritage and Endangered and Nongame Species Programs regarding State-listed and other species of concern.

Reviewing Biologist:

Authorizing Supervisor:

Eric Schrading

cc: U.S. Army Corps of Engineers - Monica Chasten

## Literature Cited

Tetra Tech. 2017. Fall 2016 Red Knot (Calidris canutus rufa) Surveys at Beach Nourishment Areas: Manasquan Inlet to Barnegat Inlet, Long Beach Island, Absecon Island, Ocean City, Great Egg Harbor to Townsend Inlet, Townsends Inlet to Hereford Inlet, Cape May City and Cape May Meadows; New Jersey Projects. Tetra Tech, Inc., Arlington, Virginia 22201. 141pp





# State of New Jersey

PHILIP D. MURPHY Governor SHEILA Y. OLIVER Lt. Governor

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Land Use Regulation Mail Code 501-02A P.O. Box 420 Trenton, New Jersey 08625-0420 www.nj.gov/dep/landuse CATHERINE MCCABE Commissioner

May 28, 2020

Peter R. Blum, PE Chief – Planning Division Department of the Army Philadelphia District, Corps of Engineers Wanamaker Building 100 Penn Square East

Philadelphia, PA 19107-3390

RE: Federal Consistency Determination and Section 401 Water Quality Certification DLUR File No. 1500-20-0001.1 CDT200001

USACE Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, Phase 1

Dear Mr. Blum:

The New Jersey Department of Environmental Protection (NJDEP), Division of Land Use Regulation (Division), acting under Section 307 of the Federal Coastal Zone Management Act (P.L. 92-583) as amended, has reviewed the Army Corps of Engineers (ACOE) request for authorization to perform periodic maintenance dredging of the Barnegat Inlet federal navigation entrance channel and placement of the material in the nearshore zone of the ocean beach between Barnegat Inlet and Harvey Cedars for supplemental sand within the authorized Barnegat Inlet to Little Egg Inlet Storm Damage Reduction Project

The Division has reviewed the submitted information and has determined that the project is consistent, to the maximum extent practicable, and with the conditions implemented below, with New Jersey's Rules on Coastal Zone Management N.J.A.C. 7:7E-1.1 <u>et seq.</u>, (as amended on February 20, 2020).

## **Project Description**

Under the Water Resource Development Act (WRDA) 2016 Section 1122 Beneficial Use Pilot Project Phase 1, the Barnegat Inlet Federal Navigation Entrance Channel would initially be dredged to its design width of 300 feet and depth of -10 feet below Mean Low Water (MLW). The initial 200,000 cubic yards of sand material removed from the channel would be beneficially used along a 1-mile long erosional zone section of ocean beach located in Harvey Cedars. The material would be placed in the nearshore zone of the ocean beach along Harvey Cedars as shown on "Figure 1, Barnegat Inlet Study Area" to reduce shoreline erosion.

Sand from subsequent maintenance dredging of the federal navigation entrance channel is anticipated to be reduced in volume and would also be placed in the nearshore zone of the ocean beach between the inlet and Harvey Cedars to supplement the nourishment needs of the Barnegat Inlet to Little

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DLUR File No. 1500-20-0001.1 CDT200001

Page 2

Egg Inlet Storm Damage Reduction Project. The ACOE will monitor the placement of sand on the ocean beaches to better understand shoreline erosion and sand movement within this area along the Atlantic Ocean.

This work is shown on site plans consisting of two sheets, prepared by ACOE, and entitled:

- ➤ "FIGURE 1, BARNEGAT INLET STUDY AREA"; and
- > "FIGURE 2, BARNEGAT INLET FEDERAL NAVIGATION PROJECT".

This consistency determination is issued subject to compliance with the following conditions:

- The ACOE shall submit a monitoring work plan to the NJDEP for review prior to implementation
  of Phase 1 of the Beneficial Use Pilot Project in calendar year 2020 as discussed in the draft
  environmental assessment, dated March 2020.
- No dredging and associated in-water work may occur in the Barnegat Inlet federal navigation entrance channel from March 1<sup>st</sup> through June 30<sup>th</sup> to be protective of anadromous fish migration.

This Federal Consistency is authorized pursuant to all parties following the guidelines set forth, and agreed upon, for the proposed activities.

Pursuant to 15 CFR 930.44, the Division reserves the right to object and request remedial action if this proposal is conducted in a manner, or is having an effect on, the coastal zone that is substantially different than originally proposed.

Thank you for your attention to and cooperation with New Jersey's Coastal Zone Management Program. If you have any questions regarding this determination, please do not hesitate to call Suzanne U. Biggins of our staff at (609) 292-2023.

Sincerely,

Colleen Keller Digitally signed by Colleen Keller Date: 2020.05.28 17:46:35 -04'00'

Colleen Keller, Assistant Director NJDEP Division of Land Use Regulation

c: William Dixon, NJDEP Division of Coastal Engineering Kim Springer, NJDEP Office of Policy Implementation

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The monitoring plan will be provided to NJDEP prior to initiation of the project.

No in-water work will occur in the inlet between March 1 and June 30.

----Original Message-----

From: Conlin, Barbara E CIV USARMY CENAP (USA)

Sent: Tuesday, June 30, 2020 3:24 PM

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

Subject: Barnegat Inlet O&M dredging (Section 305 (b)(4)(B) of the MSA)

#### Keith,

The Philadelphia District of the U.S. Army Corps of Engineers is scheduling maintenance dredging of the authorized navigation channel within Barnegat Inlet. The operation is being conducted under Section 1122 of the Water Resources Development Act as a pilot project to beneficially use the dredged material by placing it in the nearshore zone of the ocean beach fronting the borough of Harvey Cedars, Long Beach Island, New Jersey at an erosional hotspot. The program will include pre-and post-placement monitoring to track the placed material subject to natural sediment transport processes within the littoral zone.

A draft Environmental Assessment (EA) titled: National Regional Sediment Management (RSM) Program, Water Resources Development Act (WRDA 2016) Section 1122 Beneficial Use Pilot Project, Barnegat Inlet, New Jersey was provided to you 6 April 2020. Pursuant to the Magnuson Stevens Fishery Conservation and Management Act (MSA), our office initiated consultation with your office in February 2020 and provided an Essential Fish Habitat (EFH) Worksheet and additional information via email through June 2020.

Pursuant to Section 305 (b)(4)(B) of the MSA, this letter responds to your letter dated 23 March 2020 providing Conservation Recommendations. The proposed project was evaluated with respect to its potential direct, indirect, and cumulative effects on EFH. You agreed with our determination that the adverse effect on EFH or federally managed fisheries is not substantial, and effects can be alleviated with minor project modifications or EFH conservation recommendations. You provided the following Conservation Recommendations:

- To avoid and minimize the impacts of dredging on aquatic habitat, eggs, larvae, free-swimming fish, and invertebrates, dredging should be avoided from March 1 to June and from November 1 to December 31, of any given year.
- 2. Dredging heads/dragheads should not be turned on/activated until the head is at or on the bottom and should be turned off/deactivated prior to being lifted through the water column.

It is presently anticipated that dredging will begin in August 2020. The target quantity to be dredged and placed in the nearshore zone at Harvey Cedars is 200,000 cy in 2020 and significantly lesser amounts annually removed in future years. The work will continue until complete by late October 2020. This proposed period of operation will occur outside of the recommended seasonal restrictions. Pursuant to the MSA as well as the Fish and Wildlife Coordination Act, any future maintenance dredging operations that may affect EFH and other aquatic resources will be coordinated with your office.

Based on our assessment of the proposed action's in-water activities outside of your recommended seasonal restricted periods and commitment to activate/deactivate the dredge draghead only when it is

resting on the bottom, USACE can meet the conservation recommendations. No significant adverse impacts to EFH and associated federally-managed species are anticipated.

If I can provide any further required information, please don't hesitate to contact me.

Best regards, Barb

Barbara E. Conlin Ecologist Environmental Resources Branch Philadelphia District USACE

100 Penn Square East Philadelphia PA 19107 215.656.6557