MID-CHESAPEAKE BAY ISLANDS ECOSYSTEM RESTORATION PROJECT: BARREN ISLAND BORROW AREA

APPENDIX B:
PUBLIC AND AGENCY COORDINATION

APPENDIX B1: Public Notice

US Army Corps of Engineers
Baltimore District

11 January 2023

Planning Division

Public Notice

Mid-Chesapeake Bay Islands Ecosystem Restoration Project at Barren Island – Barren Island Borrow Area, Dorchester County, Maryland

All Interested Parties: The U.S. Army Corps of Engineers (USACE), Baltimore District in partnership with the Maryland Department of Transportation Maryland Port Administration (MDOT MPA), the project's non-federal sponsor, is preparing a supplemental environmental assessment (sEA) for the Barren Island Borrow Area component of the Mid-Chesapeake Bay Islands Ecosystem Restoration Project. Barren Island is an element of the U.S. Fish and Wildlife Service (USFWS) Chesapeake Marshlands National Wildlife Refuge Complex. The Mid-Chesapeake Bay Islands Ecosystem Restoration Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Islands Ecosystem Restoration Project, as described in the U.S. Army Corps of Engineers Chief's Report, dated August 24, 2009 (https://planning.erdc.dren.mil/toolbox/library/ChiefReports/mid_chesapeake.pdf) and the *Mid- Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision was signed in July 2019 initiating the next phase of the study, Preconstruction, Engineering, and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental EA on March 7, 2022, to update documentation for the National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

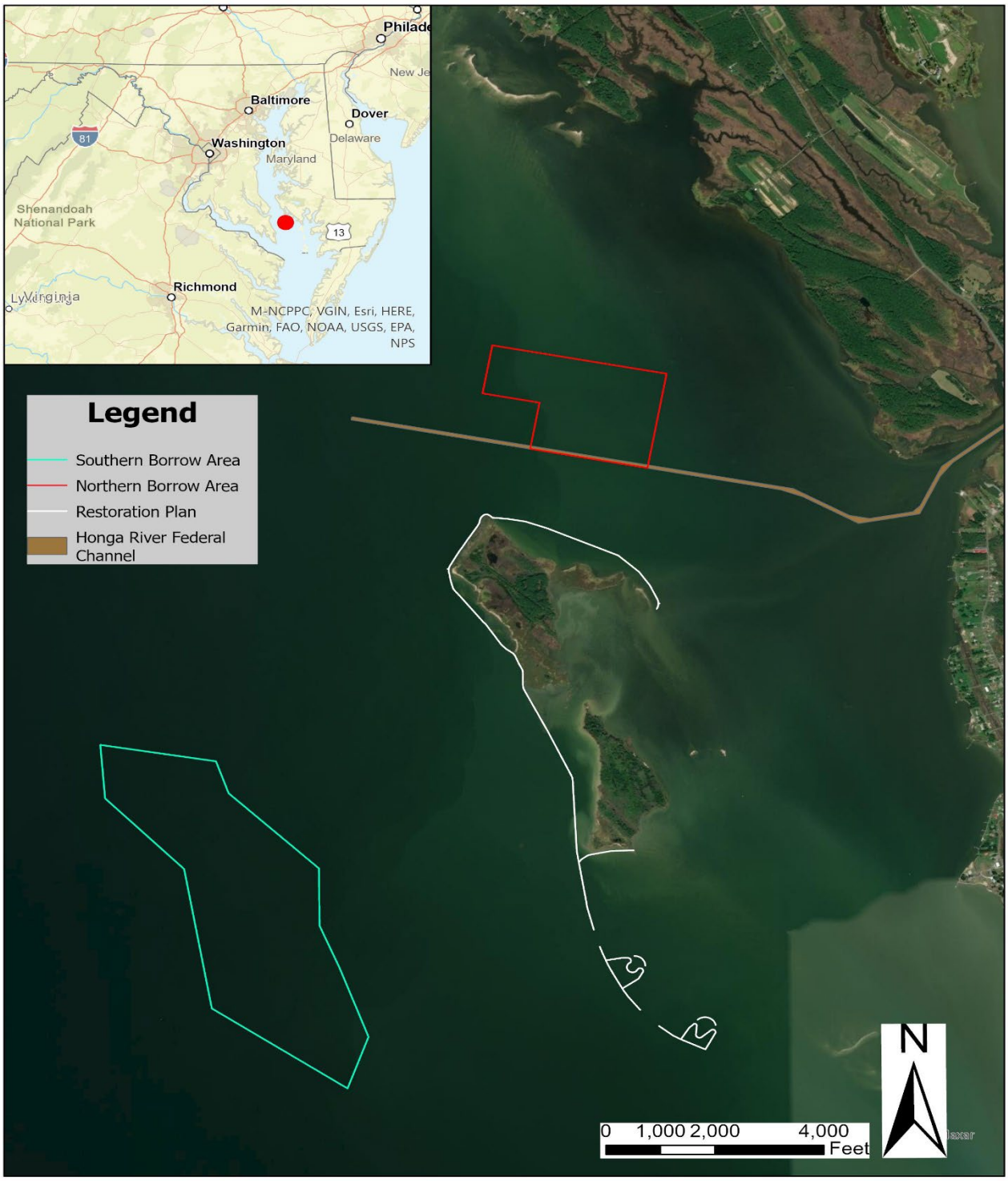
The authorized project consists of restoring approximately 83 acres at Barren Island in combination with the restoration of James Island (2,072 acres), with a habitat proportion of 45 percent upland to 55 percent wetland and an upland dike height of 20 feet above mean lower low water. The project will restore a combined 2,144 acres of remote island habitat, while also protecting approximately 1,325 acres of potential submerged aquatic vegetation (SAV) adjacent to Barren Island. Restoration of the islands will occur by the beneficial use of approximately 90 to 95 million cubic yards (MCY) of dredged material over a period of more than 30 years. The sources of the dredged material for placement at James Island are the federal navigation channels in the Maryland portion of the Chesapeake Bay serving Baltimore Harbor and the southern Chesapeake and Delaware Canal approach channels. The source of dredged material to be placed at Barren Island will be local federally-maintained navigation channels. Detailed information on the specific components of the project can be found in the recommended plan section and engineering appendix of the *Final Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report & Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). These documents, as well as additional information about the project, are available online at www.nab.usace.army.mil/mid-bay.

The purpose of this notice is to inform the public of the start of a supplemental EA specifically focused on identifying a borrow area from which to dredge sand for use in restoration efforts as part of the overall restoration at Barren Island. Two locations, a northern and a southern borrow area are being considered (enclosure). USACE is requesting any information that may affect the planning and design efforts being conducted to evaluate the Barren Island borrow areas. We request that federal and state agencies provide information concerning interests within your organization's area of responsibility or expertise, and the public provide information which may be pertinent to this project, within 30 days from the date of this notice to the point of contact listed below. A timely review of the enclosed information and a written response will be greatly appreciated and will assist us with preparation of the supplemental EA.

Additionally, we are requesting interested stakeholders to provide an email address to enable future electronic communications. Any email addresses provided will be used solely to communicate project information. If you have any questions regarding this project, please contact Angela Sowers by phone at (410) 962-7440, or by e-mail at angela.sowers@usace.army.mil, Subject: Mid-Chesapeake Bay Islands Ecosystem Restoration: Barren Island Borrow Area sEA. If you would like to provide an email address to be included in the project stakeholder list, please complete the form on the Mid-Chesapeake Bay Islands Ecosystem Restoration Project website - www.nab.usace.army.mil/mid-bay.

Enclosure

Daniel M. Bierly, P.E.
Chief, Civil Project Development Branch



Barren Island Potential Borrow Areas

APPENDIX B2: Correspondence Records

MARYLAND DEPARTMENT OF NATURAL RESOURCES

From:	Leasure, Charles W CIV USARMY CENAB (USA)
To:	tony.redman@maryland.gov
Cc:	lori.byrne@maryland.gov; Roland Limpert -DNR-; Dave Brinker -DNR-; tim.larney@maryland.gov; john.moulis@maryland.gov; Gwendolyn Gibson -DNR-; Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject:	Dorchester County, MD - Barren Island Restoration
Date:	Friday, January 13, 2023 4:06:34 PM
Attachments:	Barren Island Borrow Area Coordination Letter_MDNR_12Jan2023.pdf

Mr. Redman,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

Charles

410-962-5175 – Office
410-829-9664 – Cell

DEPARTMENT OF THE ARMY

BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Mr. Tony Redman
Maryland Department of Natural Resources
580 Taylor Avenue
Tawes State Office Building
Annapolis, Maryland 21401

Dear Mr. Redman,

The U.S. Army Corps of Engineers, Baltimore District, (USACE) is reinitiating coordination with the Maryland Department of Natural Resources (DNR) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report (https://planning.erdc.dren.mil/toolbox/library/Chief Reports/mid_chesapeake.pdf) dated August 24, 2009, and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the study, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

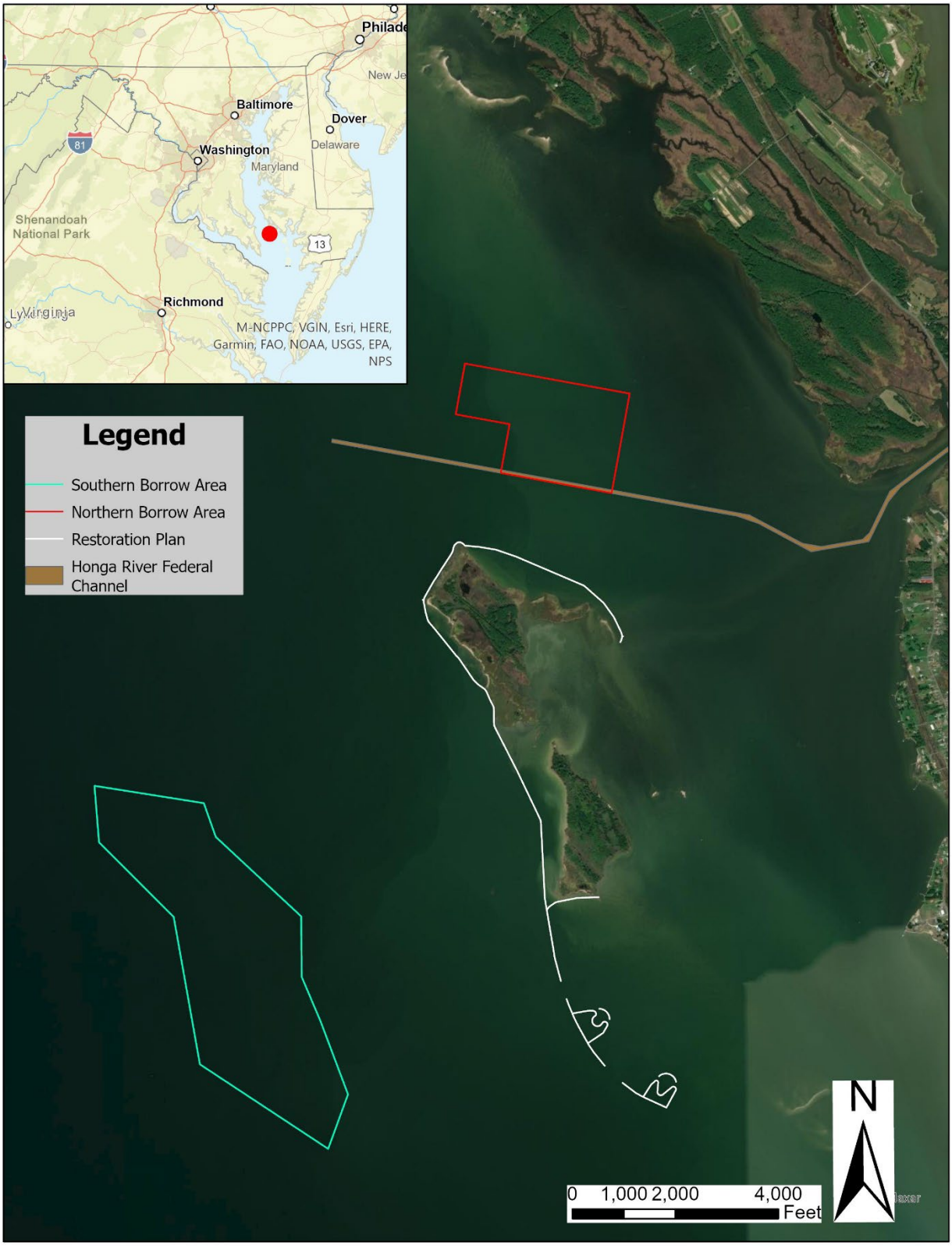
The purpose of this letter is to inform your agency of the start of a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the sEA, within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,

Daniel M. Bierly, PE
Chief, Civil Project Development Branch

cc: Lori Byrne, (lori.byrne@maryland.gov)
Roland Limpert, (roland.limpert@maryland.gov)
Dave Brinker, (dave.brinker@maryland.gov)
Tim Larney, (tim.larney@maryland.gov
John Moulis, (john.moulis@maryland.gov)
Gwen Gibson, (gwendolyn.gibson@maryland.gov)



Barren Island Potential Borrow Area Locations

NOAA - ENDANGERED SPECIES ACT

From:	Leasure, Charles W CIV USARMY CENAB (USA)
To:	jennifer.anderson@noaa.gov
Cc:	brian.d.hopper@noaa.gov; Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject:	Dorchester County, MD - Barren Island Restoration
Date:	Friday, January 13, 2023 4:16:07 PM
Attachments:	Barren Island Borrow Area Coordination Letter_NOAA ESA_12Jan2023.pdf

Ms. Anderson,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Jennifer Anderson
National Marine Fisheries Service
Greater Atlantic Region Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930

Dear Ms. Anderson,

The U.S. Army Corps of Engineers, Baltimore District, is reinitiating coordination with National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), Protected Resource Division (PRD) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report (https://planning.erdc.dren.mil/toolbox/library/ChiefReports/mid_ chesapeake.pdf), dated August 24, 2009, and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the study, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

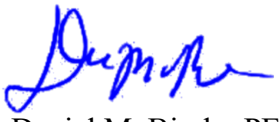
The purpose of this letter is to re-engage NOAA PRD to coordinate with your agency on Section 7(a)(2) of the Endangered Species Act and the Fish and Wildlife Coordination Act. USACE is beginning a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

Based on prior coordination, it was determined that the following species and critical habitat are under NOAA PRD jurisdiction in the action area:

- 5 Distinct Population Segments (DPS) of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) (77 FR 5880 and 77 FR 5914)
  - Gulf of Maine DPS - Threatened
  - New York Bight DPS - Endangered
  - Chesapeake Bay DPS - Endangered
  - Carolina DPS - Endangered
  - South Atlantic DPS - Endangered
- Shortnose sturgeon *(Acipenser brevirostrum)* - Endangered (32 FR 4001; Recovery plan: NMFS 1998)
- Kemp's ridley sea turtle (*Lepidochelys kempii*) - Endangered (35 FR 18319; Recovery plan: NMFS *et al*. 2011)
- Leatherback sea turtle (*Dermochelys coriacea*) - Endangered (35 FR 849; Recovery plan: NMFS & USFWS 1992)
- North Atlantic DPS of green sea turtle (*Chelonia mydas*) - Threatened (81 FR 20057; Recovery plan: NMFS & USFWS 1991)
- North Atlantic DPS of loggerhead sea turtle (*Caretta caretta*) - Threatened (76 FR 58868; Recovery plan: NMFS & USFWS 2008)

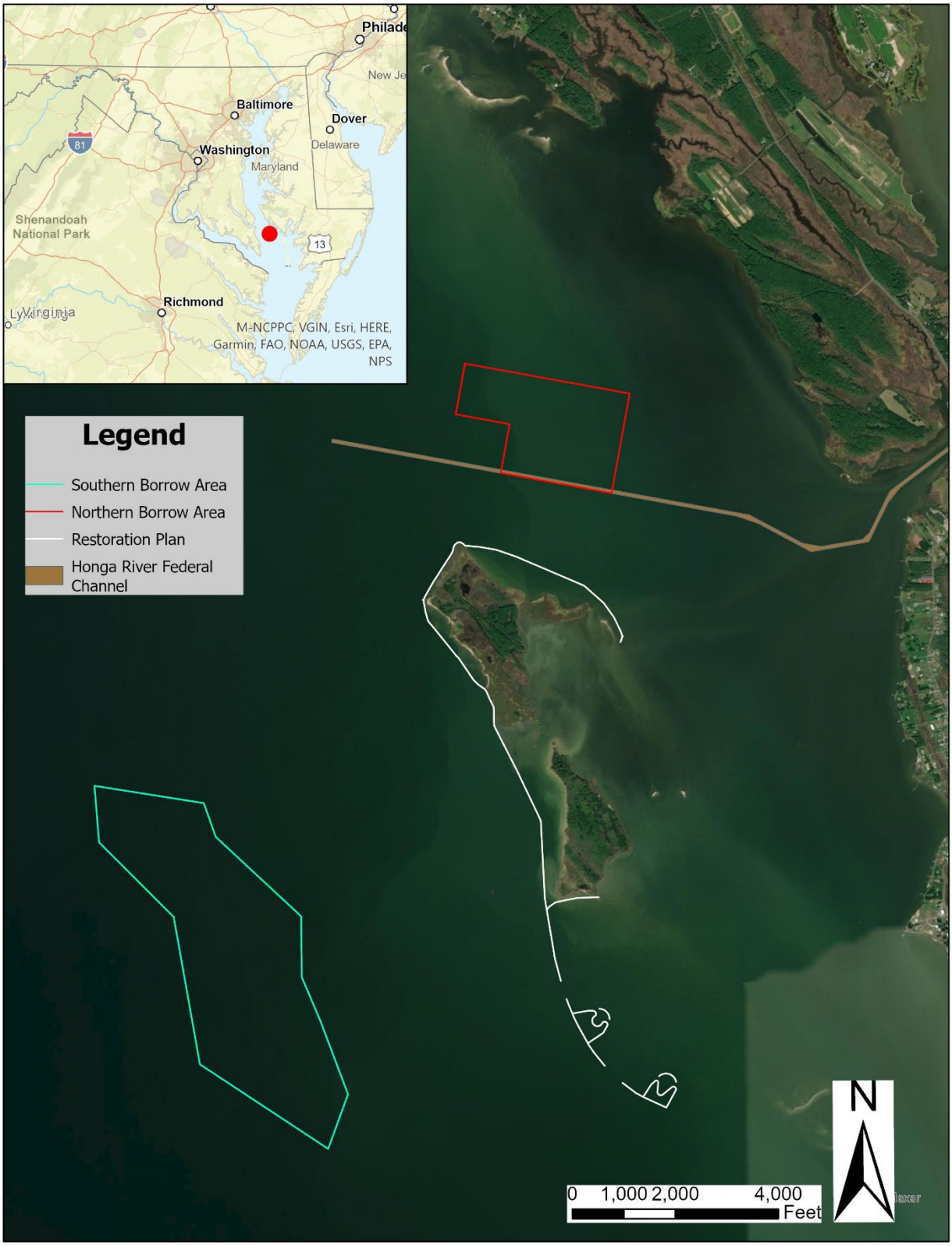
Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the sEA within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,



Daniel M. Bierly, PE
Chief, Civil Project Development Branch

CC: Brian Hopper, NMFS CBFO, brian.d.hopper@noaa.gov



Barren Island Potential Borrow Area Locations

NOAA/NMFS - MAGNUSON AND STEVENS CONSERVATION AND MANAGEMEN ACT and FISH AND WILDLIFE COORDINATION ACT

From: Leasure, Charles W CIV USARMY CENAB (USA)
To: lou.chiarella@noaa.gov
Cc: karen.greene@noaa.gov; Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject: Dorchester County, MD - Barren Island Restoration
Date: Friday, January 13, 2023 4:13:01 PM
Attachments: Barren Island Borrow Area Coordination Letter_NMFS EFH_12Jan2023.pdf

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Mr. Chiarella,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
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DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Lou Chiarella
Assistant Regional Administrator for Habitat Conservation
National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NOAA/NMFS)
Greater Atlantic Region Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930

Dear Mr. Chiarella,

The U.S. Army Corps of Engineers, Baltimore District, (USACE) is reinitiating coordination with National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report (https://planning.erdc.dren.mil/toolbox/library/ChiefReports/mid_chesapeake.pdf), dated August 24, 2009, and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the study, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

The purpose of this letter is to re-engage NMFS to coordinate with your agency on Section 305(b)(2) Magnuson-Stevens Conservation and Management Act and the Fish and Wildlife Coordination Act. USACE is beginning a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

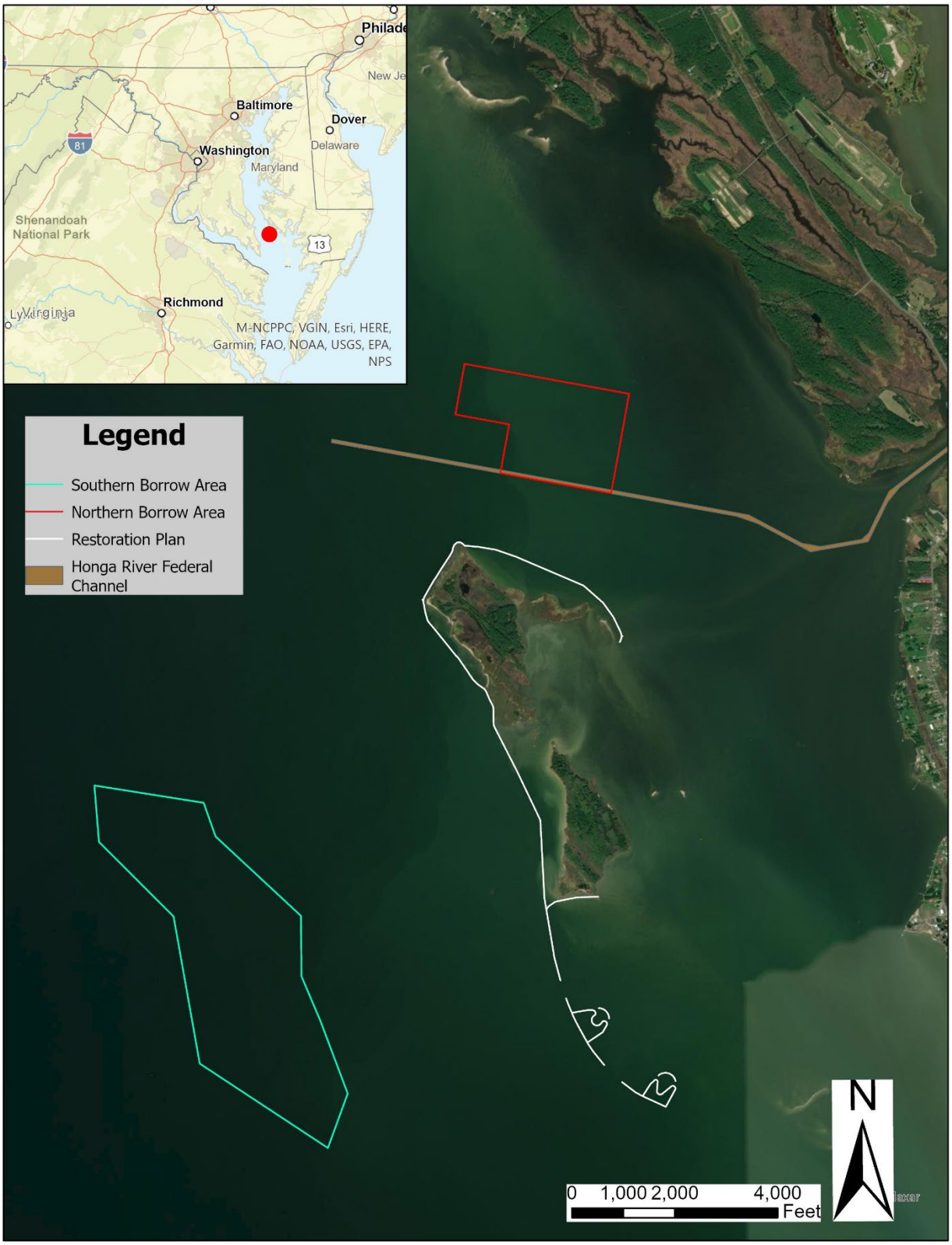
Based on prior coordination for the Barren Island sEA in August 2021, it was determined that the proposed project at Barren Island lies within waters designated as EFH for the following species and their life stages: windowpane flounder (*Scopthalmus aquosos*), juvenile and adult stages; bluefish (*Pomatomus saltatrix*), juvenile and adult stages; summer flounder (*Paralicthys dentatus*), larvae, juvenile and adult stages; Atlantic butterfish (*Peprilus triacanthus*), eggs, larvae, and adult stages; black sea bass (*Centropristus striata*), juvenile and adult stages; scup (*Stenotomus chrysops*), juvenile and adult stages; and clearnose skate (*Raja eglanteria*), juvenile and adult stages. Please confirm that the EFH assessment should remain focused on these species.

Please provide your agency's feedback and any relevant input to assist with updating the EFH assessment within thirty (30) days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,

Daniel M. Bierly, PE
Chief, Civil Project Development Branch

CC: Karen Greene, NMFS CBFO, (karen.greene@noaa.gov)



Barren Island Potential Borrow Area Locations

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

February 10. 2023

Daniel M. Bierly, Chief
Civil Project Development Branch
Baltimore District
U.S. Army Corps of Engineers
2 Hopkins Plaza
Baltimore, MD 21201-2930

Dear Mr. Bierly:

Thank you for your January 13, 2023, letters notifying us that you are preparing a supplemental Environmental Assessment (sEA) to describe the impacts of dredging estuarine bottom as part of the Barren Island portion of the Mid-Chesapeake Bay Island Ecosystem Restoration Project (henceforth, Mid-Bay Project) in Dorchester County, Maryland. Your letters also indicated that you are re-initiating coordination with us under the Magnuson Stevens Fishery Conservation and Management Act (MSA) and Section 7 of the Endangered Species Act (ESA). The Baltimore District (the District) is developing this project in partnership with the Maryland Department of Transportation Maryland Port Administration (MDOT MPA). This sEA is being prepared in accordance with the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) and will describe the impacts associated with sand dredging to support the construction of certain elements of the Barren Island component of the Mid-Bay Project.

Project History

In 2009, the Mid-Bay Feasibility Report was released. Subsequently, the Mid-Bay Project was authorized under Section 7002 of the Water Resources Reform and Development Act of 2014. The record of decision was signed in 2019, thus initiating the Preconstruction Engineering and Design (PED) phase of the study. Most recently, the District prepared a sEA for the Phase 1 construction of Barren Island on December 20, 2021, which described impacts associated with the majority of the proposed stone dike and sill structures to be constructed around the perimeter of the island for the eventual containment of maintenance dredging material. We provided comments and Essential Fish Habitat (EFH) conservation recommendations following our review of this document in our January 26, 2022, letter.

The recent sEA for Phase 1 construction at Barren Island did not describe impacts associated with the full length of the northeast sill, which requires foundation remediation (i.e., dredging existing bottom and replacing with suitable substrate), nor did it address the designs for colonial nesting waterbird habitat islands proposed at the southern terminus of the Barren Island breakwaters. The District is now considering obtaining the sand needed to construct these project elements through borrow area dredging and is in the process of developing an additional sEA detailing alternatives to source suitable material and disclose impacts, pursuant to NEPA. We are concerned that the sourcing of dredged sand from previously un-impacted benthic habitat to

create uplands elsewhere in the Mid-Bay Project represents a dual impact to our trust resources through both dredging and filling of productive aquatic bottom. This letter serves as our technical assistance to inform the initial development of the sEA as well as a request to work together during its development to ensure that all impacts to our trust resources are avoided, minimized, mitigated, or otherwise offset.

Magnuson Stevens Fishery Conservation and Management Act

The MSA requires federal agencies, such as the U.S. Army Corps of Engineers, to consult with us on any action or proposed action authorized, funded, or undertaken, by such agency that may adversely affect EFH identified under the MSA. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in the consultation process. The level of detail in an EFH assessment should be commensurate with the complexity and magnitude of the potential adverse effects of the action. A complete description of the proposed action, including a description of the direct, indirect, and synergistic consequences of the action, is a critical piece of this assessment and necessary for us to determine the potential impacts to federally managed fish, their habitats, prevalent prey species, and other NOAA trust resources.

Essential fish habitat is defined as, "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For the purpose of interpreting the definition of EFH:

- "waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate;
- "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities;
- "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem;
- "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.

The EFH final rule published in the Federal Register on January 17, 2002 defines an adverse effect as "any impact which reduces the quality and/or quantity of EFH." The rule further states that:

> An adverse effect 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 ecosystems components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from action occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

The EFH final rule also states that the loss of prey may be an adverse effect on EFH and managed species. As a result, 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.

Based on the information provided through your letter and during recurring interagency meetings, the dredging of previously undisturbed sand bottom along with the subsequent use of this sand as fill to create uplands will adversely affect EFH through the disturbance (dredge) and permanent loss (fill) of productive benthic habitats used by our trust resources. We are concerned that sufficient effort has not been undertaken to avoid, minimize, mitigate, or otherwise offset impacts to these habitats, pursuant to the MSA.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA), 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 the 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. As discussed here and in our previous letters associated with the Mid-Bay project, a wide variety of resources we conserve under this authority are present in the project area. As a result, the updated feasibility study and EA should evaluate the effects of the proposed actions on these resources as well as evaluating the impacts to EFH. For example, testimony offered by local watermen during a public meeting held by the District on June 16, 2021, indicated that the proposed site of borrow area dredging represents a productive area for the harvest of blue crab (*Callinectes sapidus*). This fishery is the most valuable in the Chesapeake Bay and supports a large proportion of the fishing industry in the state. The blue crab population is also currently under evaluation by state and federal fisheries managers due to recent historic low abundances described by the Bay-wide Blue Crab Winter Dredge Survey. Blue crabs are an important food resource for predatory fish and birds (Bain et al. 2007, Waldman 2008). Steimle et al. (2000) has documented that juvenile blue crabs are a food source for several state and federally managed fish species including winter flounder (*Pseudopleuronectes americanus*), little skate (*Leucoraja erinacea*), winter skate (*Leucoraja ocellata*), scup (*Stenolemus chrysops*), and summer flounder.(*Paralichthys dentatus*). As such, any action which could temporarily or permanently diminish the productivity of this habitat should be evaluated and measures to avoid, minimize, mitigate, or otherwise offset impacts should be fully described.

Technical Assistance

Regarding the species with designated EFH in the project area, we agree that the list provided reflects the federally managed fish species and corresponding life stages that are likely to be present in the project area. For reference, those species and life stages are:

- Windowpane flounder (*Scophthalmus aquosus*) - juveniles, adults
- Summer flounder (*Paralichthys dentatus*) - larvae, juveniles, adults
- Bluefish (*Pomatomus saltatrix*) - juveniles, adults
- Atlantic butterfish (*Peprilus triacanthus*) - eggs, larvae, juveniles, adults
- Black sea bass (*Centropristis striata*) - juveniles, adults
- Scup (*Stenolemus chrysops*) - juveniles, adults
- Clearnose skate (*Raja eglanteria*)- juveniles, adults

Aside from federally managed fish species with designated EFH in the project area, your analyses should also include consideration of impacts to prey species and their habitats. The proposed borrow area also serves as productive habitat for many other NOAA trust resources including blue crab, Atlantic croaker (*Micropogonias undulatus*), spot (*Leiostomus xanthurus*), menhaden (*Brevoortia tyrannus*) and bay anchovy (*Anchoa mitchilli*). These fishes and benthic organisms found in sand bottom habitat provide a valuable food source for many commercially and recreationally valuable species such as striped bass (*Morone saxatilis*), summer flounder, weakfish (*Cynoscion regalis*), and windowpane flounder.

Submerged aquatic vegetation (SAV) may also be present in the proposed project area. SAV has been designated as a habitat area of particular concern (HAPC) for summer flounder by the Mid-Atlantic Fishery Management Council. HAPCs are subsets of EFH identified based on one or more of the following considerations: 1) the importance of the ecological function; 2) extent to which the habitat is sensitive to human-induced degradation; 3) whether and to what extent, development activities are stressing the habitat type; and/or 4) rarity of habitat type (50 CFR 600.815(a)(8)). In addition, the U.S. Environmental Protection Agency has designated SAV as a special aquatic site under Section 404(b)(1) of the federal Clean Water Act (CWA) because of its important role in the marine ecosystem for nesting, spawning, nursery cover, and forage areas for fish and wildlife. It is a priority habitat for us for the same reasons. While your letter indicated that SAV will be avoided through the potential selection of the southern borrow area as the preferred alternative, any impacts to this habitat considered under other alternatives should be described as part of the forthcoming study.

Based on our involvement in the project thus far, it is likely that the District will propose to dredge approximately 350,000 cubic yards of sand from the designated southern borrow area. Several studies have described the impacts of dredging on benthic habitats, with recovery rates ranging from several months to several years (see reviews by ASMFC 2002; USACE 2015). In certain cases, benthic disturbance may be permanent if the hydrodynamic environment, and hence benthic sediment characteristics, are permanently altered by the activity. This is particularly true of relic sand shoals, for which a source of sand is not available to replenish the mined sand (ASMFC 2002). As part of your assessment, we recommend that you evaluate approaches to avoiding/minimizing impacts to previously un-dredged benthic habitat, including consideration of alternative upland or previously (i.e., maintenance) dredging sources. Should dredging of previously undisturbed bottom be proposed, minimization approaches could include preserving areas within the broader dredging footprint to facilitate recolonization of benthic organisms while also increasing habitat heterogeneity (Cutter et al. 2000). However, monitoring would be necessary to demonstrate the efficacy of this approach. We are also concerned that dredging to depths that typically exhibit hypoxia in the middle Chesapeake Bay could permanently degrade the existing habitats. Approaches to minimizing this risk should also be addressed. We are willing to work with your staff to develop such approaches that minimize negative impacts of sand mining, should that continue to represent the preferred alternative for the District.

Finally, due to the variety of aquatic resources and habitats likely present in the project vicinity and the complexity of food web interactions with the greater mid-Chesapeake Bay ecosystem,

the final EFH assessment contained in the sEA document should fully describe the anticipated temporary (e.g., turbidity) and permanent (e.g., hydrodynamic changes, habitat conversion) impacts to habitats used by federally managed fish species and their prey. The results from recent surveys should also be included to fully describe the resources present in the project location. Should dredging of previously unimpacted bottom be proposed, we would expect this action to be accompanied by robust pre- and post-impact monitoring of a suite of characteristics (e.g., sediment, benthic infauna) to evaluate the effects and monitor benthic recovery. This monitoring plan should be detailed in your sEA. Furthermore, approaches to avoid, minimize, mitigate, or otherwise offset impacts to these resources should also be thoroughly considered and documented, pursuant to the MSA. These details along with a complete description of the proposed action, including any subsequent dredging for sand material should be included in your assessment or in the accompanying sEA.

Endangered Species Act

On January 13, 2023, we received a letter requesting re-engagement with NOAA Protected Resources Division (PRD) to coordinate with us on Section 7(a)(2) of the Endangered Species Act. The District specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. On February 5, 2018, we completed informal consultation with the USACE on the proposed action, which concluded that the action is not likely to adversely affect listed species under our jurisdiction. Threatened or endangered species under our jurisdiction including the threatened loggerhead (*Caretta caretta*) and the endangered Kemp's ridley (*Lepidochelys kempii*), green (*Chelonia mydas*) and leatherback (*Dermochelys coriacea*) sea turtles, shortnose sturgeon (*Acipenser brevirostrum*), and Atlantic sturgeon (*Acipenser oxyrhynchus*) may be present in the project area. We are currently reviewing your request in order to make a determination regarding re-initiation of consultation. Should you have any questions about the section 7 consultation process, please contact Brian Hopper at brian.d.hopper@noaa.gov.

Conclusion

Thank you for your close coordination and formal notification for the preparation of this sEA. We have provided extensive comments throughout the development of the Mid-Bay Project and will continue to work with you as additional NEPA documents are developed. We look forward to working with you to complete the required EFH consultation under the MSA and coordination under Section 7 of the ESA. If you have questions or would like to discuss this further, please contact Jonathan Watson in our Annapolis field office at jonathan.watson@noaa.gov or (978) 675-2180 for information regarding essential fish habitat and Brian Hopper at brian.d.hopper@noaa.gov for information regarding threatened or endangered species.

Sincerely,

Karen M. Greene
Mid-Atlantic Branch Chief
Habitat and Ecosystem Services Division

cc:
C. Leasure, A. Sowers (USACE)
A. Peñafiel (MPA)
B. Hopper (NMFS - PRD)
S. Corson (NMFS - CBO)
S. Deeley, A. O'Donnell (USFWS)
T. Roberson (MDE)
R. Limpert; G. Gibson (MDNR)

Works Cited

ASMFC. 2002. Beach nourishment: a review of the biological and physical impacts. ASMFC Habitat Management Series #7. Washington, DC. 174 p/

Bain, M., J. Lodge, D.J. Suszkowski, D. Botkin, A. Brash, C. Craft, R. Diaz, K. Farley, Y. Gelb, J.S. Levinton, W. Matuszeski, F.Steimle, and P. Wilber. 2007. Target ecosystem characteristics for the Hudson Raritan Estuary: technical guidance for developing a comprehensive ecosystem restoration plan. A report to the Port Authority of NY/NJ. Hudson River Foundation, New York, NY.

Cutter, Jr., G.R., R.J. Diaz, J.A. Musick, J. Olney, Sr., D.M. Bilkovic, J. P.Y. Maa, S. Kim, C.S. Hardaway, Jr., D.A. Milligan, R. Brindley, and C.H. Hobbs. 2000. Environmental survey of potential sand resource sites offshore Delaware and Maryland. Final Report to U.S. Department of the Interior Minerals Management Service. OCS Study 2000-055.

Steimle, F.W., R.A. Pikanowski, D.G. McMillan, C.A. Zetlin and S.J. Wilk. 2000. Demersal fish and American lobster diets in the Lower Hudson-Raritan Estuary. NOAA Technical Memorandum NMFS-NE-161. Woods Hole, MA. 106 p.

USACE. 2015. Appendix B: dredging environmental considerations. pgs B-1 - B-45 *in* USACE. 2015. Dredging and dredged material management. Manual No. 1110-2-5025. Washington DC

Waldman, J.R. 2006. The diadromous fish fauna of the Hudson River: life histories, conservation concerns, and research avenues. In J. S. Levinton and J.R. Waldman (eds.). The Hudson River Estuary. Cambridge University Press, New York, pp.171-188.

SECTION 106 of NATIONAL HISTORIC PRESERVATION ACT

From: Leasure, Charles W CIV USARMY CENAB (USA)
To: elizabeth.hughes@maryland.gov
Cc: Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject: Dorchester County, MD - Barren Island Restoration
Date: Friday, January 13, 2023 4:09:50 PM
Attachments: Barren Island Borrow Area Coordination Letter_MHT_12Jan2023.pdf

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Ms. Hughes,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

Planning Division 13 January 2023

Elizabeth Hughes, SHPO
Maryland Historical Trust
100 Community Place, 3rd
Floor Crownsville, MD 21032

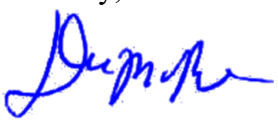
Dear Ms. Hughes:

The U.S. Army Corps of Engineers, Baltimore District, (USACE) is reinitiating coordination for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland in Dorchester County, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report (https://planning.erdc.dren.mil/toolbox/library/ChiefReports/mid_chesapeake.pdf), dated August 24, 2009, and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the project, Pre-construction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

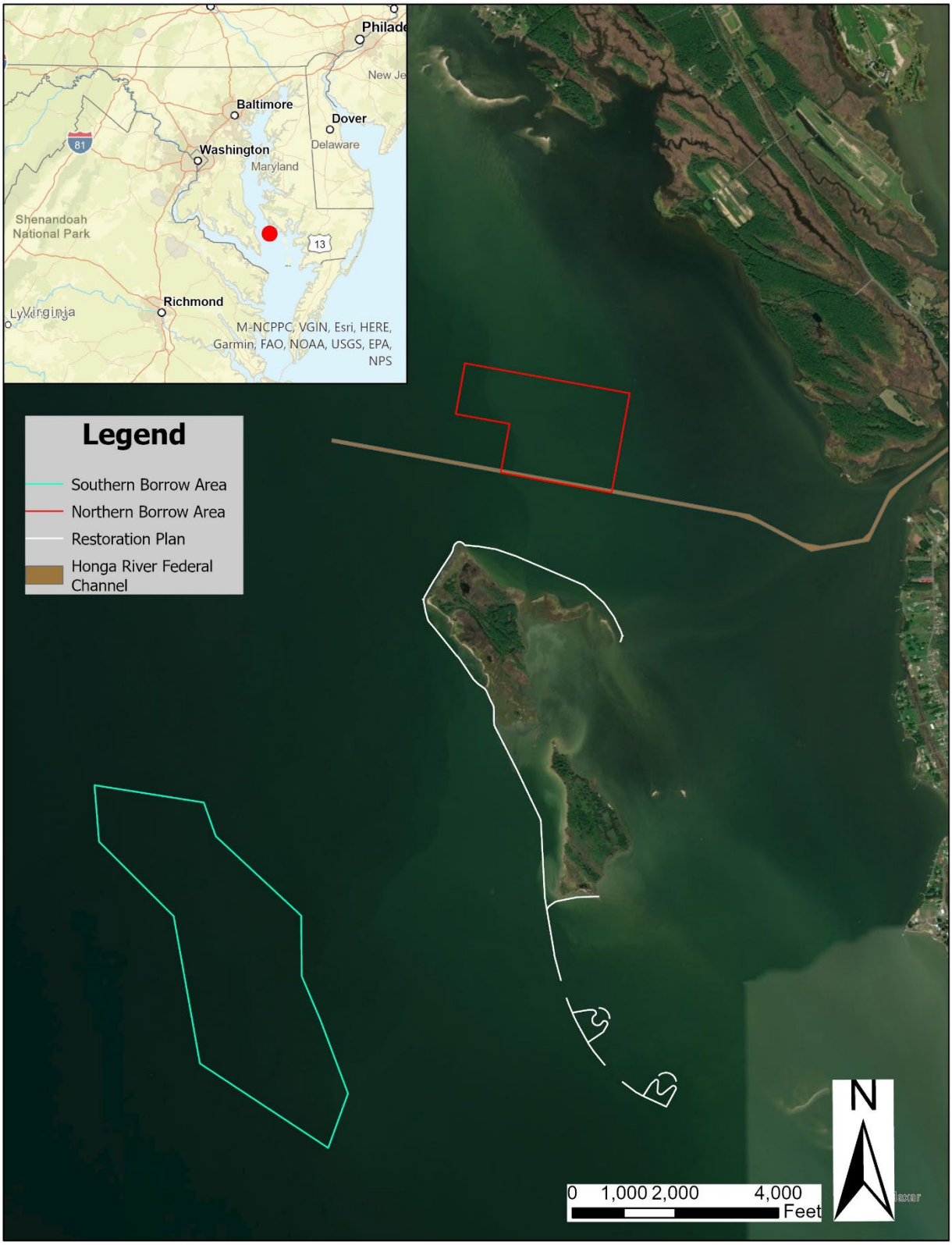
The purpose of this letter is to inform your agency of the start of a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the sEA within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angela Sowers, Ph.D., at (410) 962-7440.

Sincerely,



Daniel M. Bierly, PE
Chief, Civil Project Development Branch



Barren Island Potential Borrow Area Locations

Wes Moore, Governor
Aruna Miller, Lt. Governor

Rebecca L. Flora, AICP, Secretary

Maryland
DEPARTMENT OF PLANNING
MARYLAND HISTORICAL TRUST

January 24, 2023

Daniel M. Bierly, PE
Chief, Civil Project Development Branch
Baltimore District, U.S. Army Corps of Engineers
2 Hopkins Plaza
Baltimore, Maryland 21201

Sent via email to Charles.W.Leasure@usace.army.mil

Re: Mid-Chesapeake Bay Island Ecosystem Restoration Project - Barren Island Borrow Areas

Dear Mr. Bierly:

Thank you for your letter dated 13 January 2023 reinitiating Section 106 consultation between the Maryland State Historic Preservation Office, the Maryland Historical Trust (MHT), and the U.S. Army Corps of Engineers (USACE) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project (Mid-Bay).

MHT understands USACE is in the process of developing a Supplemental Environmental Assessment (sEA) which evaluates potential borrow areas for use in restoration of Barren Island and that the area formerly described as the Northern Borrow Area will not meet the needs of the project. USACE's evaluation is now focusing on and refining the boundaries of the Southern Borrow Area. According to MHT records, archaeological surveys or other efforts to identify historic properties within the Southern Borrow Area have not been undertaken and the Southern Borrow Area has potential to contain submerged historic properties.

MHT is aware from attendance at Mid-Bay NEPA coordination meetings that USACE plans to complete identification efforts involving use of marine geophysical remote sensing tools within the boundaries of the selected borrow area(s), which likely will be located within the larger area currently known as the Southern Borrow Area.

We await additional coordination related to that effort(s) as project planning proceeds.

Please contact me via email if you have any questions, troy.nowak@maryland.gov.

Sincerely,

Troy Nowak
Asst. Underwater Archaeologist
Maryland Historical Trust

U.S. ENVIRONMENTAL PROTECTION AGENCYY

From: Leasure, Charles W CIV USARMY CENAB (USA)
To: Nevshehirlian.Stepan@epa.gov
Cc: Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject: Dorchester County, MD - Barren Island Restoration
Date: Friday, January 13, 2023 3:52:36 PM
Attachments: Barren Island Borrow Area Coordination Letter_EPA_12Jan2023.pdf

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Mr. Nevshehirlian,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Mr. Stepan Nevshehirlian
U.S. Environmental Protection Agency,
Mid-Atlantic Region, Region 3
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

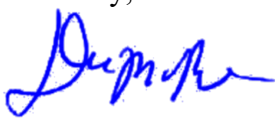
Dear Mr. Stepan Nevshehirlian,

The U.S. Army Corps of Engineers, Baltimore District, is reinitiating coordination with the U.S. Environmental Protection Agency (EPA) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report, dated August 24, 2009, (https://planning.erdc.dren.mil/toolbox/library/Chief Reports/mid_ chesapeake.pdf), and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision was signed in July 2019 initiating the next phase of the study, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

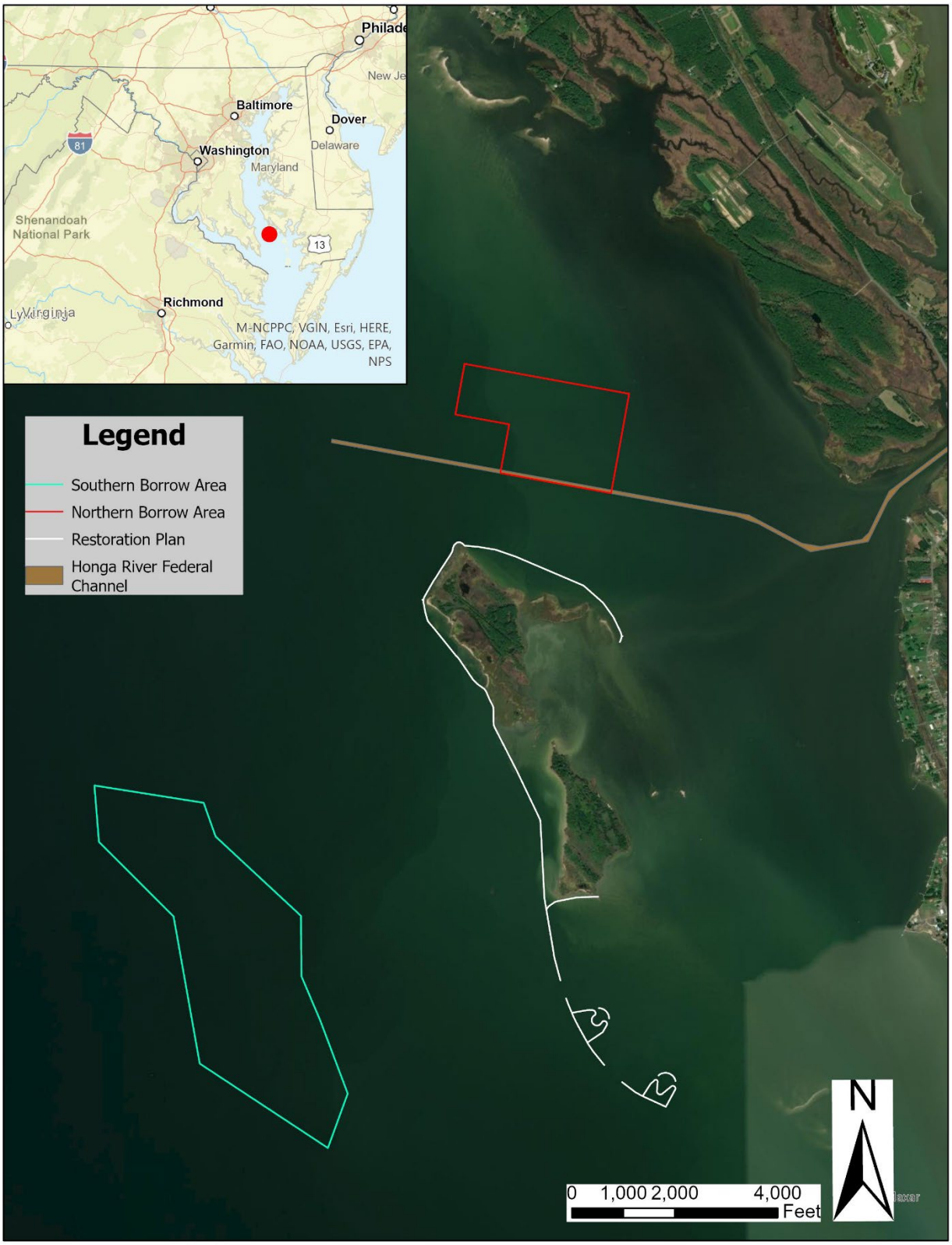
The purpose of this letter is to inform your agency of the start of a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the sEA, within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,



Daniel M. Bierly, PE
Chief, Civil Project Development Branch



Barren Island Potential Borrow Area Locations

From:	Witman, Timothy (he/him/his)
To:	Sowers, Angela M CIV USARMY CENAB (USA)
Cc:	Johnson, Christopher A CIV USARMY CENAB (USA); Nevshehirlian, Stepan; Leasure, Charles W CIV USARMY CENAB (USA); Traver, Carrie
Subject:	[Non-DoD Source] EPA Scoping Comments - Dorchester County, MD - Barren Island Restoration
Date:	Friday, February 3, 2023 11:30:25 AM
Attachments:	image007.png image008.png image009.png

Dear Dr. Sowers:

Thank you for the opportunity to engage early in the NEPA process and supplemental Environmental Assessment (sEA) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project at Barren Island. The sEA is focused on the borrow area for the Barren Island restoration.

EPA has been involved with the NEPA process for both the James and Barren Island, Mid-Chesapeake Bay Island Restorations. As part of the Mid-Chesapeake Bay Island Restorations EPA provided scoping comments on the supplemental Environmental Impact Statement for the James Island Restoration and is providing similar comments to be considered for the sEA at the Barren Island Restoration borrow area.

Climate Change and Greenhouse Gas Emissions

EPA recommends that the sEA include an estimate of greenhouse gas (GHG) emissions associated with the dredging, construction, and maintenance of Barren Island. The sEA should describe relevant climate change impacts, analyze reasonable alternatives, and/or identify practicable mitigation measures to reduce project related GHG emissions. Specifically, we recommend evaluating alternatives for dredge material location, movement, and placement that may reduce GHG emissions, if practicable.

EPA recommends that GHG emissions associated with the proposal and its alternatives be estimated. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website https://ceq.doe.gov/guidance/ghg-tools-and-resources.html.

The estimated GHG emissions can serve as a reasonable proxy for climate change impacts when comparing the proposal and alternatives. Recognizing that climate impacts are not attributable to any single action but are cumulative from a number of small actions, we do not recommend comparing GHG emissions from a proposed action and alternatives to U.S. or global emissions.

Environmental Justice, Children's Health, and Other Sensitive Receptors

In accordance with Executive Orders 12898 and 13045, any affected communities living with environmental justice (EJ) concerns should be identified and given an opportunity to provide input into the remainder of the NEPA process, including proposed mitigation. The sEA should include information describing what was or will be done to inform these communities about

the project and the potential impacts it will have on their communities, what input has been received to date from the communities, and how that input was or will be used in decision-making.
EPA's environmental justice screening tool, EJSCREEN, can be utilized for screening of potential areas of EJ concern. EJSCREEN can be accessed at: https://www.epa.gov/ejscreen. Providing maps in the NEPA document is a highly effective means of conveying demographic data for potentially impacted communities and where they are located relative to the proposed action.
You may also find helpful information in the Council on Environmental Quality Environmental Justice; Guidance Under National Environmental Policy Act, December 1997, found at https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. This guidance includes six principles for environmental justice analyses to determine any disproportionately high and adverse human health or environmental effects to low-income, minority, and tribal populations.

Recreation/Navigation

We suggest the sEA include a discussion of any likely effects on recreation or commercial use, including potential impacts to fishing, boating, or shipping during construction. We recommend addressing how any potential impacts or closures will be communicated to the public.
We request that you share the draft sEA with EPA and recommend coordination with applicable agencies prior to release of the draft to ensure that any concerns regarding assessment types, methodologies, or data collection are addressed early in the planning process.

Thank you for the opportunity to review this project and for considering our comments as you prepare the sEA. Feel free to contact me at (215-814-2775 or witman.timothy@epa.gov) or Carrie Traver (215-814-2772 or traver.carrie@epa.gov) should you have any questions.

Timothy Witman
Environmental Assessment Branch
Office of Communities, Tribes and Environmental Assessment
Phone: (215) 814-2775
Email: Witman.Timothy@EPA.GOV

USEPA - Mid-Atlantic Region
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

From: Nevshehirlian, Stepan <Nevshehirlian.Stepan@epa.gov>

U.S. FISH AND WILDIFE SERVICE

From: Leasure, Charles W CIV USARMY CENAB (USA)
To: Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject: FW: Dorchester County, MD - Barren Island Restoration
Date: Friday, January 13, 2023 4:20:25 PM
Attachments: Barren Island Borrow Area Coordination Letter_FWS_12Jan2023.pdf

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From: Leasure, Charles W CIV USARMY CENAB (USA)
Sent: Friday, January 13, 2023 3:56 PM
To: genevieve_larouche@fws.gov
Cc: marcia_pradines@fws.gov; sabrina_deeley@fws.gov; matt_whitbeck@fws.gov
Subject: Dorchester County, MD - Barren Island Restoration

Ms. LaRouche,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Genevieve LaRouche
Field Supervisor
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

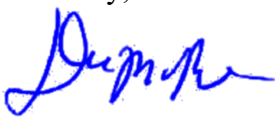
Dear Ms. LaRouche,

The U.S. Army Corps of Engineers, Baltimore District (USACE), is reinitiating coordination with the U.S. Fish and Wildlife Service (FWS) for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report, dated August 24, 2009 (https://planning.erdc.dren.mil/toolbox/library/ChiefReports/mid_ chesapeake.pdf), and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the study, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

The purpose of this letter is to re-engage FWS to coordinate with your agency on Section 7(a)(1) and 7(a)(2) of the Endangered Species Act and the Fish and Wildlife Coordination Act (FWCA) for the start of a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

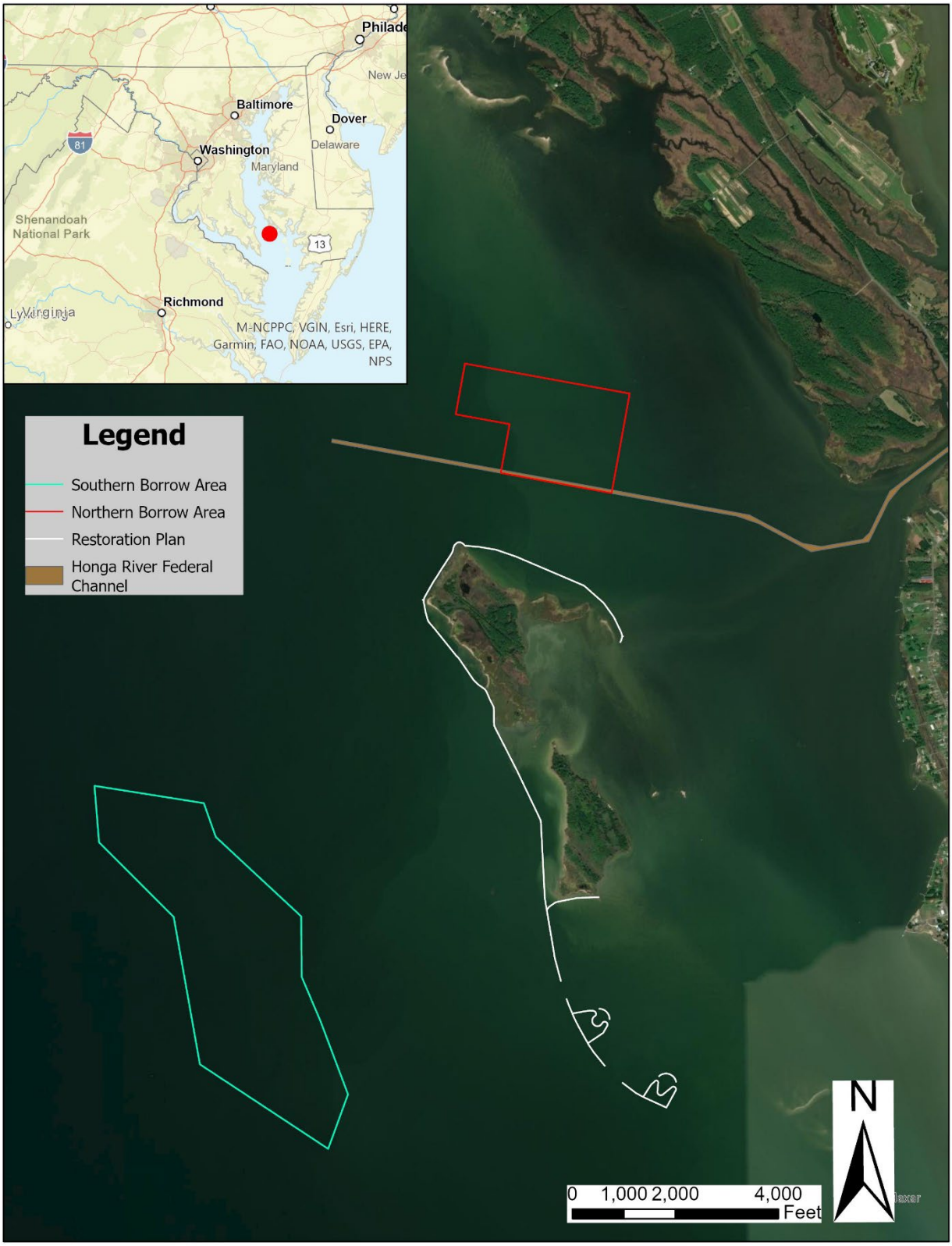
Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the sEA, within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,



Daniel M. Bierly, PE
Chief, Civil Project Development Branch

Cc: Marcia Pradines, Chesapeake Marshlands Wildlife Refuge (marcia_pradines@fws.gov)
Sabrina Deely (sabrina_deeley@fws.gov)
Matthew Whitbeck (matt_whitbeck@fws.gov)



Barren Island Potential Borrow Area Locations

MARYLAND DEPARTMENT OF THE ENVIRONMENT

From:	Leasure, Charles W CIV USARMY CENAB (USA)
To:	Sowers, Angela M CIV USARMY CENAB (USA); Johnson, Christopher A CIV USARMY CENAB (USA)
Subject:	FW: Dorchester County, MD - Barren Island Restoration
Date:	Friday, January 13, 2023 4:20:56 PM
Attachments:	Barren Island Borrow Area Coordination Letter_MDE_12Jan2023.pdf

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From: Leasure, Charles W CIV USARMY CENAB (USA)
Sent: Friday, January 13, 2023 3:59 PM
To: H.Nelson@maryland.gov
Cc: Mary.Phipps-Dickerson@maryland.gov
Subject: Dorchester County, MD - Barren Island Restoration

Ms. Nelson,

USACE – Baltimore District would like to re-initiate coordination with your office for our Barren Island Restoration project.
Specifically, USACE and the Maryland Port Administration will be drafting a sEA for the borrow of material for the restoration efforts.

We look forward to continuing our dialog with your office.

Thank you,
Charles

Charles W. Leasure, AICP
Environmental Policy Advisor
US Army Corps of Engineers
Baltimore District - Planning Division
Civil Project Development Branch

2 Hopkins Plaza
10th Floor Planning - 10-E-06
Baltimore, MD 21201

410-962-5175 - Office
410-829-9664 - Cell

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201

REPLY TO
ATTENTION OF

13 January 2023

Planning Division

Ms. Heather Nelson
Maryland Department of the Environment
Wetlands and Waterways Program
1800 Washington Boulevard
Baltimore, Maryland 21230

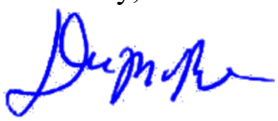
Dear Ms. Nelson,

The U.S. Army Corps of Engineers, Baltimore District, (USACE) is reinitiating coordination with the Maryland Department of the Environment for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. The Mid-Chesapeake Bay Island Project recommends remote island restoration at James Island and Barren Island, both on the Eastern Shore of Maryland and in Dorchester County, MD, through the beneficial use of dredged material. Section 7002 of Water Resources Reform and Development Act of 2014 authorized the Mid-Chesapeake Bay Island Project, as described in the Chief's Report, dated August 24, 2009 (https://planning.erdc.dren.mil/toolbox/library/Chief Reports/mid_ chesapeake.pdf), and the *Mid-Chesapeake Bay Island Ecosystem Restoration Integrated Feasibility Report and Environmental Impact Statement (EIS)*, dated September 2008 (and updated in April 2009). The Record of Decision (ROD) was signed in July 2019 initiating the next phase of the project, Preconstruction Engineering and Design (PED). As part of the PED effort, USACE prepared and completed a supplemental Environmental Assessment (sEA) on March 7, 2022, to update National Environmental Policy Act (NEPA) of 1969, as amended, focused on the Barren Island component of the project. A supplemental Environmental Impact Statement is underway for the James Island component.

The purpose of this letter is to inform your agency of the start of a sEA specifically focused on evaluating a borrow area from which to dredge material for use in restoration efforts as part of the overall restoration of Barren Island. Following coordination with stakeholders USACE identified two potential borrow areas. USACE has completed geotechnical soil borings in those two proposed areas. Based on the results of the geotechnical investigation and potential impacts to submerged aquatic vegetation (SAV), it has been determined that the northern borrow area will not meet the needs of the project, and USACE is now focusing on the southern borrow area (see enclosure).

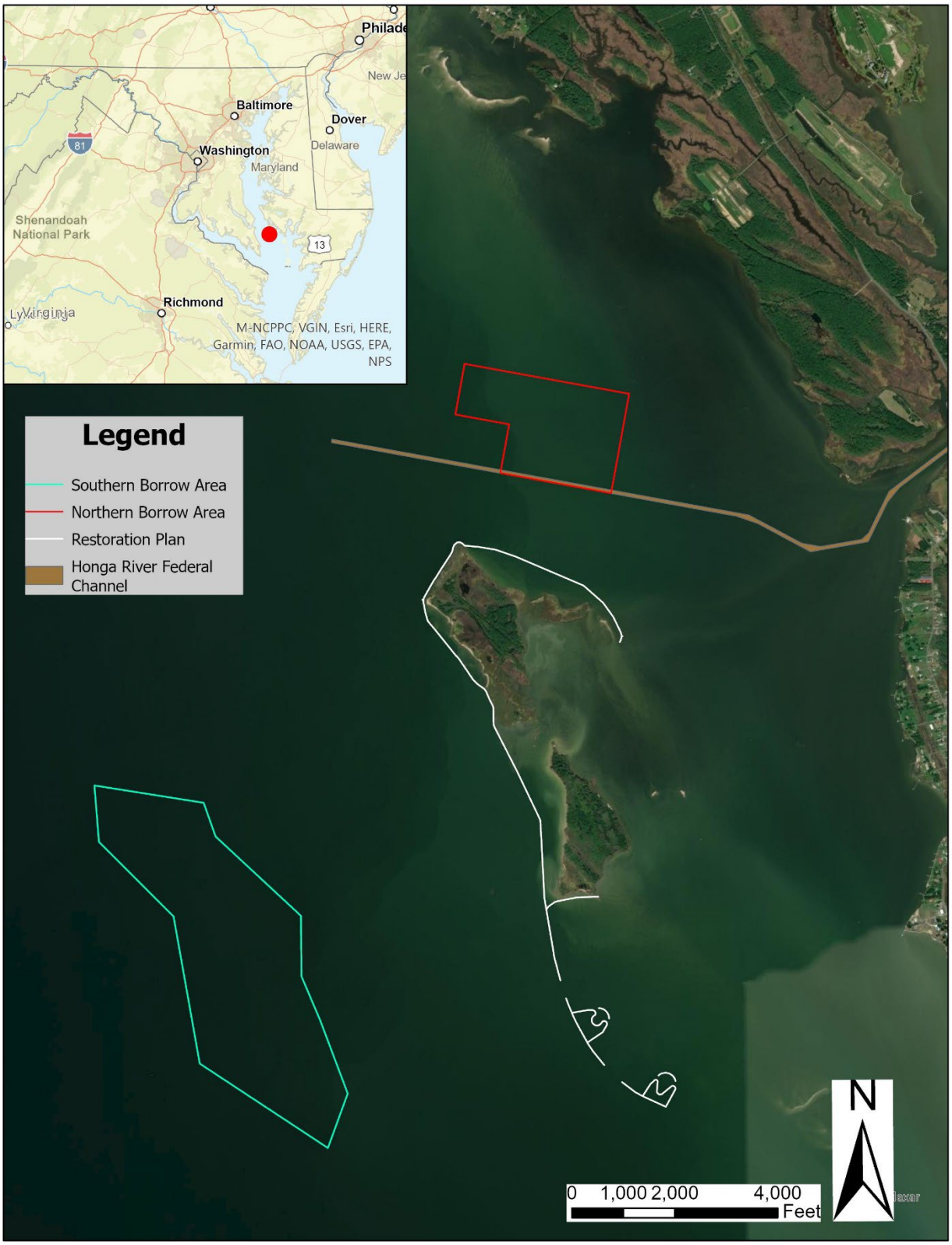
Please provide any information or concerns that your agency may have that will assist USACE with the preparation of the supplemental EA, within 30 days of the date of this letter. If you have any questions regarding this matter, please contact Ms. Angie Sowers, Ph.D., at (410) 962-7440.

Sincerely,



Daniel M. Bierly, PE
Chief, Civil Project Development Branch

CC: Mary Phipps-Dickerson, MDE Wetlands and Waterways Program Reviewer, Dorchester County, mary.phipps-dickerson@maryland.gov



Barren Island Potential Borrow Area Locations

From:	O"donnell, Amy W
To:	Bierly, Daniel M CIV USARMY CENAB (USA); Leasure, Charles W CIV USARMY CENAB (USA); Sowers, Angela M CIV USARMY CENAB (USA)
Cc:	Callahan, Carl R; Deeley, Sabrina M; Thompson-Slacum, Julie; LaRouche, Genevieve
Subject:	[Non-DoD Source] RE: [EXTERNAL] Dorchester County, MD - Barren Island Restoration
Date:	Tuesday, January 24, 2023 1:10:19 PM

Good afternoon,

After reviewing the proposed southern borrow area to be used for dredge material for the Mid-Bay project, while we have concluded dredging in the proposed area will not have detrimental effects on the Service's resources, our comments would reiterate what was written in the draft of the planning aid report previously submitted to US Army Corps. Best management practices should be implemented to avoid impacts to aquatic resources, this includes considering time of year restrictions for dredging operations and abiding by regulations regarding dredging near known or historic shellfish/oyster areas. The action of dredging disrupts sediments and is expected to remove or bury macroinvertebrates which would temporarily negatively impact anadromous and catadromous fishes; dredging is also expected to disturb sea birds using that area, however both of these are temporary impacts and not expected to have long term effects. We would recommend consulting with NOAA regarding essential fish habitat and propensity for marine mammals and marine threatened or endangered species using the area, as dredging is known to have an effect on these species. Thank you for reinitiating the FWCA with our office, we appreciate the opportunity to provide input regarding Fish and Wildlife resources and look forward to continue working together on this project!

Thanks,
Amy O'Donnell

From: Thompson-Slacum, Julie <julie_thompson-slacum@fws.gov>
Sent: Tuesday, January 17, 2023 10:52 AM
To: Deeley, Sabrina M <sabrina_deeley@fws.gov>; Callahan, Carl R <Carl_Callahan@fws.gov>; O'donnell, Amy W <amy_odonnell@fws.gov>
Subject: Fw: [EXTERNAL] Dorchester County, MD - Barren Island Restoration

Julie A. Slacum
Division Chief, Strategic Resource Conservation
177 Admiral Cochrane Drive
Annapolis, MD. 21401
410-573-4595 Office
410-215-0260 Cell

From: LaRouche, Genevieve <Genevieve_LaRouche@fws.gov>
Sent: Tuesday, January 17, 2023 9:52 AM
To: Thompson-Slacum, Julie <julie_thompson-slacum@fws.gov>

APPENDIX B3: Agency Coordination/NEPA Meeting Records

Agency Coordination/NEPA Meeting #1 - Kick-off (November 22, 2022)

Mid-Bay Island Ecosystem Restoration Project

Agency Coordination Meeting - NEPA

22 November 2022; 1:30 - 3:30 p.m.

Meeting information:

Click here to join the meeting

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MGNmNWViZGQtNzg4ZS00MDU4LTg3MjMtODljODViZmZlZDlk%40thread.v2/0?context=%7b%22Tid%22%3a%224c44e1cf-7dae-454f-a18f-c18a6a12f9d7%22%2c%22Oid%22%3a%226f2ecce7-76f4-402c-86c0-a17687c9fbb6%22%7d

Meeting ID: 289 362 348 939 Passcode: N8SXKZ

Or call in (audio only) +1 443-842-5306,,580617403#

Phone Conference ID: 580 617 403#

1. Introductions (10 minutes)

2. Barren Island Phase I Construction (15 minutes)

    a. Status and Construction Schedule
    b. On-going surveys
        i. H&H
        ii. oyster habitat

3. Barren Borrow Area supplemental Environmental Assessment (25 minutes)

    a. Schedule
    b. Array of Alternatives and Screening Criteria
    c. Next Steps

4. James Island supplemental EIS (25 minutes)

    a. NOI update
    b. Status of Coordination Letters and Cooperating Agency Letters
    c. Revised Purpose and Need Statement
    d. Array of Alternatives
    e. Permitting Timetable
    f. Next Steps

5. Barren and James Island Master Plans (35 minutes)

    a. Summary of agency input received
    b. Planned revisions – short and long-term/on-going considerations

6. Discussion and Wrap-up (10 minutes)

Agency Coordination/NEPA Meeting #2 - Geotechnical and Initial Benthic Survey Results (December 20, 2022)

Agency Coordination and Habitat Development Workgroup Meeting
Mid - Chesapeake Bay Island Ecosystem Restoration Project
December 20, 2022 – 9 AM – 12:15
Virtual Meeting
Virtual LINK (if calling in - Number: 443-842-5306 Passcode: 964968691#)

1. **Introductions (10 minutes)** **Maura Morris, MES**

2. **Barren Island NEPA Update (30 minutes)** **Angie Sowers, USACE**
    a. *Borrow Area*
        i. *Cultural resource schedule*
        ii. *Geotechnical results*
        iii. *Benthics – Karin Olsen, Anchor QEA*

3. **Adaptive Management Plan Update (20 minutes)** **Michelle Osborn, MES**
    a. *Overview of AMP process*
    b. *Overview of comments*
    c. *Next steps*

4. **Poplar Marsh Studies (1 hour)** **Michelle Osborn, MES, Jeff Cornwell, and Lori Staver, UMCES**
    a. *Marsh Ratio Reassessment Group – Michelle Osborn*
    b. *Sediment – Jeff Cornwell*
    c. *Vegetation – Lori Staver*
    d. *Cell Design – Lori Staver*

Break: 15 minutes

5. **Bird Island Design (30 minutes)** **Angie Sowers, USACE**
    a. *Design criteria*
    b. *Elevations*

6. **Barren Island Modeling Update (30 minutes)** **Angie Sowers, USACE**

Agency Coordination/NEPA Meeting #3 - Geotechnical and Full Benthic Survey Results and Modeling Overview (February 28, 2023)

Mid-Bay Island Ecosystem Restoration Project

Agency Coordination Meeting – NEPA

28 February 2023, 9:00 AM -11:00 AM

1. Introductions (10 minutes)

2. Barren Island Phase I (10 minutes)
    a. Status and Construction Schedule

3. Bird Island Design Update (15 minutes)

4. Barren Borrow Area supplemental Environmental Assessment Update (15 minutes)

5. Modeling Review (60 minutes)

    a. CSTORM
    b. StormSim
    c. Adaptive Hydraulics

6. Wrap-up and Action Items (10 minutes)

USACE Model Details

Model Name: CSTORM comprised of coupled surge and nearshore wave models (ADCIRC and STWAVE, respectively)
Purpose: To determine surge and wave responses during storm conditions for with-project design and generate water surface elevation and velocity boundary conditions for use with the AdH model.
Inputs: NACCS meteorological forcing data (wind and pressure), NACCS wave spectra data, topography and bathymetry, nodal attributes (e.g. friction factors), with-project feature geometry and height, and Sea level
Outputs: Maximum water surface elevation and velocity at each model grid point and selected save point locations, time series of water surface elevations and velocities at each grid point and selected save point locations, maximum wave height, period, and direction at each model grid cell and selected save point locations, and time series of wave height, period, and direction at each grid cell and selected save point locations.

Model Name: StormSim
Purpose: Storm suite selection, probabilistic coastal hazard analysis, probabilistic structure design, probabilistic life-cycle simulation of hazards (storm wave and water level, RSLC), and structure responses and costs.
Inputs: Historical storm history and meteorology, NACCS cyclone modeling (winds and pressures), NACCS hydrodynamic modeling and aleatory and epistemic hazard uncertainty, bathymetry/topography, feasibility structure design, structure and stone details, historical damage data (Poplar Is.), and structure response epistemic uncertainty.
Outputs: Probabilistic hazards, probabilistic structure design (crest, geometry, armor, toe), life cycle simulation output including life cycles of storms/responses/costs, intra-storm hazard/response/cost time series, and present worth costs.

Model Name: Adaptive Hydraulics (AdH)
Purpose: To model the internal restoration island features (tidal channels, marsh areas, etc.). AdH has the ability to include wetting/drying of the restoration features to account for inundation of the various areas over several tidal cycles. It can model tracers to look at flushing of various inland features over time. This will allow us to review different sizes or alignments of the various features and compare how they perform.
Inputs: AdH is being driven with water surface elevations on the north and south from ADCIRC model results. AdH is being run with predicted tides and river inflows.
Outputs: water surface elevation, depth, velocity vectors, and constituent tracer results (where included) for all nodes within the model domain.

Agency Coordination/NEPA Meeting #4 - Bathymetric Survey Results (March 28, 2023)

Mid-Bay Island Ecosystem Restoration Project

Agency Coordination Meeting – NEPA and Habitat Working Group

28 March 2023; 9:00 am – 1:00 p.m.

Meeting information:
My Webex or MES Teams???

1. Introductions (10 minutes) – Maura Morris/MES

2. Barren Island Phase I Construction (10 minutes) – Angie Sowers/USACE

    a. Construction Update
    b. On-going surveys
        i. H&H – Initial monitoring data (October and November 2022)

NEPA

3. Barren Island Phase 2/3 Planning (30 minutes) – Angie Sowers/USACE
    a. Borrow Area supplemental Environmental Assessment
        i. Bathymetric survey results
        ii. Projected sand quantities needed by project component (Need map of NE sill extent)
        iii. Cultural surveys – ongoing
        iv. Bird islands – reef design considerations
    b. Projected Dredging Quantities/Funding Available Honga River Dredging for Placement and Prioritization of wetland cells for restoration

4. James Island sEIS (5 minutes) – Angie Sowers/USACE
    a. Update – OFD Concurrence Point #2 Completed; report drafting continues
    b. Cultural surveys – ongoing

Break (10 minutes)

Habitat Working Group

5. Wetlands Design Discussion
    a. Design metrics preview (10 minutes) – Angie Sowers/USACE
    b. Evolution of wetland design at Poplar Island (30 minutes) – Lori Staver/UMCES
        i. Elevation and elevation capital, and
        ii. Ongoing wetlands modeling to guide redefining the marsh ratio
    c. Hummock design guidance (15 minutes) – FWS
    d. Vegetation monitoring as it pertains to reference marsh identification (15 minutes) - FWS
    e. Path forward to establish design criteria (15 minutes) – elevation, low to high marsh ratio, channel metrics, use of reference sites – Angie Sowers/USACE

6. Discussion (1 hour)

7. Wrap up/Action Items