U.S. Army Corps of Engineers
Baltimore District

Baltimore Metropolitan
Coastal Storm Risk Management Feasibility Study

APPENDIX H

Agency and Public

Involvement Coordination

FINAL REPORT

April 2024

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

September 9, 2019

Mr. Cosmo Servidio
Regional Administrator
U.S. Environmental Protection Agency – Region 3
1650 Arch Street
Mail Code: 3RA00
Philadelphia, PA 19103-2029

Dear Mr. Servidio,

The U. S. Army Corps of Engineers, Baltimore District (USACE), has begun a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area and develop solutions to reduce future risk (see enclosed study area map). The non-federal sponsor is the Maryland Department of Transportation (MDOT). As part of the feasibility study, we are preparing environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. As the lead federal agency under NEPA, we are inviting your participation as a cooperating agency in the development of the environmental documents (either an Environmental Impact Statement or an Environmental Assessment). The NEPA documents will evaluate environmental impacts from project alternatives. We are currently formulating alternatives, and the draft integrated Feasibility Report and NEPA document is tentatively scheduled to be released in the fall of 2020.

The study is built upon the USACE North Atlantic Coast Comprehensive Study (NACCS), which identified nine high-risk areas that warrant further investigation of coastal storm risk management solutions, including the Baltimore area. More information on the NACCS can found at: https://www.nad.usace.army.mil/CompStudy/.

The study will seek to identify alternative plans to reduce coastal storm risks in ways that support the long-term resilience and sustainability of human communities and the coastal ecosystem. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

Based on your agency's jurisdiction by law and/or special expertise, specifically under the Clean Water Act and NEPA, your participation as a cooperating agency may enhance the interdisciplinary capability of the USACE and contribute to a more thorough evaluation of the proposed plan.

In accordance with the Council on Environmental Quality final implementing regulations for NEPA (40 C.F.R. § 1501.6 and § 1508.5), your agency's specific responsibilities as a cooperating agency would include:

- Participation in agency coordination meetings, conference calls, and site visits;
- Comment and feedback on the NEPA document schedule, overall scope of the document, significant issues to be evaluated, environmental impacts, study and assessment methodologies, range of alternatives, and proposed compensatory mitigation, if applicable;
- Identification of issues related to your agency's jurisdiction by law and special expertise;
- Participation, as appropriate, at public meetings and hearings; and
- Timely review of the draft and final NEPA document prior to public review to communicate any concerns of your agency.

Please provide your written statement of interest to this invitation and an agency point of contact within 30 days of this letter. If you elect not to become a cooperating agency, you must decline this invitation in writing within 30 days of this letter, indicating that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, does not have adequate funds to participate in the project, or does not intend to submit comments on the project. Your response may be transmitted electronically to Ms. Vanessa Campbell, Project Biologist at Vanessa.m.campbell@usace.army.mil. Please be advised that if your agency does not respond within the specified timeframe, your agency will automatically become a cooperating agency.

We look forward to your response to this request and your role as a cooperating agency on this study. If you have questions or would like to discuss the project in more detail or our agencies' respective roles and responsibilities during the preparation of the NEPA document, please contact Ms. Campbell at the email above or by phone at (410) 962-6704.

Sincerely,

Daniel M. Bierly
Chief, Civil Project Development Branch
Planning Division

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 26, 2019

Ms. Vanessa Campbell
U.S. Army Corps of Engineers, Baltimore District
Planning Division,10th Floor
2 Hopkins Plaza
Baltimore, Maryland 21201

Re: Cooperating Agency Role for the Baltimore Metropolitan Coastal Storm Risk Management Study

Dear Ms. Campbell:

The U.S. Environmental Protection Agency (EPA) is responding to your letter dated September 9, 2019, in which you requested our participation as a cooperating agency in the development of an Environmental Impact Statement (EIS) or Environmental Assessment (EA) for the Baltimore Metropolitan Coastal Storm Risk Management Study. EPA is pleased to reply that we are committed to playing an active role as a cooperating agency for the subject project.

The Council of Environmental Quality (CEQ) has determined that a cooperating agency has the responsibility to assist the lead agency by participating in the National Environmental Policy Act (NEPA) process at the earliest possible time. This participation includes: engaging in the scoping process, developing information and preparing environmental analyses in areas of special technical expertise, and providing staff support at the lead agency's request to enhance the lead agency's interdisciplinary capabilities. Our role as a cooperating agency in support of the subject EIS or EA as presented in your letter, will include providing technical assistance for:

- General NEPA work such as scoping, development of the range of alternatives, analysis of the alternatives and their environmental impacts, identification of significant issues, and assessment of Environmental Justice, cumulative impacts, and compensatory mitigation as applicable;
- Clean Water Act (CWA) Section 404 and Clean Air Act (CAA) compliance;
- Data, mapping, and assessment methodologies or models that may offer relevant information or analyses;
- Technical support in the field and participation in related meetings.

As you are aware, there are a number of benefits of enhanced cooperating agency participation in the preparation of NEPA analyses, including: disclosing relevant information early in the analytical process; applying available technical expertise and staff support; and establishing a mechanism for

addressing intergovernmental issues. Given reasonable time frames, we would be pleased to review preliminary project documentation, including draft versions of the document.

Please note that CEQ guidance recognizes that status as a cooperating agency should not be construed as expressing agreement with the lead agency regarding the conclusions to be drawn or the selection of the preferred alternative in the NEPA document. In addition, EPA has a number of independent responsibilities related to the proposed project, and we retain our independent obligations and responsibilities pursuant to Section 309 of the Clean Air Act (CAA), Sections 402(d) and 404(b), (c), and (q) of the CWA.

While we plan on being fully engaged as a cooperating agency, resource constraints may require us to limit our in-person attendance at project meetings. We hope that video or telephone conference opportunities are made available for that contingency.

Thank you for the opportunity to be a cooperating agency on this project. We look forward to working with you to ensure that a scientifically sound and sufficient study is developed for this project. If you need additional assistance, the staff contact for this project is Carrie Traver; she can be reached at 215-814-2772.

Sincerely,

Barbara Rudnick
NEPA Program Coordinator
Office of Communities, Tribes, & Environmental Assessment

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

September 9, 2019

Paul Phifer, PhD
Assistant Regional Director – Ecological Services Northeast Region
Department of the Interior
U.S. Fish and Wildlife Service
Northeast Regional Office
300 Westgate Center Drive
Hadley, MA 01035-9587

Dear Dr. Phifer:

The U. S. Army Corps of Engineers, Baltimore District (USACE), has begun a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area and develop solutions to reduce future risk (see enclosed study area map). The non-federal sponsor is the Maryland Department of Transportation (MDOT). As part of the feasibility study, we are preparing environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. As the lead federal agency under NEPA, we are inviting your participation as a cooperating agency in the development of the environmental documents (either an Environmental Impact Statement or an Environmental Assessment). The NEPA documents will evaluate environmental impacts from project alternatives. We are currently formulating alternatives, and the draft integrated Feasibility Report and NEPA document is tentatively scheduled to be released in the fall of 2020.

The study is built upon the USACE North Atlantic Coast Comprehensive Study (NACCS), which identified nine high-risk areas that warrant further investigation of coastal storm risk management solutions, including the Baltimore area. More information on the NACCS can found at: https://www.nad.usace.army.mil/CompStudy/.

The study will seek to identify alternative plans to reduce coastal storm risks in ways that support the long-term resilience and sustainability of human communities and the coastal ecosystem. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

Based on your agency's jurisdiction by law and/or special expertise, specifically under the Fish and Wildlife Coordination Act and Endangered Species Act, your participation as a cooperating agency will enhance the interdisciplinary capability of the USACE and contribute to a more thorough evaluation of the proposed plan.

In accordance with the Council on Environmental Quality final implementing regulations for NEPA (40 C.F.R. § 1501.6 and § 1508.5), your agency's specific responsibilities as a cooperating agency would include:

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We look forward to your response to this request and your role as a cooperating agency on this study. If you have questions or would like to discuss the project in more detail or our agencies' respective roles and responsibilities during the preparation of the NEPA document, please contact Ms. Campbell at the email above or by phone at (410) 962-6704.

Sincerely,

Daniel M. Bierly
Chief, Civil Project Development Branch
Planning Division

Enclosure

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
http://www.fws.gov/chesapeakebay

October 3, 2019

Daniel M. Bierly,
Chief, Civil Project Development Branch, Planning Division
Army Corps of Engineers, Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201

RE: Request to be a Cooperating or Participating Agency in the Baltimore Coastal Storm Risk Reduction Feasibility Study

Dear Mr. Bierly:

This responds to your letter, dated September 9, 2019, requesting participation of the U.S. Fish and Wildlife Service (Service) as a cooperating or participating agency in a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area. We have reviewed the information provided and the following response is in accordance with the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.) and Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq*.).

Background

The U.S. Army Corps of Engineers, Baltimore District (Corps) is developing a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area with the intent of developing solutions to reduce future risk. The study is built upon the Corps' North Atlantic Comprehensive Study (NACCS) (USACE, 2015) of which the Service was a cooperating agency. The NACCS identified nine high-risk areas that warrant further investigation with regard to coastal storm risk management solutions. One of these nine areas is the Baltimore metropolitan area. The intent of this study is to identify alternative plans to reduce coastal storm risk in a way that supports long-term resilience and sustainability of communities and ecosystems. The study focuses on the Patapsco River in Baltimore City, Baltimore County, and Anne Arundel County. The Corps requests that the Service participates as a cooperating or participating agency as described in the National Environmental Policy Act (NEPA) of 1969.

Service Resources and Response to the Corps Request

The Greater Baltimore region has become an important area to the Service with the establishment of the Baltimore Rivers to Harbor Urban Wildlife Refuge Partnership. The Service has been participating in a number of habitat restoration projects in the Patapsco River watershed including: the Masonville Cove restoration project; Cox Creek/Swan Cove restoration project; Ridgely Cove restoration project; and the Bloede Dam removal project. Objectives of these

projects include increasing aquatic function for resident and migratory fish, including shad and river herring, as well as creating riparian buffers for migratory birds. Because of the importance of the Patapsco River in the Service's Baltimore Rivers to Harbor Urban Wildlife Refuge Partnership, the Service requests to be a cooperating agency in the proposed feasibility study.

The Service appreciates the opportunity to work with the Corps to ensure that the goals of this feasibility study are achieved, while proactively benefitting fish and wildlife resources. If you have any further questions or concerns, please contact Chris Guy of my staff at (410) 573-4529 or chris_guy@fws.gov.

Sincerely,

Julie A. Slacum

Acting For
Genevieve LaRouche
Field Supervisor

References

USACE 2015. https://www.nad.usace.army.mil/CompStudy/

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

September 9, 2019

Gregory Murrill
Division Administrator
Federal Highway Administration - Maryland Division
George H. Fallon Federal Building
31 Hopkins Plaza, Suite 1520
Baltimore, MD 21201

Dear Mr. Murrill:

The U. S. Army Corps of Engineers, Baltimore District (USACE), has begun a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area and develop solutions to reduce future risk (see enclosed study area map). The non-federal sponsor is the Maryland Department of Transportation (MDOT). As part of the feasibility study, we are preparing environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. As the lead federal agency under NEPA, we are inviting your participation as a cooperating agency in the development of the environmental documents (either an Environmental Impact Statement or an Environmental Assessment). The NEPA documents will evaluate environmental impacts from project alternatives. We are currently formulating alternatives, and the draft integrated Feasibility Report and NEPA document is tentatively scheduled to be released in the fall of 2020.

The study is built upon the USACE North Atlantic Coast Comprehensive Study (NACCS), which identified nine high-risk areas that warrant further investigation of coastal storm risk management solutions, including the Baltimore area. More information on the NACCS can found at: https://www.nad.usace.army.mil/CompStudy/.

The study will seek to identify alternative plans to reduce coastal storm risks in ways that support the long-term resilience and sustainability of human communities and the coastal ecosystem. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

Based on your agency's jurisdiction by law and/or special expertise, your participation as a cooperating agency may enhance the interdisciplinary capability of the USACE and contribute to a more thorough evaluation of the proposed plan.

In accordance with the Council on Environmental Quality final implementing regulations for NEPA (40 C.F.R. § 1501.6 and § 1508.5), your agency's specific responsibilities as a cooperating agency would include:

- Participation in agency coordination meetings, conference calls, and site visits;
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- Participation, as appropriate, at public meetings and hearings; and
- Timely review of the draft and final NEPA document prior to public review to communicate any concerns of your agency.

Please provide your written statement of interest to this invitation and an agency point of contact within 30 days of this letter. If you elect not to become a cooperating agency, you must decline this invitation in writing within 30 days of this letter, indicating that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, does not have adequate funds to participate in the project, or does not intend to submit comments on the project. Your response may be transmitted electronically to Ms. Vanessa Campbell, Project Biologist at Vanessa.m.campbell@usace.army.mil. Please be advised that if your agency does not respond within the specified timeframe, your agency will automatically become a cooperating agency.

We look forward to your response to this request and your role as a cooperating agency on this study. If you have questions or would like to discuss the project in more detail or our agencies' respective roles and responsibilities during the preparation of the NEPA document, please contact Ms. Campbell at the email above or by phone at (410) 962-6704.

Sincerely,

Daniel M. Bierly
Chief, Civil Project Development Branch
Planning Division

Enclosure

U.S. Department of Transportation
Federal Highway Administration

Maryland Division

31 Hopkins Plaza, Suite 1520
Baltimore, MD 21201
(410) 962-4440
(410) 962-4054
http://www.fhwa.dot.gov/mddiv/

October 4, 2019

In Reply Refer To:
HDA-MD

Mr. Daniel M. Bierly
Chief, Civil Project Development Branch
Corps of Engineers, Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201

Dear Mr. Bierly:

In response to your September 9, 2019 letter, the Federal Highway Administration accepts U.S. Army Corps of Engineers, Baltimore District's invitation to be a cooperating agency in its undertaking to investigate coastal storm risk problems in the Baltimore metropolitan area.

As a cooperating agency, per 40 CFR §1501.6 and §1508.5, we will participate in agency coordination meetings and site visits as appropriate, provide comment and feedback on NEPA document development and environmental impacts, and identify any issues related to our agency's special expertise.

Thank you for the opportunity to participate as a cooperating agency. We look forward to working with you as the feasibility study is developed. We have designated Ms. Jeanette Mar, Environmental Program Manager as the point of contact (POC) for this study. If you have any questions, she can be reached at (410) 779-7152 or Jeanette.mar@dot.gov.

Sincerely,

Bill Wade
for Gregory Murrill
Division Administrator

cc: Ms. Vanessa Campbell, USACE, Project Biologist

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

September 9, 2019

Michael Pentony
Regional Administrator
Greater Atlantic Regional Fisheries Office
Office of National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930

Dear Mr. Pentony:

The U. S. Army Corps of Engineers, Baltimore District (USACE), has begun a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area and develop solutions to reduce future risk (see enclosed study area map). The non-federal sponsor is the Maryland Department of Transportation (MDOT). As part of the feasibility study, we are preparing environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. As the lead federal agency under NEPA, we are inviting your participation as a cooperating agency in the development of the environmental documents (either an Environmental Impact Statement or an Environmental Assessment). The NEPA documents will evaluate environmental impacts from project alternatives. We are currently formulating alternatives, and the draft integrated Feasibility Report and NEPA document is tentatively scheduled to be released in the fall of 2020.

The study is built upon the USACE North Atlantic Coast Comprehensive Study (NACCS), which identified nine high-risk areas that warrant further investigation of coastal storm risk management solutions, including the Baltimore area. More information on the NACCS can found at: https://www.nad.usace.army.mil/CompStudy/.

The study will seek to identify alternative plans to reduce coastal storm risks in ways that support the long-term resilience and sustainability of human communities and the coastal ecosystem. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

Based on your agency's jurisdiction by law and/or special expertise, specifically under the Magnuson-Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act and Endangered Species Act, your participation as a cooperating agency may enhance the interdisciplinary capability of the USACE and contribute to a more thorough evaluation of the proposed plan.

In accordance with the Council on Environmental Quality final implementing regulations for NEPA (40 C.F.R. § 1501.6 and § 1508.5), your agency's specific responsibilities as a cooperating agency would include:

- Participation in agency coordination meetings, conference calls, and site visits;
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We look forward to your response to this request and your role as a cooperating agency on this study. If you have questions or would like to discuss the project in more detail or our agencies' respective roles and responsibilities during the preparation of the NEPA document, please contact Ms. Campbell at the email above or by phone at (410) 962-6704.

Sincerely,

Daniel M. Bierly
Chief, Civil Project Development Branch
Planning Division

Enclosure

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

October 10, 2019

Daniel Bierly, Chief
Civil Project Development Branch
Planning Division
US Army Corps of Engineers
Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201-2930

RE: Baltimore Metropolitan Coastal Storm Risk Management Feasibility Study

Dear Mr. Bierly:

Thank you for your September 9, 2019, letter inviting us to be a cooperating agency on the preparation of environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, regarding the feasibility study to investigate potential solutions to reduce flood risk associated with coastal storm events in the Baltimore, Maryland metropolitan area. Because this project is covered under the provisions of Section 1005 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), we accept your invitation to become a cooperating agency for this project.

Our role and degree of involvement is dependent on existing staff and fiscal resources, and our contribution to the process will be limited to participating in project meetings and providing written comments in response to your documents prepared as part of the National Environmental Policy Act (NEPA) process. We will provide technical information identifying aquatic species and habitats of concern, identification of issues to be considered and evaluated during the NEPA process and guidance on evaluating, avoiding, and minimizing project effects to our trust resources. At this time, we are unable to undertake any data collection, conduct analyses or to prepare any sections of the NEPA document as our staff and resources are fully committed to other obligatory programs of NOAA Fisheries.

Please note that our involvement as a cooperating agency does not constitute an endorsement of this project, nor does it obviate the need for consultations required under the Magnuson-Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act, and the Endangered Species Act.

We look forward to working with you and your staff as the project moves forward. If you have any questions regarding this matter, please contact Kristy Beard in our Annapolis, MD field office (kristy.beard@noaa.gov) or Brian Hopper in our Protected Resources Division

(brian.d.hopper@noaa.gov) regarding threatened and endangered species listed by us under the ESA.

Sincerely,

for

Louis A. Chiarella
Assistant Regional Administrator
Habitat Conservation Division

cc: Vanessa Campbell, NAB Corps
Kristy Beard, HCD
Mark Murray-Brown, PRD
Chris Vaccaro, PRD
Brian Hopper, PRD

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MARYLAND 21201-2930

September 9, 2019

MaryAnn Tierney
Regional Administrator
Federal Emergency Management Agency-Region III
615 Chestnut Street
One Independence Mall, Sixth Floor
Philadelphia, PA 19106-4404

Dear Ms. Tierney,

The U. S. Army Corps of Engineers, Baltimore District (USACE), has begun a feasibility study to investigate coastal storm risk problems in the Baltimore metropolitan area and develop solutions to reduce future risk (see enclosed study area map). The non-federal sponsor is the Maryland Department of Transportation (MDOT). As part of the feasibility study, we are preparing environmental documents pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. As the lead federal agency under NEPA, we are inviting your participation as a cooperating agency in the development of the environmental documents (either an Environmental Impact Statement or an Environmental Assessment). The NEPA documents will evaluate environmental impacts from project alternatives. We are currently formulating alternatives, and the draft integrated Feasibility Report and NEPA document is tentatively scheduled to be released in the fall of 2020.

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Sincerely,

Daniel M. Bierly
Chief, Civil Project Development Branch
Planning Division

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

Jonathan M. Watson
Marine Habitat Resource Specialist
NOAA Fisheries Greater Atlantic Regional Fisheries Office
Habitat & Ecosystem Services Division (Habitat Conservation)
177 Admiral Cochrane Drive
Annapolis, MD 21401

March 3, 2022

Dear Mr. Watson:

In compliance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers (USACE) Baltimore District, is preparing an Integrated Feasibility Report/ Environmental Assessment for the Baltimore Coastal Storm Risk Management Study in Baltimore, MD. This study originally began in August 2019. The study was paused in February 2020 because of an interruption in funding. Funding was restored and the study re-started in July 2021, and shortly thereafter, coordination with the agencies resumed. On December 29, 2021, USACE (Chris Johnson, Biologist) re-initiated coordination with NOAA Fisheries (Jonathan Watson) via email. The email included information pertaining to past coordination efforts with NOAA Fisheries from November 2019, and asked Mr. Watson for the necessary processes to ensure Essential Fish Habitat (EFH) coordination and documentation was performed accurately and thoroughly as the study progresses.

To reiterate, the study's purpose is to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources, while considering future climate and sea level change scenarios. Two separate study areas are being analyzed for this study; Baltimore City and Martin State Airport, the latter being located in Baltimore County. The objectives for the Baltimore City portion of the study area include reducing economic damages associated with coastal flooding to residential, commercial, industrial, and government buildings while also protecting critical infrastructure, such as utilities, roadways, and electronic services. The objective of the Martin State Airport portion of the study area is to reduce coastal flooding impacts that may disrupt or damage transportation and emergency service infrastructure and assets that support the airport. The initial array of 11 alternatives were screened down to four (Alternatives 4-7). The alternatives and their locations are listed in the table below and shown in the attached maps:

Location	Structural/Non-Structural	Alt 4	Alt 5	Alt 6	Alt 7
Patapsco Wastewater Treatment Plant	Non-Structural	X	X	X	X
Martin State Airport (Baltimore County)	Non-Structural	X	X	X	X
Fort McHenry	Non-Structural	X	X	X	
Inner Harbor	Non-Structural		X	X	
Canton	Non-Structural		X	X	
US Coast Guard Yard	Non-Structural		X	X	X
I-895 & I-95 Tunnel Entrances Floodwall	Structural	X	X	X	X
Seagirt Terminal Floodwall	Structural			X	X
Inner Harbor Floodwalls	Structural				X
Canton Floodwalls	Structural				X
Fells Point Floodwalls	Structural				X
Martin State Airport Perimeter Road Elevation (Baltimore County)	Structural				X

In December 2021, USACE developed an EFH report through the NOAA 'EFH Mapper'. Below are the list of species and life stages found at the location used for the mapper. Additionally, the Atlantic sturgeon and the short-nosed sturgeon were identified through the Endangered Species Act (ESA) Section 7 mapper as potentially occurring within the study area.

EFH Species	Life Stage
Atlantic Butterfish	Adult, larvae, eggs
Atlantic Herring	Adult, juvenile
Black Sea Bass	Adult, juvenile
Bluefish	Adult, juvenile
Clearnose Skate	Adult, juvenile
Little Skate**	Adult
Red Hake	Adult, juvenile, eggs, larvae
Scup	Adult, juvenile
Summer flounder*	Adult, juvenile, larvae
Windowpane Flounder	Adult, juvenile
Winter Skate**	Adult
* = Habitat Areas of Particular Concern (HAPC)	
** = No longer have EFH designated in the Chesapeake Bay, per the Final Omnibus EFH Amendment 2 dated October 25, 2017 (NEFMC2017) and codified in 50 CFR Part 648 *et seq*. (Info provided by Jonathan Watson to Chris Johnson, via email on December 29, 2021).	

Although the species listed above may exist within the vicinity of study areas, there will be no in-water construction, mobilization, or placement of structures during the life of the study. Additionally, state, county, and/or City best management practices and guidelines, as well as erosion and sediment control measures will be followed during the construction process. For these reasons, USACE is seeking concurrence from NOAA Fisheries that no further EFH assessments, worksheets, or coordination are required to complete this study. In the unlikely event changes to the proposed alternatives or the methods of construction occur, USACE will re-engage with your office to re-initiate coordination.

As mentioned previously, an Integrated Feasibility Report/Environmental Assessment will be drafted for this project, including the alternatives. USACE will notify your office when the draft document is available for review, and we would welcome any comments your office may have. If you have any questions about USACE's proposed course of action for NOAA Fisheries resources as they pertain to this project, please contact Chris Johnson by email at Christopher.a.johnson@usace.army.mil, or by phone (443-807-7461).

Sincerely,

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

Enclosure: Site Maps

Non-Structural Measures at Federal Facilities at Fort McHenry

Floodwall around Interstate 95 Highway Tunnel Entrance

Floodwall around Transportation Critical Facilities

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at Martin State Airport

MARTIN STATE AIRPORT INSET MAP

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

US Army Corps of Engineers
Baltimore District

Alternative Plan 4
Critical Infrastructure Plan
Baltimore and Martin State Airport, Maryland

NORTH

0 5,000 10,000
Feet

Map: Critical Infrastructure Plan.mxd
Developed by: USACE Baltimore
Date: 2/18/2022

Non-Structural Measures - Inner Harbor & Canton

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 95 Highway Tunnel Entrance

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at US Coast Guard Facility

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

MARTIN STATE AIRPORT INSET MAP

US Army Corps of Engineers
Baltimore District

Alternative Plan 5
Critical Infrastructure with Non-Structural Measures Plan
Baltimore & Martin State Airport, Maryland

NORTH

Map: Critical Infrastructure + NonStructural Plan.mxd
Developed by: USACE Baltimore
Date: 2/10/2022

0 7,500 15,000
Feet

Non-Structural Measures - Inner Harbor & Canton

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 95 Highway Tunnel Entrance

Seagirt Terminal Floodwall

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at US Coast Guard Facility

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

MARTIN STATE AIRPORT INSET MAP

US Army Corps of Engineers
Baltimore District

Alternative Plan 6
Critical Balanced Plan - Critical Infrastructure with Non-Structural Measures Plan and Port of Baltimore Floodwalls
Baltimore & Martin State Airport, Maryland

NORTH

0 8,000 16,000
Feet

Map: Critical Balanced Plan.mxd
Developed by: USACE Baltimore
Date: 2/10/2022

Inner Harbor Floodwalls

Locus Point North Floodwalls

Floodwall around Transportation Critical Facilities

Floodwall at Wheelabrator Incinerator Plant

Floodwall at Interstate 95 Highway Tunnel Entrance

Seagirt Terminal Floodwall

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Pump Stations (Approximate Location)

Floodwall

Perimeter Road Elevation

MARTIN STATE AIRPORT INSET MAP

Elevation of Airport Perimeter Roads

US Army Corps of Engineers
Baltimore District

Alternative Plan 7
Mid-Tier Plan
Baltimore & Martin State Airport, Maryland

NORTH

Map: Mid-Tier.mxd
Developed by: USACE Baltimore
Date: 2/22/2022

0 8,000 16,000
Feet

From: Johnson, Christopher A CIV USARMY CENAB (USA)
To: Jonathan Watson - NOAA Federal
Cc: Ciaramellano Campbell, Vanessa M CIV USARMY CENAB (USA); Karen Greene - NOAA Federal
Subject: RE: [URL Verdict: Neutral][Non-DoD Source] Re: Baltimore Coastal Storm Risk Management Study
Date: Monday, March 7, 2022 12:57:00 PM

Hi Jonathan,

Thank you for your quick response! The email correspondence below will suffice for our efforts. Again, if any changes to the project occurs, we will be sure to reach back out.

Thanks again,

Chris Johnson
Biologist
U.S. Army Corps of Engineers
Baltimore District, Planning Division
2 Hopkins Plaza Baltimore, MD 21201
Phone: (410) 962-2926
Email: christopher.a.johnson@usace.army.mil

From: Jonathan Watson - NOAA Federal <jonathan.watson@noaa.gov>
Sent: Friday, March 4, 2022 3:18 PM
To: Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil>
Cc: Ciaramellano Campbell, Vanessa M CIV USARMY CENAB (USA) <Vanessa.M.Campbell@usace.army.mil>; Karen Greene - NOAA Federal <karen.greene@noaa.gov>
Subject: Re: [URL Verdict: Neutral][Non-DoD Source] Re: Baltimore Coastal Storm Risk Management Study

Hi Chris,

Thank you for providing this information regarding the Baltimore Coastal Storm Risk Management Study. Based on the information presented in the documents provided and the fact that no in-water work is proposed, we concur that these projects will not directly affect essential fish habitat (EFH) which we work to protect under the authority of the Magnuson Stevens Fisheries Conservation and Management Act. As indicated in your letter, please reconsult with us should project plans change such that effects to EFH are anticipated. Finally, please let us know if you require indicating our concurrence for your records, or if this correspondence will suffice.

Best regards,

Jonathan Watson

On Thu, Mar 3, 2022 at 4:36 PM Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil> wrote:

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

Brian D. Hopper
Protected Resources Division
NOAA Fisheries
Greater Atlantic Regional Fisheries Office
200 Harry S Truman Parkway, Suite 460
Annapolis, MD 21401

March 16, 2022

Dear Mr. Hopper:

In compliance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers (USACE) Baltimore District, is preparing an Integrated Feasibility Study/ Environmental Assessment for the Baltimore Coastal Storm Risk Management Study in Baltimore, MD. This study originally began in August 2019. The study was paused in February 2020 because of an interruption in funding. Funding was restored and the study re-started in July 2021, and shortly thereafter, coordination with the agencies resumed. On December 28, 2021, USACE (Chris Johnson, Biologist) re-initiated coordination with NOAA Fisheries – Protected Resources Division (Brian Hopper) via email. The email included information pertaining to past coordination efforts with NOAA Fisheries – Protected Resources Division from November 2019, and asked Mr. Hopper for the necessary processes to ensure protected and endangered species coordination and documentation was performed accurately and thoroughly as the study progresses.

To reiterate, the study's purpose is to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources, while considering future climate and sea level change scenarios. Two separate study areas are being analyzed for this study; Baltimore City and Martin State Airport, the latter being located in Baltimore County. The objectives for the Baltimore City portion of the study area include reducing economic damages associated with coastal flooding to residential, commercial, industrial, and government buildings while also protecting critical infrastructure, such as utilities, roadways, and electronic services. The objective of the Martin State Airport portion of the study area is to reduce coastal flooding impacts that may disrupt or damage transportation and emergency service infrastructure and assets that support the airport. The initial array of 11 alternatives were screened down to four (Alternatives 4-7). The alternatives and their locations are listed in the table below:

Location	Structural/Non-Structural	Alt 4	Alt 5	Alt 6	Alt 7
Patapsco Wastewater Treatment Plant	Non-Structural	X	X	X	X
Martin State Airport (Baltimore County)	Non-Structural	X	X	X	X
Fort McHenry	Non-Structural	X	X	X	
Inner Harbor	Non-Structural		X	X	
Canton	Non-Structural		X	X	
US Coast Guard Yard	Non-Structural		X	X	X
I-895 & I-95 Tunnel Entrances Floodwall	Structural	X	X	X	X
Seagirt Terminal Floodwall	Structural			X	X
Inner Harbor Floodwalls	Structural				X
Canton Floodwalls	Structural				X
Fells Point Floodwalls	Structural				X
Martin State Airport Perimeter Road Elevation (Baltimore County)	Structural				X

In December 2021, USACE developed a Section 7 Consultation report through the NOAA Endangered Species Act (ESA) Section 7 Mapper. Below are the list of species and life stages found at the location used for the mapper.

ESA Species	Life Stage	Behavior
Atlantic Sturgeon	Adult, Subadult, Juvenile	Migrating & Foraging
Shortnose Sturgeon	Adult	Migrating, Foraging, Overwintering

Although the species listed above may exist within the vicinity of study areas, there will be no in-water construction, mobilization, or placement of structures during the life of the project. Additionally, state, county, and/or City best management practices and guidelines, as well as erosion and sediment control measures will be followed during the construction process. For these reasons, USACE is seeking concurrence from NOAA Fisheries – Protected Resources Division that no further ESA Section 7 coordination is required to complete this study. In the unlikely event changes to the proposed alternatives or the methods of construction occur, USACE will re-engage with your office to re-initiate coordination.

As mentioned previously, an Integrated Feasibility Study/Environmental Assessment will be drafted for this project, including the alternatives. USACE will notify your office when the draft document is available for review, and we would welcome any comments your office may have. If you have any questions about USACE's proposed course of action for ESA resources as they pertain to this project, please contact Chris Johnson by email at Christopher.a.johnson@usace.army.mil, or by phone (443-807-7461).

Sincerely,

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

Enclosure: Site Maps

Non-Structural Measures at Federal Facilities at Fort McHenry

Floodwall around Interstate 95 Highway Tunnel Entrance

Floodwall around Transportation Critical Facilities

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at Martin State Airport

MARTIN STATE AIRPORT INSET MAP

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

US Army Corps of Engineers
Baltimore District

Alternative Plan 4
Critical Infrastructure Plan
Baltimore and Martin State Airport, Maryland

NORTH

0 5,000 10,000
Feet

Map: Critical Infrastructure Plan.mxd
Developed by: USACE Baltimore
Date: 2/18/2022

Non-Structural Measures - Inner Harbor & Canton

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 95 Highway Tunnel Entrance

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at US Coast Guard Facility

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

MARTIN STATE AIRPORT INSET MAP

US Army Corps of Engineers
Baltimore District

Alternative Plan 5
Critical Infrastructure with Non-Structural Measures Plan
Baltimore & Martin State Airport, Maryland

NORTH

Map: Critical Infrastructure + NonStructural Plan.mxd
Developed by: USACE Baltimore
Date: 2/10/2022

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Feet

Non-Structural Measures - Inner Harbor & Canton

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 95 Highway Tunnel Entrance

Seagirt Terminal Floodwall

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Non-Structural Measures at US Coast Guard Facility

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Floodwall

MARTIN STATE AIRPORT INSET MAP

US Army Corps of Engineers
Baltimore District

Alternative Plan 6
Critical Balanced Plan - Critical Infrastructure with Non-Structural Measures Plan and Port of Baltimore Floodwalls
Baltimore & Martin State Airport, Maryland

NORTH

0 8,000 16,000
Feet

Map: Critical Balanced Plan.mxd
Developed by: USACE Baltimore
Date: 2/10/2022

Inner Harbor Floodwalls

Locus Point North Floodwalls

Floodwall around Transportation Critical Facilities

Floodwall at Wheelabrator Incinerator Plant

Floodwall at Interstate 95 Highway Tunnel Entrance

Seagirt Terminal Floodwall

Floodwall at Interstate 895 Highway Tunnel Entrance

Non-Structural Measures at Patapsco Wastewater Treatment Plant

Planning Units

NONSTRUCTURAL MEASURES

Eligible Structures for Floodproofing

STRUCTURAL MEASURES

Pump Stations (Approximate Location)

Floodwall

Perimeter Road Elevation

MARTIN STATE AIRPORT INSET MAP

Elevation of Airport Perimeter Roads

US Army Corps of Engineers
Baltimore District

Alternative Plan 7
Mid-Tier Plan
Baltimore & Martin State Airport, Maryland

NORTH

Map: Mid-Tier.mxd
Developed by: USACE Baltimore
Date: 2/22/2022

0 8,000 16,000
Feet

From: Brian D Hopper - NOAA Federal
To: Johnson, Christopher A CIV USARMY CENAB (USA)
Cc: Ciaramellano Campbell, Vanessa M CIV USARMY CENAB (USA); Jonathan Watson - NOAA Federal
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: Baltimore Coastal Storm Risk Management Study
Date: Thursday, March 17, 2022 8:00:41 AM

Hi Chris,

Thank you for providing the project information. My sincerest apologies for not reaching out sooner, but I've got two formal consultations running back to back and they are taking up 100% of my time. Anyway, your email and letter dated March 16, 2022, regarding the Army Corps' proposed Baltimore Coastal Storm Risk Management Study in Baltimore, MD, requested information on the presence of ESA-listed species under our jurisdiction.

Although four species of sea turtles, shortnose sturgeon, and Atlantic sturgeon originating from five Distinct Population Segments (DPS) are known to occur in the Chesapeake Bay and its rivers and tributaries, based on the activities associated with the project, the location the project, and information you provided in your letter and email, we believe that these species will not be exposed to any direct or indirect effects of the action. Therefore, we do not believe a consultation in accordance with section 7 of the Endangered Species Act (ESA) is necessary. As such, no further coordination on this activity with the NMFS Protected Resources Division is necessary at this time. Should there be additional changes to the project plans or new information becomes available that changes the basis for this determination, further coordination should be pursued. Please contact me (brian.d.hopper@noaa.gov), should you have any questions regarding these comments. If you have any questions about essential fish habitat, please contact Jonathan Watson in our Habitat and Ecosystems Services Division's Annapolis Field Office (jonathan.watson@noaa.gov, 410-295-3152).

Regards,
-Brian

On Wed, Mar 16, 2022 at 4:15 PM Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil> wrote:

> Good Afternoon Brian,
>
> It’s been a few weeks since we last spoke and I know we’ve been trying to schedule a meeting to discuss the Baltimore CSRM project but I understand we just haven’t been able to sync up. So I’m reaching out today to provide some more information in regard to the project.
>
> We’ve started to solidify our alternatives but are still working towards selecting our tentatively selected plan. As we’ve worked through the alternatives, we’ve come to the realization that we will have no in-water construction, mobilization, or placement of structures during the entirety of this study. For these reasons, USACE is seeking concurrence from your agency that no further ESA (Section 7) assessments are required to complete this study. I attached a coordination letter and site maps to this email for your review, reference, and comment at your earliest convenience. If you have any questions, please feel free to reach out to me via email or phone.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

June 1, 2022

Lori Byrne, Environmental Review Specialist
Wildlife and Heritage Service
Maryland Department of Natural Resources
580 Taylor Avenue
Tawes State Office Building E-1
Annapolis, MD 21401
Lori.byrne@maryland.gov

Dear Ms. Byrne:

The U.S. Army Corps of Engineers, Baltimore District (USACE), in cooperation with the Maryland Department of Transportation (MDOT), has restarted a feasibility study to examine the Baltimore metropolitan area for problems, needs, and opportunities for improvements related to coastal storm risk. This study originally began in August 2019. The study was paused in February 2020 because of an interruption in funding. Funding was restored and the study re-started in July 2021. The study's purpose is to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources, while considering future climate and sea level change scenarios. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

This effort is a spin-off study of the North Atlantic Coast Comprehensive Study (NACCS) that was completed in January 2015 and was commissioned by Congress as part of Hurricane Sandy recovery. The purpose of NACCS was to help local communities better understand their changing flood risks due to climate change and provide them tools to be better prepared for the future. The Baltimore metropolitan region was one of nine high-risk areas identified in NACCS as needing further analysis. More information on the NACCS can be found at: https://www.nad.usace.army.mil/CompStudy/.

As part of the feasibility study, USACE will prepare an Integrated Feasibility Report (IFR) and Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. An initial array of 11 alternatives was screened down to four, and as of earlier this month, a Tentatively Selected Plan (TSP) was selected (please see enclosure). The TSP will include structural floodwalls around the I-95 and I-895 tunnel entrances and associated critical infrastructure, and nonstructural floodproofing measures along areas within Locust Point, Riverside, Inner Harbor, Canton, and Fells Point. It should be noted that no in-water work is anticipated with this study. USACE would like to request information or comments from your agency that may assist us with the Baltimore Metropolitan Coastal Storm Risk Management Study NEPA document. Following your review, we would appreciate an opinion as to whether any rare, threatened, endangered, or species in need of conservation exist within the study area.

We look forward to the receipt of your findings and appreciate your assistance with this matter. If additional information is required, please do not hesitate to contact Chris Johnson at (443) 807-7461 or at Christopher.a.johnson@usace.army.mil.

Sincerely,

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

Enclosures

Non-Structural Measures - Fells Point & Canton

Non-Structural Measures - Inner Habor

Non-Structural Measures - Riverside

Non-Structural Measures - North Locust Point

Floodwall at Interstate 95 Highway Tunnel Entrance

Non-Structural Measures - South Locust Point

Floodwall around Transportation Critical Facilities

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

STRUCTURAL MEASURES

Floodwall

SELECT NONSTRUCTURAL MEASURES BASED ON ANNUAL EXCEEDANCE PROBABILITIES (AEP) WATER SURFACE ELEVATIONS

Area for Floodproofing to 5% AEP Elevation

Area for Floodproofing to 2% AEP Elevation

Area for Floodproofing to 1% AEP Elevation

US Army Corps of Engineers
Baltimore District

Tentatively Selected Plan - Alternative Plan 5A
Critical Infrastructure with Select Non-Structural Measures Plan
Baltimore, Maryland

NORTH

Map: Critical Infrastructure with Select NonStructural Plan.mxd
Developed by: USACE Baltimore
Date: 4/1/2022

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Feet

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Jeannie Haddaway-Riccio, Secretary
Allan Fisher, Deputy Secretary

July 15, 2022

Mr. Christopher A. Johnson
U.S. Army Corps of Engineers
Baltimore District, Planning Division
2 Hopkins Plaza
Baltimore, MD 21201

RE: Environmental Review for Baltimore Coastal Storm Risk Management Study (Alternative Plan 5A), Baltimore City and County, Maryland.

Dear Mr. Johnson:

The Wildlife and Heritage Service has no official records for State or Federal listed, candidate, proposed, or rare plant or animal species within the project area shown on the map provided. As a result, we have no specific concerns regarding potential impacts to such species or recommendations for protection measures at this time. If the project changes in the future such that the limits of proposed disturbance or overall site boundaries are modified, please provide us with revised project maps and we will provide you with an updated evaluation.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at lori.byrne@maryland.gov or at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2022.0877.bc/ba
Cc: C. Jones, CAC

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

June 1, 2022

Matt Wallach
Natural Resources Planner
Tidal Wetlands Division
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230
matthew.wallach@maryland.gov

Dear Mr. Wallach:

The U.S. Army Corps of Engineers, Baltimore District (USACE), in cooperation with the Maryland Department of Transportation (MDOT), has restarted a feasibility study to examine the Baltimore metropolitan area for problems, needs, and opportunities for improvements related to coastal storm risk. This study originally began in August 2019. The study was paused in February 2020 because of an interruption in funding. Funding was restored and the study re-started in July 2021. The study's purpose is to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources, while considering future climate and sea level change scenarios. More information on the Baltimore Metropolitan Coastal Storm Risk Management Study can be found at: https://www.nab.usace.army.mil/missions/civil-works/baltimore-coastal-study/.

This effort is a spin-off study of the North Atlantic Coast Comprehensive Study (NACCS) that was completed in January 2015 and was commissioned by Congress as part of Hurricane Sandy recovery. The purpose of NACCS was to help local communities better understand their changing flood risks due to climate change and provide them tools to be better prepared for the future. The Baltimore metropolitan region was one of nine high-risk areas identified in NACCS as needing further analysis. More information on the NACCS can be found at: https://www.nad.usace.army.mil/CompStudy/.

As part of the feasibility study, USACE will prepare an Integrated Feasibility Report (IFR) and Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. An initial array of 11 alternatives was screened down to four, and a Tentatively Selected Plan (TSP) was selected (please see enclosure). The TSP will include structural floodwalls around the I-95 and I-895 tunnel entrances and associated critical infrastructure, and nonstructural floodproofing measures along areas within Locust Point, Riverside, Inner Harbor, Canton, and Fells Point. It should be noted that no in-water work is anticipated with this project.

Between the months of March and May of 2022, USACE (Chris Johnson, Biologist) spoke with Mr. Wallach via teleconference regarding potential impacts to tidal wetlands and/or impacts to areas within the Maryland 1972 Tidal Wetlands Boundary. A specific area of concern was identified east of the Ft. McHenry West Ventilation Building. Based on the information provided by Chris Johnson on the proposed project impacts, it was determined through verbal coordination with Mr. Wallach that USACE will not need to apply for a tidal wetland permit through MDE's Tidal Wetland Division. This is based on the premise that

the project impacts will be negligible and will not have any impacts to tidal wetlands or impacts within the Maryland 1972 Tidal Wetland Boundary. In the unlikely event changes to the proposed alternatives or the methods of construction occur, USACE will re-engage with your office to re-initiate coordination. If all accounts and statements presented in this letter are accurate, we look forward to receiving your concurrence. If additional information is required, please do not hesitate to contact Chris Johnson at (443) 807-7461 or at Christopher.a.johnson@usace.army.mil.

Sincerely,

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

Enclosure

From: Matthew Wallach -MDE-
To: Johnson, Christopher A CIV USARMY CENAB (USA)
Cc: Tammy Roberson -MDE-
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: Baltimore Coastal coordination letter
Date: Wednesday, June 1, 2022 4:49:07 PM

Hi Chris,

Thank you for discussing the project and for providing the map and Agency Coordination Letter. Below is a response to confirm what was previously discussed. I cc'd my Chief, Tammy Roberson on this email.

Thank you again for sharing the proposed floodwall project with MDE. As we discussed, a section of the project overlaps State Tidal Wetlands as was determined in the Maryland 1972 Tidal Wetland Maps. The State of Maryland reserves the right to regulate any fastland that was previously documented as State Tidal Wetlands in 1972, including any projects proposed in, on, over, or under the land that was previously State Tidal Wetlands. However, in this case, after discussing the proposal, we determined that the area in question is relatively small, is functioning as uplands, and no impacts are proposed to any area functioning as State Tidal Wetlands. Based on this, we determined that the State would not require review or authorization for the proposed work. This determination was made solely for this project based on how it was presented to the Department. Any future projects may have a different determination and if the scope of this project changes, the Department reserves the right to request an application to review the proposed work.

Matt Wallach
Natural Resources Planner
Tidal Wetlands Division
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230
matthew.wallach@maryland.gov
410-207-0893
Website | Facebook | Twitter

On Wed, Jun 1, 2022 at 1:22 PM Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil> wrote:

> Good Afternoon Matt,
>
> I'm following up with you from our phone conversation yesterday regarding the Baltimore Coastal Storm Risk Management study and potential impacts to tidal wetlands and/or areas within the 1972 Tidal Wetland Boundary. Attached is a coordination letter with project details as well as information pertaining to our phone conversations. Just to reiterate, this letter is to close the loop on any potential impacts to tidal wetlands or within the '72 boundary for our (USACE's) records. If all the information in the letter is correct and you're comfortable with how everything is stated, can you please provide your concurrence in

either an email response back to me or in a letter, whichever is easiest for you.

Thanks again for all your help with this process and please feel free to reach out with any questions or concerns.

Chris Johnson

Biologist

U.S. Army Corps of Engineers

Baltimore District, Planning Division

2 Hopkins Plaza Baltimore, MD 21201

Phone: (410) 962-2926

Email: christopher.a.johnson@usace.army.mil

Non-Structural Measures - Fells Point & Canton

Non-Structural Measures - Inner Habor

Non-Structural Measures - Riverside

Non-Structural Measures - North Locust Point

Floodwall at Interstate 95 Highway Tunnel Entrance

Non-Structural Measures - South Locust Point

Floodwall around Transportation Critical Facilities

Floodwall around Transportation Critical Facilities

Floodwall at Interstate 895 Highway Tunnel Entrance

STRUCTURAL MEASURES

Floodwall

SELECT NONSTRUCTURAL MEASURES BASED ON ANNUAL EXCEEDANCE PROBABILITIES (AEP) WATER SURFACE ELEVATIONS

Area for Floodproofing to 5% AEP Elevation

Area for Floodproofing to 2% AEP Elevation

Area for Floodproofing to 1% AEP Elevation

US Army Corps of Engineers
Baltimore District

Tentatively Selected Plan - Alternative Plan 5A
Critical Infrastructure with Select Non-Structural Measures Plan
Baltimore, Maryland

NORTH

Map: Critical Infrastructure with Select NonStructural Plan.mxd
Developed by: USACE Baltimore
Date: 4/1/2022

0 3,000 6,000
Feet

From: Danielle Spendiff -MDE-
To: Johnson, Christopher A CIV USARMY CENAB (USA)
Cc: Kristen Fleming -DNR-; Ciaramellano Campbell, Vanessa M CIV USARMY CENAB (USA)
Subject: Re: [URL Verdict: Neutral][Non-DoD Source] USACE Baltimore CSRM Study- Federal Consistency Determination
Date: Wednesday, February 22, 2023 8:33:11 AM

Yes this is the official concurrence- thanks!

On Tue, Feb 21, 2023 at 3:56 PM Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil> wrote:

> Hi Danielle,
>
> Thank you for the update! Can I use this email as the official consistency concurrence for the project?
>
> Thanks again!
>
> Chris Johnson
>
> Biologist
>
> U.S. Army Corps of Engineers
>
> Baltimore District, Planning Division
>
> 2 Hopkins Plaza Baltimore, MD 21201
>
> Office: (410) 962-2926
>
> Cell: (443) 807-7461
>
> Email: christopher.a.johnson@usace.army.mil
>
> ---
>
> **From:** Danielle Spendiff -MDE- <danielle.spendiff1@maryland.gov>
> **Sent:** Friday, February 17, 2023 7:04 PM
> **To:** Johnson, Christopher A CIV USARMY CENAB (USA) <Christopher.A.Johnson@usace.army.mil>
> **Cc:** Kristen Fleming -DNR- <kristen.fleming@maryland.gov>
> **Subject:** [URL Verdict: Neutral][Non-DoD Source] USACE Baltimore CSRM Study- Federal Consistency Determination
>
> Hello Chris,

I am responding to your request for Federal consistency concurrence under CZMA for the following US Army Corps of Engineers (USACE) project located in Baltimore, MD:

USACE Baltimore Coastal Storm Risk Management Study, Tentatively Selected Plan - Alternative Plan 5A: Critical Infrastructure with Select Non-Structural Measures Plan. Structural measures include floodwall installation around transportation critical facilities; nonstructural measures include floodproofing in various locations.

Based on our review of the information provided, the activities described above are consistent with the enforceable coastal policies of the Maryland Coastal Zone Management Program (including but not limited to, TP1 – Sustainability Analysis of Transportation Projects, TP2 – Public Engagement in Transportation Project Planning, TP3 – Projects Must Support Multi-Modal Transportation, TP5 – Transportation Projects Must Consider the Needs of Bicyclists & Pedestrians, and 5.1.4 - Flood Hazards & Community Resilience Policies), subject to the following conditions:

- These projects must comply with all applicable Critical Area Policies under 5.2.1, "The Chesapeake and Atlantic Coastal Bays Critical Area" to the maximum extent practicable

Please note that this determination does not obviate the applicant's responsibility to obtain any other State or local approvals that may be necessary for the project.

If you have any questions regarding this determination, please do not hesitate to contact me.

Thank you,

--

Danielle A. Spendiff
Chief, Regulatory & Customer Service Division
Federal Consistency Coordinator
Water & Science Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

danielle.spendiff1@maryland.gov
410-537-4023 (O)
410-913-8524 (M)
Website | Facebook | Twitter

Click here to complete a three question customer experience survey.

Click here to complete a three question customer experience survey.

--

Danielle A. Spendiff
Chief, Regulatory & Customer Service Division
Federal Consistency Coordinator
Water & Science Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230
danielle.spendiff1@maryland.gov
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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
http://www.fws.gov/chesapeakebay

April 6, 2022

Colonel Estee S. Pinchasin
District Engineer
U.S. Army Corps of Engineers
10 South Howard Street
Baltimore, MD 21201

Attn: Charles Leasure, Environmental Team Lead, Planning Division

RE: U.S. Fish and Wildlife Coordination Act 2(b) Report for the Baltimore Coastal Storm Risk Management Feasibility Study

Dear Colonel Pinchasin:

This letter constitutes the report of the U.S. Fish and Wildlife Service (Service) on the proposed Baltimore Coastal Storm Risk Management Feasibility Study in Baltimore City, MD. It is submitted in accordance with Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat 401, as amended; 16 U.S.C. *et seq*.) and Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1513 *et seq*.). The present report summarizes pertinent information and sets forth the Service's official position on the U.S. Corps of Engineers, Baltimore Districts (Corps) recommended plan as described below.

Project Description

The U.S. Army Corps of Engineers (Corps) requested assistance from the U.S. Fish and Wildlife Service (Service) in identifying positive and/or negative effects from a project along the Baltimore metro area within the City of Baltimore, Anne Arundel County and Baltimore County. The objective of this study is to investigate coastal flooding problems, needs and potential solutions for key locations in the Baltimore coastal study area. The Baltimore Coastal Study is a 3-year, $3 million study cost-shared evenly between the U.S. Army Corps of Engineers, Baltimore District, and the Maryland Department of Transportation, which is the non-Federal sponsor. A Federal cost-sharing agreement was signed in August 2019 between the agencies. The effort is a spin-off study of the 2-year North Atlantic Coast Comprehensive Study (NACCS) that was completed in January 2015 and was commissioned by Congress as part of Hurricane Sandy recovery. The purpose of NACCS was to help local communities better understand their changing flood risks due to climate change and provide them tools to be better prepared for the future. The Baltimore metropolitan region was one of nine high-risk areas identified in NACCS as needing further analysis. The goal is to reduce coastal flood risk at key locations to people, properties, infrastructure and resources in the study area, considering future

climate and sea level change scenarios. The intent of this study is to identify alternative plans to reduce coastal storm risk in a way that supports long-term resilience and sustainability of communities and ecosystems.

The tentatively selected plan (TSP) is a combination of certain components from previously proposed Alternative 5, and is being referred to as Alternative 5B, Critical Infrastructure and Select Nonstructural Plan. The structural components are floodwalls around the I-95 and I-895 tunnel entrances and associated critical infrastructure such as tunnel ventilation buildings. The nonstructural components associated with this alternative are floodproofing of select structures in the Inner Harbor, Canton, Fells Point and Locust Point areas. These were grouped into structures vulnerable under three storm scenarios and yielded the highest net benefits from areas proposed under the TSP (Appendix). As for the components previously discussed with the Corps regarding Martin State Airport, those are currently not included in the TSP and therefore will not be discussed in this document.

Service Comments

The Service reviewed the Feasibility Study with the objective of identifying the alternative that would meet the purpose and need while providing the largest benefit to fish and wildlife habitat. Under further discussion with the Corps, because the alternative proposed is in highly developed area with little wildlife value, it was agreed upon that a Fish and Wildlife Coordination Act letter would stand in place of a Planning Aid Report. This letter will still discuss potential for effects to fish and wildlife resources within the project area.

Within the Patapsco River, there are not any submerged aquatic vegetation (SAV) beds near the proposed project area. The Service recommends monitoring areas for runoff during construction to avoid potentially overloading the river with nutrients/sediment.

Wetland habitats are considered a trust resource, which are natural resources the Service has been entrusted with protecting for the benefit of American people. The Service's responsibility for protecting wetland habitats comes largely from the Fish and Wildlife Coordination Act; significantly concerned about wetland loss and the subsequent impacts on fish and wildlife populations. According to the February 23, 2022 data received from the National Wetlands Inventory Mapper, the main wetland type that occurs near any of the project areas are estuarine/marine deepwater wetlands. Because the project consists of construction on land, it is not expected to have negative effect on diadromous fish in the area. Major effects are not expected for wetlands, as proposed construction alternatives are only slated to place material on land. No construction is proposed to occur in the water, only on hardened shoreline. When possible, the construction should avoid placement via waterways to mitigate potential for displacement of benthic communities and fish and wildlife resources, and as previously suggested monitor any runoff during construction to avoid additional nutrient deposition to the Patapsco.

Information obtained from Atlantic Coast Joint Venture was through the American Black Duck Prioritization Tool on February 25, 2022 (Appendix). The Patapsco River portion of the project

area falls within Maintenance Watersheds. These areas currently contain enough food to support black duck population objectives. Work in these areas could include restoring or protecting addition habitat should current habitat be lost or degraded. Because the project alternatives being considered are only expected to alter developed areas, areas not suitable for black duck nesting, the project alternatives are not expected to have any effect on American black ducks expected to be in that area.

This letter also considers at-risk species - species whose population is in decline but are not yet determined to be threatened or endangered. This includes species that are proposed for listing, candidates for listing, and/or petitioned for listing under the Endangered Species Act. The Service may also consider species of greatest conservation need as identified by the states. A polygon of the project area was mapped within IPaC, which generated a list of migratory birds and Birds of Conservation Concern within the Patapsco River project area. Several at-risk species were identified within the IPaC list as well, including monarch butterfly (*Danaus plexippus*), American oystercatcher (*Haematopus pilliatus*), cerulean warbler (*Dendroica cerulea*), Eastern whip-poor-will (*Antrostomus vociferus*), ruddy turnstone (*Arenaria interpres morinella*) and wood thrush (*Hylocichla mustilina*). Common terns (*Sterna hirundo)* and royal tern (*Sterna Thalasseus maximus*) also could be seen within the project area. Royal terns are not known to nest in the project area, there is an annual nesting common tern colony on a barge off the coast of Masonville Cove, it is approximately one mile from the nearest construction area. Due to the location in the TSP, because it is highly developed and does not offer suitable foraging or nesting habitat and offers a good bit of distance between the construction areas and potential nesting sites, it is not expected that this project will have any negative effects on these species.

IPaC identified only one threatened/endangered species, the northern long-eared bat (*Myotis septentrionalis*). Although it was identified in the screening, the developed area is not suitable habitat for this species, therefore it has been determined that the project is not likely to adversely affect the species. The bald eagle was also identified by IPaC due to its protection under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The nearest bald eagle nest to the project area is at Masonville Cove, approximately one mile from the nearest construction activity, therefore the TSP is not expected to have any affect on the bald eagle population expected to occur within the project area.

Conclusion

There are several species that are identified as utilizing the project area that are at-risk, threatened/endangered, and/or state listed as threatened or endangered. The Wildlife and Heritage Services within Maryland Department of Natural Resources is responsible for the identification and protection of these species in Maryland. Best management practices should be implemented to avoid detrimental impacts to aquatic resources, i.e., monitoring any runoff that occurs due to construction. Coordination with National Marine Fisheries Service (NMFS) is recommended regarding potential impacts to Essential Fish Habitat and NMFS trust resources. Consultation pursuant to the Endangered Species Act of 1973 will also be required with the Service if the presence of any threatened and endangered species occurs within the project area

of impact. Due to the nature of this project, and because the alternative outlined consists of construction in highly developed areas with low fish and wildlife resources, the species identified to be within the project area are not likely to be negatively impacted by this project. This alternative should minimize any adverse effects to Service trust resources and optimize for environmentally compatible options if possible. If there are any questions, please contact Amy O'Donnell, of my staff, at amy_odonnell@fws.gov.

Sincerely,

Genevieve LaRouche
Field Supervisor

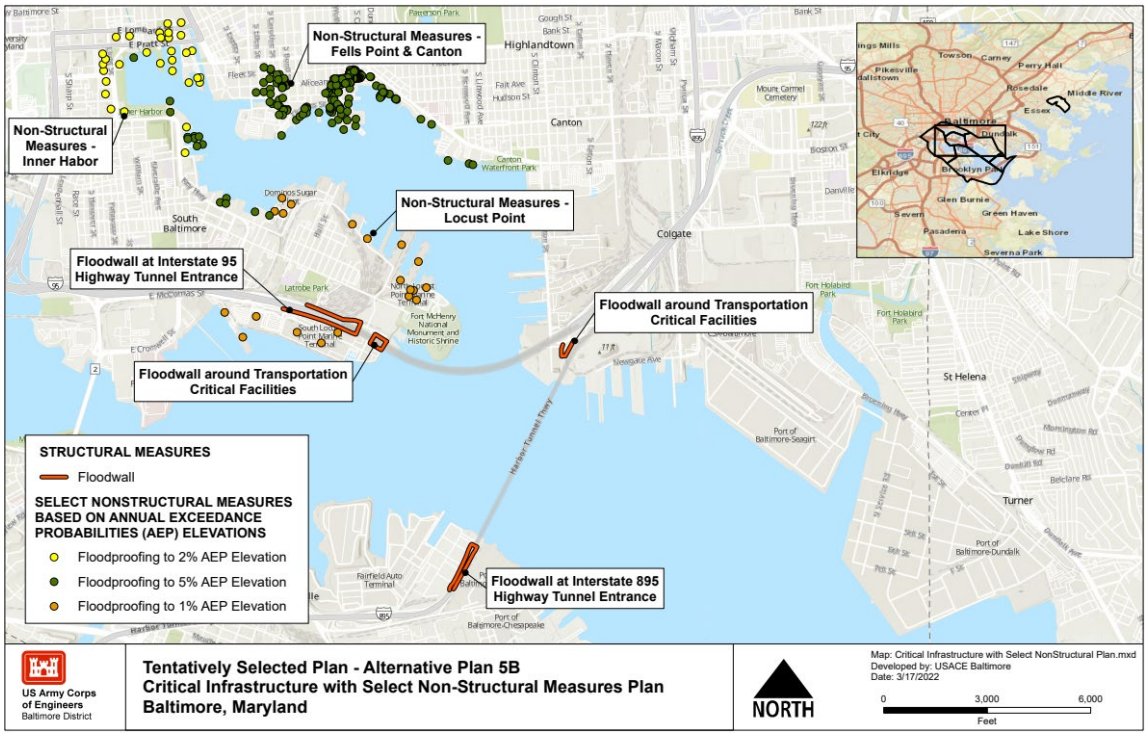
References

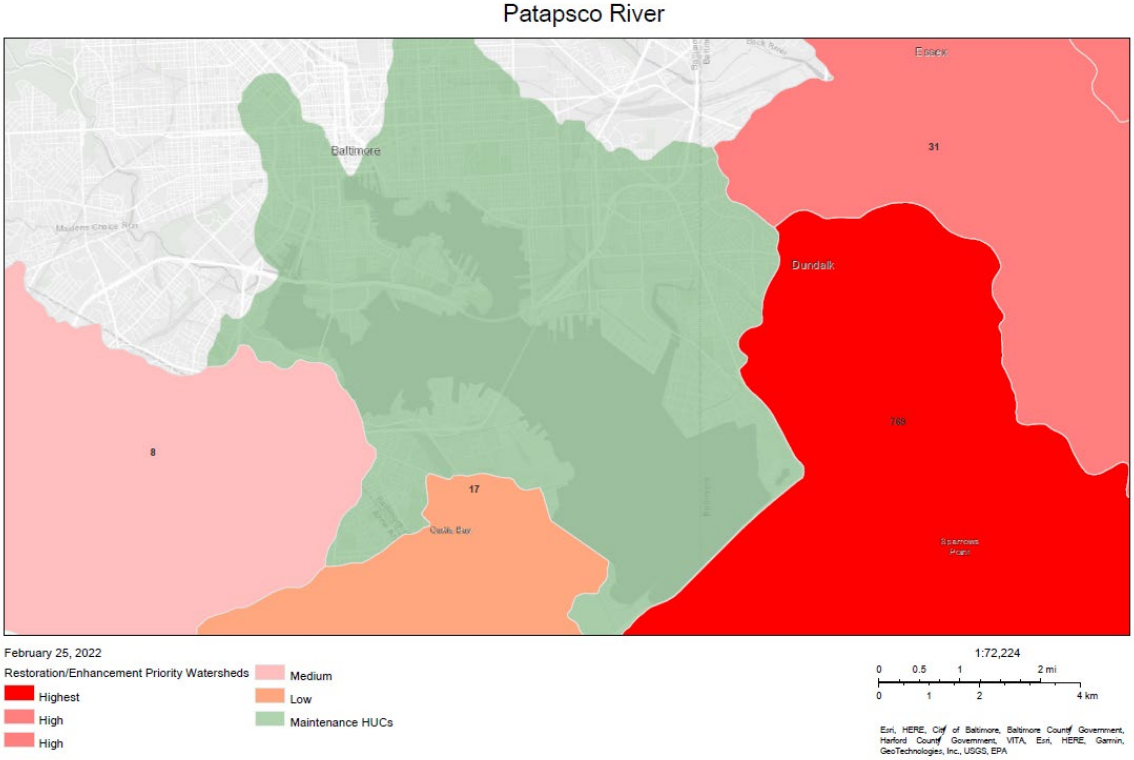
Atlantic Coast Joint Venture (ACJV) American Black Duck. 2020 https://acjv.org/american-black-duck/ Accessed February 2022.

U.S. Fish and Wildlife Information for Planning and Conservation (IPaC). 2022 https://ipac.ecosphere.fws.gov/ Accessed February 2022.

U.S. Fish and Wildlife Wetlands Mapper.2022. https://www.fws.gov/wetlands/data/Mapper.html Accessed February 2022.

Appendix


Non-Structural Measures - Fells Point & Canton
Non-Structural Measures - Inner Habor
Non-Structural Measures - Locust Point
Floodwall at Interstate 95 Highway Tunnel Entrance
Floodwall around Transportation Critical Facilities
Floodwall around Transportation Critical Facilities
Floodwall at Interstate 895 Highway Tunnel Entrance
STRUCTURAL MEASURES
Floodwall
SELECT NONSTRUCTURAL MEASURES BASED ON ANNUAL EXCEEDANCE PROBABILITIES (AEP) ELEVATIONS
Floodproofing to 2% AEP Elevation
Floodproofing to 5% AEP Elevation
Floodproofing to 1% AEP Elevation
US Army Corps of Engineers
Baltimore District
Tentatively Selected Plan - Alternative Plan 5B
Critical Infrastructure with Select Non-Structural Measures Plan
Baltimore, Maryland
NORTH
Map: Critical Infrastructure with Select NonStructural Plan.mxd
Developed by: USACE Baltimore
Date: 3/17/2022
0 3,000 6,000
Feet


Patapsco River
Baltimore
Essex
Dundalk
31
8
17
Curtis Bay
February 25, 2022
Restoration/Enhancement Priority Watersheds
Highest
High
High
Medium
Low
Maintenance HUCs
1:72,224
0 0.5 1 2 mi
0 1 2 4 km
Esri, HERE, City of Baltimore, Baltimore County Government, Harford County Government, VITA, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To: February 04, 2022
Project Code: 2022-0003498
Project Name: Baltimore Coastal Storm Risk Management Feasibility Study

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan
(http://www.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Project Code: 2022-0003498
Event Code: None
Project Name: Baltimore Coastal Storm Risk Management Feasibility Study
Project Type: Land Preservation
Project Description: The Baltimore Coastal Storm Risk Management Feasibility Study seeks to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources considering future climate and sea level rise scenarios to support resilient communities in Baltimore.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.24312990000007,-76.5707463544322,14z

Counties: Anne Arundel, Baltimore, and Baltimore counties, Maryland

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key

Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis*	Threatened

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/10477

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html).

Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER POND

- PUBHx
- PUSAx
- PUSCx
- PUBFh
- PUBHh
- PUBH
- PUBFx

ESTUARINE AND MARINE WETLAND

- E2US2P
- E2USP
- E2USN
- E2EM1P6
- E2EM1Px
- E2EM1P

FRESHWATER EMERGENT WETLAND

- PEM1/SS1F
- PEM1Fx
- PEM1R
- PEM1/SS1Cx
- PEM1E
- PEM1D
- PEM1Cd
- PEM5A
- PEM1C
- PEM1F
- PEM1Eh

- PEM1Ch
- PEM1Cx
- PEM1Fh
- PEM1Ax

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1/EM5A
- PFO1C
- PFO1R
- PFO1S
- PSS1R
- PFO1A
- PFO1Fx
- PFO1/SS1Ch

RIVERINE

- R1UBV
- R5UBH
- R4SBC
- R2UBH
- R1USQ

ESTUARINE AND MARINE DEEPWATER

- E1UBL
- E1UBLh
- E1UBL6
- E1UBLx

LAKE

- L1UBK
- L2USCh

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Baltimore Coastal Storm Risk Management Feasibility Study

LOCATION

Anne Arundel, Baltimore, and Baltimore counties, Maryland

DESCRIPTION

Some(The Baltimore Coastal Storm Risk Management Feasibility Study seeks to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources considering future climate and sea level rise scenarios to support resilient communities in Baltimore.)

Local office

Chesapeake Bay Ecological Services Field Office

(410) 573-4599
(410) 266-9127

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307

http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Northern Long-eared Bat Myotis septentrionalis Wherever found	Threatened

This species only needs to be considered if the following condition applies:

- Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9045

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found	Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/10477

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found	Candidate

This species only needs to be considered if the following condition applies:

- The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html).

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES

THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

American Oystercatcher Haematopus palliatus — Breeds Apr 15 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8935

Bald Eagle Haliaeetus leucocephalus — Breeds Oct 15 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Black Scoter Melanitta nigra — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black-billed Cuckoo Coccyzus erythropthalmus — Breeds May 15 to Oct 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9399

Blue-winged Warbler Vermivora pinus — Breeds May 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Bobolink Dolichonyx oryzivorus — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Brown Pelican Pelecanus occidentalis — Breeds Jan 15 to Sep 30
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/6034

Canada Warbler Cardellina canadensis — Breeds May 20 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cerulean Warbler Dendroica cerulea — Breeds Apr 29 to Jul 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/2974

Common Loon gavia immer — Breeds Apr 15 to Oct 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/4464

Double-crested Cormorant phalacrocorax auritus — Breeds Apr 20 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/3478

Eastern Whip-poor-will Antrostomus vociferus — Breeds May 1 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Golden Eagle Aquila chrysaetos — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Gull-billed Tern Gelochelidon nilotica — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9501

Hudsonian Godwit Limosa haemastica — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Kentucky Warbler Oporornis formosus — Breeds Apr 20 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Long-tailed Duck Clangula hyemalis — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/7238

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Purple Sandpiper Calidris maritima — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-breasted Merganser Mergus serrator — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-necked Phalarope Phalaropus lobatus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-throated Loon Gavia stellata — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Ring-billed Gull Larus delawarensis — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Royal Tern Thalasseus maximus — Breeds Apr 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Ruddy Turnstone Arenaria interpres morinella — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Rusty Blackbird Euphagus carolinus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Surf Scoter Melanitta perspicillata — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

White-winged Scoter Melanitta fusca — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wood Thrush Hylocichla mustelina — Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

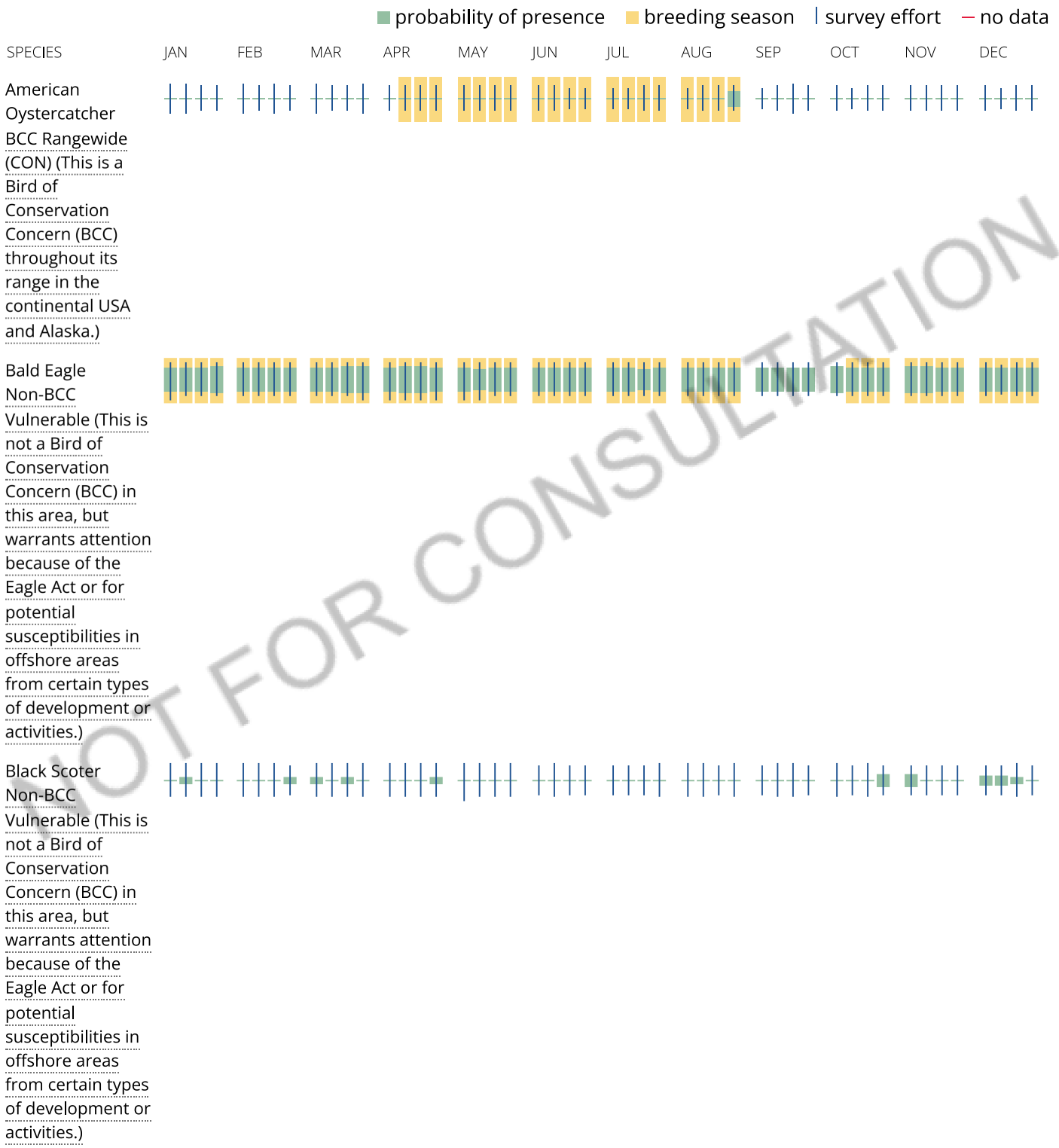
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

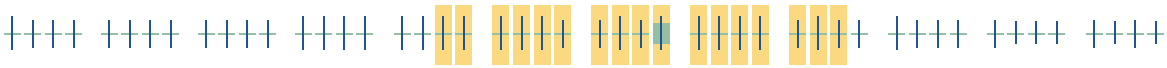
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

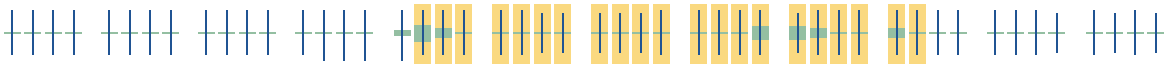
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Black Skimmer BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

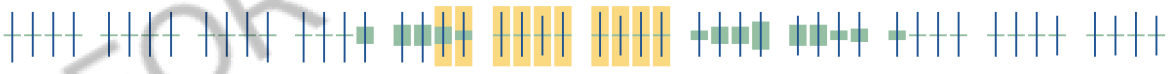


Black-billed Cuckoo BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

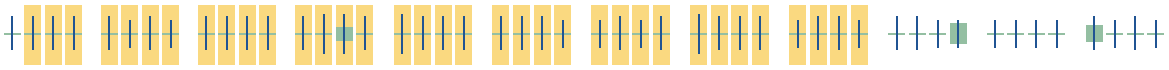


Blue-winged Warbler BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

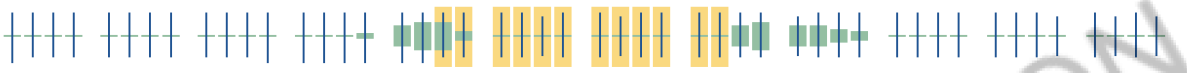
Bobolink BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Brown Pelican Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

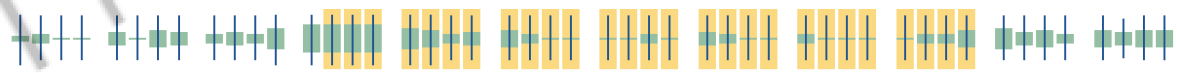


Canada Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Cerulean Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

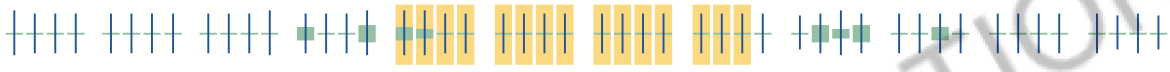
Common Loon Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Double-crested Cormorant
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Eastern Whip-poor-will
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

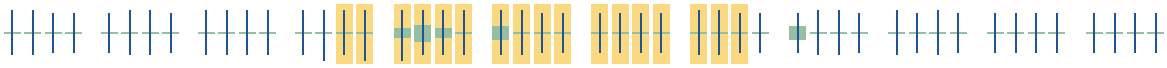


Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

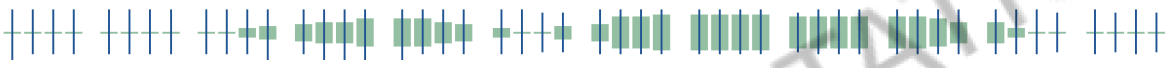
Gull-billed Tern
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Hudsonian Godwit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

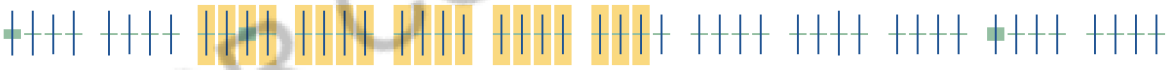
Kentucky Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



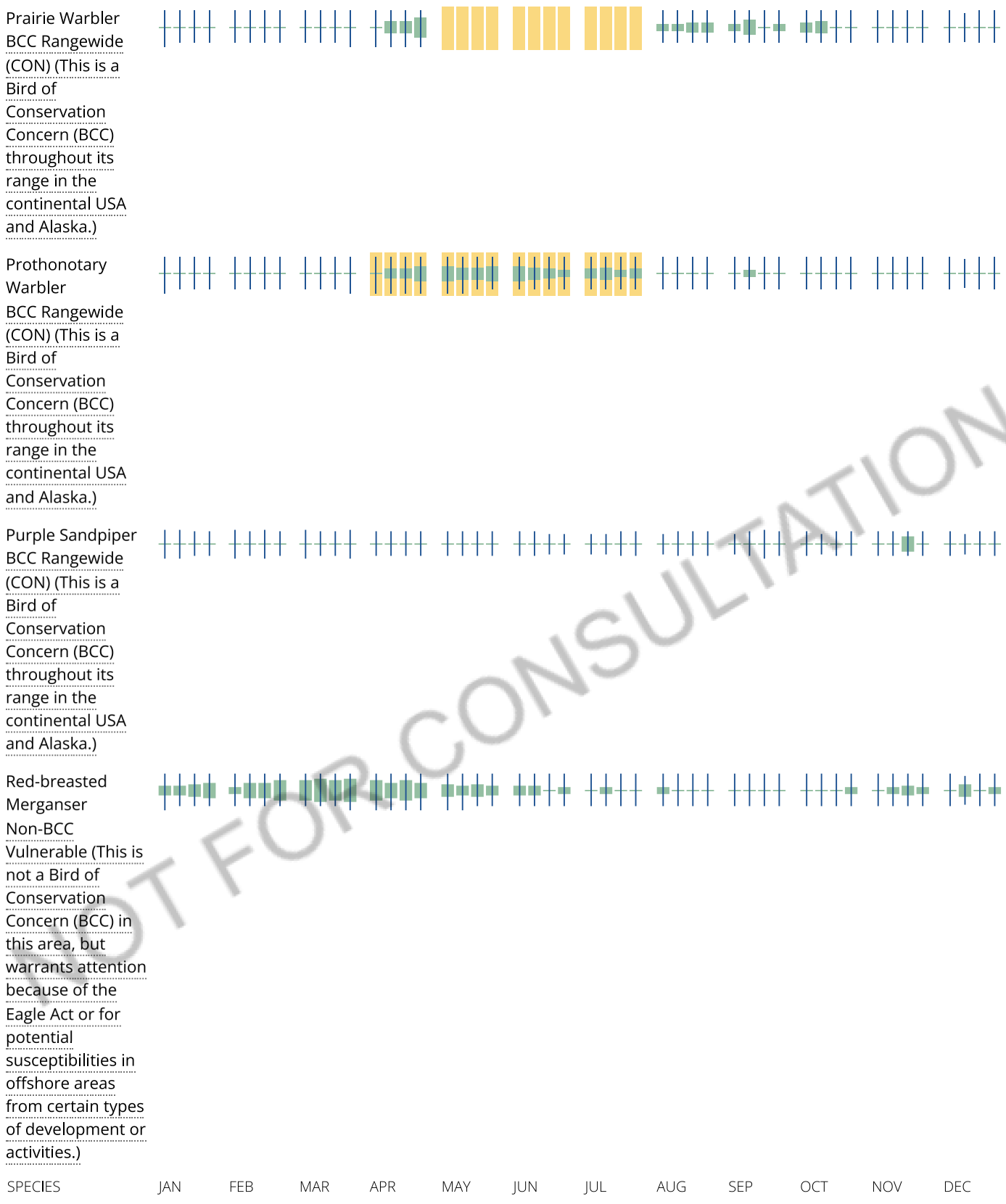
Lesser Yellowlegs BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Long-eared Owl BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Long-tailed Duck Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

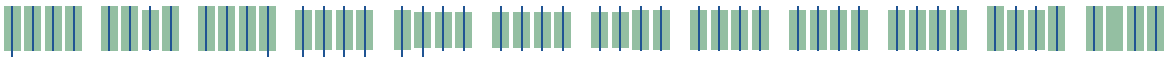


Red-headed Woodpecker BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

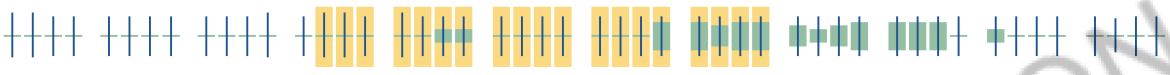
Red-necked Phalarope Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Red-throated Loon Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Ring-billed Gull Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Royal Tern Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Ruddy Turnstone BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

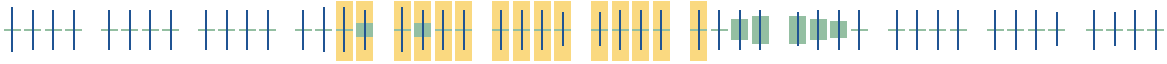
Rusty Blackbird BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

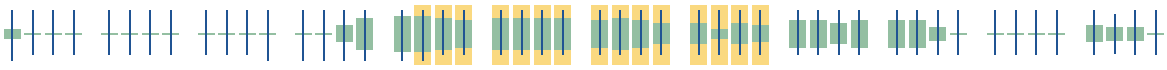
Surf Scoter
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

White-winged Scoter
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wood Thrush BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds

guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid

or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

- E1UBL
- E1UBL6
- E1UBLh
- E1UBLx

ESTUARINE AND MARINE WETLAND

- E2EM1P
- E2EM1P6

- E2USP
- E2US2P
- E2USN
- E2EM1Px

FRESHWATER EMERGENT WETLAND

- PEM1/SS1F
- PEM1Fx
- PEM1Cd
- PEM1C
- PEM1Fh
- PEM1F
- PEM1Ch
- PEM1/SS1Cx
- PEM1Cx
- PEM1E
- PEM1Eh
- PEM1Ax
- PEM1D
- PEM5A
- PEM1R

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A
- PFO1C
- PFO1/SS1Ch
- PFO1S
- PSS1R
- PFO1/EM5A
- PFO1Fx
- PFO1R

FRESHWATER POND

- PUBHx
- PUBH
- PUBHh
- PUBFx
- PUBFh
- PUSCx
- PUSAx

LAKE

- L2USCh
- L1UBK

RIVERINE

- R4SBC
- R1UBV

R5UBH
R2UBH
R1USQ

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127

In Reply Refer To: February 12, 2024
Project Code: 2022-0003498
Project Name: Baltimore Coastal Storm Risk Management Feasibility Study

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

PROJECT SUMMARY

Project Code: 2022-0003498
Project Name: Baltimore Coastal Storm Risk Management Feasibility Study
Project Type: Land Preservation
Project Description: The Baltimore Coastal Storm Risk Management Feasibility Study seeks to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources considering future climate and sea level rise scenarios to support resilient communities in Baltimore.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.24333690000003,-76.57093721595646,14z

Counties: Anne Arundel, Baltimore, and Baltimore counties, Maryland

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R2UBH
- R1USQ
- R1UBV
- R4SBC
- R5UBH

ESTUARINE AND MARINE WETLAND

- E2EM1P
- E2EM1P6
- E2US2P
- E2USP
- E2USN
- E2EM1Px

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1R
- PFO1/SS1Ch
- PFO1A
- PSS1R
- PFO1C
- PFO1/EM5A

- PFO1Fx
- PFO1S

FRESHWATER EMERGENT WETLAND

- PEM1Cd
- PEM1R
- PEM1E
- PEM1Cx
- PEM1Ax
- PEM1F
- PEM1/SS1Cx
- PEM1Fx
- PEM1C
- PEM1Ch
- PEM1Fh
- PEM5A
- PEM1Eh
- PEM1D
- PEM1/SS1F

LAKE

- L1UBK
- L2USCh

ESTUARINE AND MARINE DEEPWATER

- E1UBL
- E1UBLx
- E1UBLh
- E1UBL6

FRESHWATER POND

- PUSCx
- PUBHx
- PUBHh
- PUBFx
- PUSAx
- PUBFh
- PUBH

IPAC USER CONTACT INFORMATION

Agency: Department of Defense
Name: Chris Johnson
Address: 2 Hopkins Place
City: Baltimore
State: MD
Zip: 21201
Email christopher.a.johnson@usace.army.mil
Phone: 4438077461

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127

In Reply Refer To: February 13, 2024
Project code: 2022-0003498
Project Name: Baltimore Coastal Storm Risk Management Feasibility Study

Federal Nexus: yes
Federal Action Agency (if applicable): Department of Defense

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Baltimore Coastal Storm Risk Management Feasibility Study'

Dear Chris Johnson:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 13, 2024, for “Baltimore Coastal Storm Risk Management Feasibility Study” (here forward, Project). This project has been assigned Project Code 2022-0003498 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (DKey), invalidates this letter. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat.

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is

not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Eastern Black Rail (*Laterallus jamaicensis ssp. jamaicensis*)	Threatened	No effect

Conclusion If there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the Chesapeake Bay Ecological Services Field Office and reference the Project Code associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Baltimore Coastal Storm Risk Management Feasibility Study

2. Description

The following description was provided for the project 'Baltimore Coastal Storm Risk Management Feasibility Study':

> The Baltimore Coastal Storm Risk Management Feasibility Study seeks to reduce coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources considering future climate and sea level rise scenarios to support resilient communities in Baltimore.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.24333690000003,-76.57093721595646,14z

QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

   Yes

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

   Note: This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

   No

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

   No

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

   Note: If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

   Yes

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

   Yes

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)?

   No

8. Will the proposed project involve the use of herbicide where listed species are present?

   No

9. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

   No

10. Does any component of the project associated with this action include structures that may pose a collision risk to **birds** (e.g., land-based or offshore wind turbines, communication towers, high voltage transmission lines, any type of towers with or without guy wires)?

    Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

    No

11. Does any component of the project associated with this action include structures that may pose a collision risk to **bats** (e.g., land-based wind turbines)?

    Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

    No

12. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

    For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

    No

13. Will the proposed project affect wetlands where listed species are present?

    This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

    No

14. Will the proposed project activities (including upland project activities) occur within 0.5 miles of the water's edge of a stream or tributary of a stream where listed species may be present?

    Yes

15. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary where listed species may be present?

    No

16. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream where listed species may be present?

    No

17. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds) where listed species may be present?

    No

18. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining where listed species may be present?

    No

19. Will the proposed project involve the creation of a new water-borne contaminant source where listed species may be present?

    Note New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

    No

20. Will the proposed project involve perennial stream loss, in a stream of tributary of a stream where listed species may be present, that would require an individual permit under 404 of the Clean Water Act?

    No

21. Will the proposed project involve blasting where listed species may be present?

    No

22. Will the proposed project include activities that could result in an increase to recreational fishing or potentially affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage)?

    No

23. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream or tributary of a stream where listed species may be present?

    NoteAnswer "Yes" to this question if erosion and sediment control measures will be used to protect the stream.

    No

24. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank where listed species may be present?

    No

25. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

    Yes

26. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

    Automatically answered
    No

27. [Semantic] Does the project intersect the Indiana bat critical habitat?

    Automatically answered
    No

28. [Semantic] Does the project intersect the candy darter critical habitat?

    Automatically answered
    No

29. [Semantic] Does the project intersect the diamond darter critical habitat?

    Automatically answered
    No

30. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

    Automatically answered
    No

31. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

    Automatically answered
    No

32. [Hidden Semantic] Does the project intersect the Eastern black rail AOI?

    Automatically answered
    Yes

33. Does the action area include persistent emergent wetlands (salt, brackish, or freshwater)?

    No

34. Do you have any other documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?

   0.0

2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?

   1.0

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

   Urban land

IPAC USER CONTACT INFORMATION

Agency: Department of Defense
Name: Chris Johnson
Address: 2 Hopkins Place
City: Baltimore
State: MD
Zip: 21201
Email christopher.a.johnson@usace.army.mil
Phone: 4438077461

Baltimore Coastal Storm Risk Management Feasibility Study
Cultural Resources Coordination

Agency/Stakeholder	Format	Date	Description
USACE to MD SHPO	Email	February 3, 2022	Formal letter emailed to MD SHPO initiating Section 106 consultation and describing the focused array of alternatives.
USACE to Baltimore City Commission for Historical and Architectural Preservation (CHAP)	Email	February 3, 2022	Formal letter emailed to CHAP initiating Section 106 consultation and describing the focused array of alternatives.
USACE to Baltimore County Department of Planning	Email	February 3, 2022	Formal letter emailed to the Baltimore County Department of Planning initiating Section 106 consultation and describing the focused array of alternatives.
USACE to Delaware Nation	Email	February 3, 2022	Formal letter emailed to the Delaware Nation initiating Section 106 consultation and describing the focused array of alternatives.
USACE to Delaware Tribe of Indians	Email	February 3, 2022	Formal letter emailed to the Delaware Tribe of Indians initiating Section 106 consultation and describing the focused array of alternatives.
USACE to Seneca-Cayuga Tribe of Oklahoma	Email	February 3, 2022	Formal letter emailed to the Seneca-Cayuga Tribe of Oklahoma initiating Section 106 consultation and describing the

Baltimore Coastal Storm Risk Management Feasibility Study
Cultural Resources Coordination

Agency/Stakeholder	Format	Date	Description
			focused array of alternatives.
MHT to USACE	Email	March 24, 2022	Formal letter emailed to USACE discussing what resources may be affected by the project and providing additional potential consulting parties.
USACE to MHT	Email	June 10, 2022	Formal letter emailed to MHT informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to Baltimore City CHAP	Email	June 10, 2022	Formal letter emailed to CHAP informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to Baltimore County Department of Planning	Email	June 10, 2022	Formal letter emailed to the Baltimore County Department of Planning informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to Delaware Nation	Email	June 10, 2022	Formal letter emailed to Delaware Nation informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.

Baltimore Coastal Storm Risk Management Feasibility Study
Cultural Resources Coordination

Agency/Stakeholder	Format	Date	Description
USACE to Delaware Tribe of Indians	Email	June 10, 2022	Formal letter emailed to the Delaware Tribe of Indians informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to Seneca-Cayuga Tribe of Oklahoma	Email	June 10, 2022	Formal letter emailed to the Seneca-Cayuga Tribe of Oklahoma informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to NPS	Email	June 10, 2022	Formal letter emailed to NPS informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
USACE to Preservation Maryland	Email	June 10, 2022	Formal letter emailed to Preservation Maryland informing them of the TSP and requesting assistance with development of a Programmatic Agreement for the project.
Delaware Nation to USACE	Email	June 21, 2022	Formal letter emailed to USACE stating they would like to consult on the development of the Programmatic Agreement for the project.

Baltimore Coastal Storm Risk Management Feasibility Study
Cultural Resources Coordination

Agency/Stakeholder	Format	Date	Description
NPS to USACE	Email	June 30, 2022	Informal email to USACE stating they would like to accept the invitation to be a consulting party.
USACE to MHT	Email	January 26, 2023	Informal email sending a preliminary draft PA for review.
USACE to NPS	Email	January 26, 2023	Informal email sending a preliminary draft PA for review.
USACE to Delaware Nation	Email	January 26, 2023	Informal email sending a preliminary draft PA for review.
USACE to ACHP	Email	January 31, 2023	E106 form submission requesting ACHP review and involvement.
NPS to USACE	Email	February 8, 2023	email sending comments on the draft PA.
Delaware Nation to USACE	Email	February 10, 2023	email stating they have no comment on the draft PA and attaching the Delaware Nation's inadvertent /human remains discovery policy
ACHP to USACE	Email	February 15, 2023	Email and letter stating they do not wish to participate in the project.
MHT to USACE	Email	June 6, 2023	email sending comments on the draft PA.
USACE to MHT	Email	June 8, 2023	email sending revised draft PA back to consulting parties.

Baltimore Coastal Storm Risk Management Feasibility Study
Cultural Resources Coordination

Agency/Stakeholder	Format	Date	Description
USACE to NPS	Email	June 8, 2023	email sending revised draft PA back to consulting parties.
USACE to Delaware Nation	Email	June 8, 2023	email sending revised draft PA back to consulting parties.

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

Elizabeth Hughes
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place
Crownsville, MD 21032

3 February 2022

Dear Ms. Hughes:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along

Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5) Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

We look forward to consulting with your office regarding the nature and scope of possible additional investigations to identify historic properties in the project areas, and to assess potential effects to those properties. As they become available, we will provide you with more detailed site plans illustrating the location and boundaries of all proposed ground-disturbing activities. In the interim, we ask that your office review the enclosed information and assist us in identifying and assessing the project's effects on historic properties. We also ask that your office assist us in identifying additional consulting parties that should be contacted for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Eric Holcomb
Executive Director
Commission for Historical and
Architectural Preservation
City Hall, Room 250
100 North Holliday Street
Baltimore, MD 21202

4 February 2022

Dear Mr. Holcomb:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5) Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

We look forward to consulting with your office regarding the nature and scope of possible additional investigations to identify historic properties in the project areas, and to assess potential effects to those properties. As they become available, we will provide you with more detailed site plans illustrating the location and boundaries of all proposed ground-disturbing activities. In the interim, we ask that your office review the enclosed information and assist us in identifying and assessing the project's effects on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Caitlin Merritt
Chief of Preservation Services
Baltimore County Department of Planning
400 Washington Avenue
Towson, MD 21204

4 February 2022

Dear Ms. Merritt:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along

Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5) Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

We look forward to consulting with your office regarding the nature and scope of possible additional investigations to identify historic properties in the project areas, and to assess potential effects to those properties. As they become available, we will provide you with more detailed site plans illustrating the location and boundaries of all proposed ground-disturbing activities. In the interim, we ask that your office review the enclosed information and assist us in identifying and assessing the project's effects on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Deborah Dotson, President
Delaware Nation
P.O. Box 825
Anadarko, OK 73005

3 February 2022

Dear Ms. Dotson:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for

the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5). Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide.

Thank you for your assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Susan Bachor
Deputy Director, THPO
Delaware Tribe of Indians
126 University Circle
Stroud Hall, Room 437
East Stroudsburg, PA 18301

3 February 2022

Dear Ms. Bachor:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around

the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5) Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide.

Thank you for your assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Chief William Fisher
Seneca-Cayuga Tribe of Oklahoma
P.O. Box 45322
Grove, OK 74345

3 February 2022

Dear Chief Fisher:

The purpose of this letter is to initiate consultation with your office in accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South (Enclosure 1).

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a focused array of four alternatives, (Alternatives 4 through 7), which are being considered at this time.

Alternative 4 is defined as the Critical Infrastructure Only plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 2). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Non-structural measures are proposed for federal facilities near Fort McHenry, the Patapsco Wastewater Treatment Plant, and Martin State Airport.

Alternative 5 is defined as the Critical Infrastructure and Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 3). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around transportation facilities along Interstate 95. Nonstructural measures are proposed for the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 6 is defined as the Critical Balanced plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 4). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, around transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Nonstructural measures are proposed for

the Inner Harbor and Canton areas, the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Locust Point and Patapsco South planning units.

Alternative 7 is defined as the Mid-Tier Balanced plan and consists of a combination of proposed floodwalls, nonstructural measures, and road and walkway elevations (Enclosure 5) Floodwalls are proposed around the Inner Harbor and Canton areas, Locust Point, "Wheelabrator" Incinerator Plant, Interstate 95 and Interstate 895 tunnel entrances, transportation facilities along Interstate 95, and along the Seagirt Marine Terminal. Non-structural measures are proposed for the Patapsco Wastewater Treatment Plant, Martin State Airport, and other select areas within the Patapsco South planning unit. Proposed road and walkway elevations include an elevated walkway along the Inner Harbor and an elevated perimeter road at Martin State Airport.

The area of potential effect (APE) for the project may be defined as the area of direct construction impacts and the areas within which the undertaking may directly or indirectly cause alterations to the character or use of historic properties, including visual effects. The viewsheds of any nearby historic properties would also be included in the APE. A preliminary examination of the APE was completed using Medusa, the Maryland Historical Trust's cultural resources information system (CRIS). The CRIS indicated that numerous historic properties are located in and around the project areas.

Please let us know if you are interested in consulting on this project on a Government-to-Government basis, and the extent to which you wish to participate. We will provide a USACE representative at consultation meetings, and we will fully consider any information you wish to provide.

Thank you for your assistance with this project. We ask that your office review the enclosed information and assist us in identifying and assessing the project's effect on historic properties. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Secretary
Sandy Schrader, Deputy Secretary

Maryland
DEPARTMENT OF PLANNING
MARYLAND HISTORICAL TRUST

March 24, 2022

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

Re: MHT Review of Baltimore Coastal Storm Risk Management Feasibility Study
Baltimore City and Baltimore County, Maryland

Dear Mr. Bierly:

Thank you for initiating consultation and providing the Maryland Historical Trust (MHT) with preliminary information regarding the above-referenced project. It is our understanding that the purpose of the proposed undertaking(s) is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area, and that the original project scope has already been screened down to an array of four alternatives – Alternatives 4, 5, 6, and 7 – that are being considered at this time. We have begun our review of the alternatives to assess their potential effects on historic properties in accordance with Section 106 of the National Historic Preservation Act and the Maryland Historical Trust Act of 1985 and are writing to offer the following comments and recommendations. Due to the early planning stages of the project at this time, of course, we are only able to provide *preliminary* comments and recommendations regarding potential effects on historic properties.

Alternative Plan 4 – Critical Infrastructure – The proposed floodwalls and non-structural measures included in this plan may involve impacts to the historic properties listed below:

- B-5333, Baltimore Harbor Tunnel and the Canton Ventilation Building – National Register eligible
- B-5094 – Naval Reserve Readiness Center – National Register eligible
- B-4606 – Ordinance Storehouse and Coal House, Fort McHenry
- BA-2081 – Glenn L. Martin Airport – National Register eligible

Alternative Plan 5 – Critical Infrastructure with Non-Structural Measures – The proposed floodwalls will involve impacts to the historic properties listed below:

- B-5333, Baltimore Harbor Tunnel and the Canton Ventilation Building – National Register eligible
- BA-2081 – Glenn L. Martin Airport – National Register eligible

Meanwhile, the proposed non-structural measures will involve impacts to several other historic properties, including (but not limited to) many contributing structures, archeological sites, and MHT easement properties located within a variety of National Register-listed historic districts:

- U.S. Coast Guard Yard Curtis Bay – National Register listed
- B-5094 – Naval Reserve Readiness Center – National Register eligible
- B-4606 – Ordinance Storehouse and Coal House, Fort McHenry
- Proctor and Gamble Baltimore Plant – National Register listed
- B-994 - Domino Sugar Plant
- Baltimore Museum of Industry – MHT Easement Property
- Federal Hill Historic District – National Register listed
- Business and Government Historic District – National Register listed
- Baltimore Children's Museum – MHT Easement Property
- Fells Point Historic District – National Register listed
- South Central Avenue Historic District – National Register listed

Alternative Plan 6 – Critical Balanced Plan – Critical Infrastructure with Non-Structural Measures Plan and Port of Baltimore Floodwalls, Baltimore & Martin State Airport –

The proposed floodwalls may involve impacts to the historic properties listed below:

- B-5333, Baltimore Harbor Tunnel and the Canton Ventilation Building – National Register eligible
- B-5298 – Western Electric Company, Point Breeze Plant Historic District – National Register eligible
- BA-2081 – Glenn L. Martin Airport – National Register eligible

Meanwhile, the proposed non-structural measures will involve impacts to several other historic properties, including (but not limited to) many contributing structures, archeological sites, and MHT easement properties located within a variety of National Register-listed historic districts:

- U.S. Coast Guard Yard Curtis Bay – National Register listed
- B-5094 – Naval Reserve Readiness Center – National Register eligible
- B-4606 – Ordinance Storehouse and Coal House, Fort McHenry
- Proctor and Gamble Baltimore Plant – National Register listed
- B-994 - Domino Sugar Plant
- Baltimore Museum of Industry – MHT Easement Property
- Federal Hill Historic District – National Register listed
- Business and Government Historic District – National Register listed
- Baltimore Children's Museum – MHT Easement Property
- Fells Point Historic District – National Register listed
- South Central Avenue Historic District – National Register listed

Alternative Plan 7 – Mid-Tier Balanced Plan – The proposed floodwalls may involve impacts to the historic properties listed below:

- B-5333, Baltimore Harbor Tunnel and the Canton Ventilation Building – National Register eligible
- Fort McHenry National Monument and Historic Shrine
- B-5298 – Western Electric Company, Point Breeze Plant Historic District – National Register eligible
- BA-2081 – Glenn L. Martin Airport – National Register eligible
- B-994 - Domino Sugar Plant
- Baltimore Museum of Industry – MHT Easement Property
- Federal Hill Historic District – National Register listed
- Fells Point Historic District – National Register listed
- Canton Historic District – National Register listed
- B-1019 – Bethlehem Steel Key Highway Shipyard
- Pratt Street Power Plant – National Register listed
- Archeological sites such as 18BC11 (19th c. Baltimore Glass works), 18BC52 (18th c. rowhouses), 18BC53 (18th c. rowhouses and 19th c. warehouses), and 18BC59 (late 18th c. Brown's Wharf)

Meanwhile, the proposed non-structural measures will involve impacts to several other historic properties, including (but not limited to) many contributing structures, archeological sites, and MHT easement properties located within a variety of National Register-listed historic districts:

- BA-2081 – Glenn L. Martin Airport – National Register eligible
- B-5094 – Naval Reserve Readiness Center – National Register eligible
- B-4606 – Ordinance Storehouse and Coal House, Fort McHenry
- Proctor and Gamble Baltimore Plant – National Register listed
- B-994 - Domino Sugar Plant
- Baltimore Museum of Industry – MHT Easement Property
- Federal Hill Historic District – National Register listed
- Business and Government Historic District – National Register listed
- Baltimore Children's Museum – MHT Easement Property
- Fells Point Historic District – National Register listed
- South Central Avenue Historic District – National Register listed

Given the presence of these numerous historic properties, we would like to request that we be provided with detailed site plans illustrating the location and boundaries of all proposed activities and impact areas, when they become available, so that we may assess the project's *potential* impacts on historic properties. Upon our review of this information, we will be able to provide more informed recommendations regarding what avoidance or minimization measures or cultural resources investigations will be necessary prior to construction. MHT would also recommend that the Corps begin to coordinate with the relevant consulting parties, including (but not limited

to) Preservation Maryland, Baltimore City's Commission for Historical and Architectural Preservation (CHAP), the Baltimore Heritage Area Association, the National Park Service, and the Baltimore County Department of Planning.

We look forward to receiving the information requested above and to further coordination as project planning proceeds on this important initiative. If you have any questions or we may be of assistance, please do not hesitate to contact me at dixie.henry@maryland.gov /410-697-9553. Thank you for providing us with this opportunity to comment.

Sincerely,

Dixie Henry (signed electronically)

Dixie L. Henry, Ph.D.
Preservation Officer
Maryland Historical Trust

DLH/202200668

cc: Ethan A. Bean (COE)

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

Caitlin Merritt
Chief of Preservation Services
Baltimore County Department of Planning
400 Washington Avenue
Towson, Maryland 21204

June 10, 2022

Dear Ms. Merritt:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

The original project scope consisted of an initial array of eleven draft alternatives. The initial alternatives were screened down to a tentatively selected plan (Alternative 5a), which is being considered at this time. Alternative 5a is defined as the Critical Infrastructure with Select Nonstructural plan and consists of a combination of proposed floodwalls and nonstructural measures (Enclosure 1). Floodwalls are proposed around the Interstate 95 and Interstate 895 tunnel entrances, and around their associated transportation critical facilities. Nonstructural measures are proposed for the Inner Harbor and Canton areas, Riverside, North Locust Point, and South Locust Point.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

June 10, 2022

Eric Holcomb
Executive Director
Commission for Historical and
Architectural Preservation
City Hall, Room 250
100 North Holliday Street
Baltimore, Maryland 21202

Dear Mr. Holcomb:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Deborah Dotson, President
Delaware Nation
P.O. Box 825
Anadarko, Oklahoma 73005

June 15, 2022

Dear Ms. Dotson:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility

Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

June 10, 2022

Susan Bachor
Deputy Director, THPO
Delaware Tribe of Indians
126 University Circle
Stroud Hall, Room 437
East Stroudsburg, PA 18301

Dear Ms. Bachor:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Elizabeth Hughes, SHPO
Maryland Historical Trust
100 Community Place
Crownsville, Maryland 21032

June 10, 2022

Dear Ms. Hughes:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility

Study. We ask that your office review the enclosed information and notify us as to whether you concur with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

June 10, 2022

Mark Eberle
External Review Coordinator
National Park Service, Interior Region 1
1234 Market Street, 20th Floor
Philadelphia, Pennsylvania 19107

Dear Mr. Eberle:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Nicholas Redding, President
Preservation Maryland
3600 Clipper Mill Road, Suite 248
Baltimore, Maryland 21211

June 10, 2022

Dear Mr. Redding:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility

Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

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

Chief William Fisher
Seneca-Cayuga Tribe of Oklahoma
P.O. Box 45322
Grove, Oklahoma 74345

June 15, 2022

Dear Chief Fisher:

The purpose of this letter is to continue consultation with your office in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations at 36 CFR Part 800, regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted by the U.S. Army Corps of Engineers, Baltimore District (USACE). The purpose of the project is to reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area as authorized by a resolution of the U.S. House of Representatives Committee on Public Works and Transportation, dated April 30, 1992. The project's study area is divided into seven planning units: Inner Harbor, Locust Point, Martin State Airport, Middle Branch, Patapsco East, Patapsco North, and Patapsco South.

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Thank you for your assistance with this project. We look forward to continued consultation with your office on the Baltimore Coastal Storm Risk Management Feasibility

Study. We ask that your office review the enclosed information and notify us as to whether you wish to participate with the development of a PA for this project. If you have any questions about the project, please contact Ethan A. Bean at (410) 962-2173 or ethan.a.bean@usace.army.mil.

Sincerely,

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

Enclosures

From: Katelyn Lucas
To: Bean, Ethan A CIV USARMY CENAB (USA)
Subject: [Non-DoD Source] RE: Section 106 Review – Baltimore Coastal Storm Risk Management Feasibility Study
Date: Tuesday, June 21, 2022 10:19:00 PM

Hello,

Yes, we would like to consult in the development of a PA for this project. Please keep me updated on any future developments for this project and the PA, thank you.

Sincerely,
Katelyn Lucas
Delaware Nation Historic Preservation Assistant; PhD Candidate
405-544-8115
klucas@delawarenation-nsn.gov

From: Bean, Ethan A CIV USARMY CENAB (USA) <ETHAN.A.BEAN@usace.army.mil>
Sent: Wednesday, June 15, 2022 5:01 PM
To: Katelyn Lucas
Subject: Section 106 Review – Baltimore Coastal Storm Risk Management Feasibility Study

Good afternoon,

Please find attached for your review information regarding the Baltimore Coastal Storm Risk Management Feasibility Study being conducted in Baltimore City and Baltimore County, Maryland. We are assessing alternatives that would reduce coastal flood risk to vulnerable areas in the Baltimore Metropolitan area. At this time, we are requesting assistance with the development of a programmatic agreement for the project. Please let me know if you are interested in consulting on

From: Eberle, Mark D
To: Bean, Ethan A CIV USARMY CENAB (USA)
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: [EXTERNAL] Section 106 Review – Baltimore Coastal Storm Risk Management Feasibility Study
Date: Thursday, June 30, 2022 1:56:00 PM

Hi Ethan,

Just to follow up with you on this study. Yes, the National Park Service will be a consulting party on this programmatic agreement. We will follow up with an official letter to the USACE confirming that.

Also, could you please share some of the project background information (feasibility report/draft EA), so we can see how you got to the tentatively selected plan. I would like to share with the NPS Team.

Thanks,
Mark

Mark Eberle
External Review Coordinator / Resource Planning Specialist
National Park Service
Interior Region 1, North Atlantic-Appalachian
Resource Planning and Compliance Division
1234 Market Street, 20th Floor, Philadelphia, PA 19107
Cell Phone: 267-315-1631
General Work Hours and Schedule: M: office 8:00am-4:00pm; T-F: telework 8:00am-4:30pm

DOI folks: check out the new and improved RPC Division SharePoint Site

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From: Eberle, Mark D <mark_eberle@nps.gov>
Sent: Thursday, June 16, 2022 8:52 AM
To: Bean, Ethan A CIV USARMY CENAB (USA) <ethan.a.bean@usace.army.mil>
Subject: Re: [EXTERNAL] Section 106 Review – Baltimore Coastal Storm Risk Management Feasibility Study

Hi Ethan,

Thanks for coordinating this project with the National Park Service (NPS). I'll share the information with the internal NPS team, and we will get back to you on whether we would like to consult on this project. Also, could you please share some of the project background information (feasibility report/draft EA), so we can see how you got to the tentatively selected plan.

Thanks,
Mark

February 15, 2023

Ethan A. Bean
Archaeologist
U.S. Army Corps of Engineers
Baltimore District
2 Hopkins Plaza, Baltimore, MD 21201

Ref: *Baltimore Metropolitan Coastal Storm Risk Management Feasibility Study*
Baltimore City, Maryland
ACHP Project Number: 019200

Dear Mr. Bean:

On January 31, 2023, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the potential adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe our participation in the consultation to resolve adverse effects is needed.

However, if we receive a request for participation from the Maryland State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Should the undertaking's circumstances change, consulting parties cannot come to consensus, or you need further advisory assistance to conclude the consultation process, please contact us.

Pursuant to 36 CFR § 800.6(b)(1)(iv), you will need to file the final Section 106 agreement document (Agreement), developed in consultation with the Maryland SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the Agreement and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the NHPA.

Thank you for providing us with your notification of adverse effect. If you have any questions or require our further assistance, please contact Christopher Daniel at (202) 517-0223 or by e-mail at

ADVISORY COUNCIL ON HISTORIC PRESERVATION
401 F Street NW, Suite 308 ▯ Washington, DC 20001-2637
Phone: 202-517-0200 ▯ Fax: 202-517-6381 ▯ achp@achp.gov ▯ www.achp.gov

cdaniel@achp.gov and reference the ACHP Project Number above.

Sincerely,

Artisha Thompson
Historic Preservation Technician
Office of Federal Agency Programs

Baltimore Coastal Storm Risk Management Feasibility Study – Public Comments

Comment Number	1
Comment Submitter	James Looper Jr
Submitter Email	xxxxxxxxxx
Method	Website
Comment	Please consider green infrastructure solutions! Including wetland & oyster reef restoration to combat storm surges as a compliment to traditional grey infrastructure
Action Needed in Report/Appendices	*Add more reasoning for why NNBF was not as feasible in study area, within analysis text in report.*
Response	Thank you for your comment. Natural and nature-based (NNBF) features were considered in the alternatives evaluated for the Baltimore Coastal Storm Risk Management Feasibility Study. The Middle Branch area was targeted for NNBF as part of multiple alternatives proposed. However, similar efforts were approved and received funding through a separate initiative called Reimagine Middle Branch. Additional information on the Reimagine Middle Branch initiative and how it ties into the Baltimore Coastal Storm Risk Management Feasibility study can be found in Section ### of the Final Report. Due to existing shoreline conditions, challenges in converting open water to wetland habitat, and space limitations, NNBF was determined to not meet the coastal storm risk management reduction goals.
Comment Number	2
Comment Submitter	Matthew Garono
Submitter Email	xxxxxxxxxx
Method	Website
Comment	Storm surges have wreaked the most havoc in Fell's Point in the past so mitigating those should be a high priority. A permanent easement on real estate with so many restrictions is not ideal. Particularly no residences below grade even if flood resistant doors and windows are installed. This is a significant impairment to the property value as there are apartments in the lower levels of some of these buildings. Can you provide more detailed maps of the affected areas in Fell's Point?
Action Needed in Report/Appendices	
Response	Thank you for your comment. Participation in floodproofing would be voluntary. The non-federal sponsor would be responsible for obtaining all the required real estate interests on the affected parcels. Floodproofing would likely

	require a non-standard estate or agreement between the non-federal sponsor and the property owner(s). The agreement would define property owner rights, limitations, and responsibilities related to the project and the subject property. For additional information, please refer to Section 5 of Appendix F: Real Estate Plan in the final report.
Comment Number	3
Comment Submitter	Kyle St Denny
Submitter Email	xxxxxxxxxx
Method	Website
Comment	So your plan for waterfront neighborhoods is to tell property owners to by storm windows and sump pumps? Thank oh wise civic leaders for our city's salvation. Like at least build some storm gardens or something, literally anything, do literally anything.
Action Needed in Report/Appendices	
Response	Thank you for your comment. The Recommended Plan includes floodproofing of vulnerable structures in the Canton, Fells Point, Inner Harbor and Locust Point areas. The recommended plan would be cost shared with a non-Federal sponsor at a break down of 65% federal and 35% non-federal. Floodproofing would be voluntary.
Comment Number	4
Comment Submitter	Blue Water Baltimore
Submitter Email	xxxxxxxxxx
Method	Website
Comment	***See Attachment below comment matrix.***
Action Needed in Report/Appendices	
Response	Modeling of storm scenarios with future sea level rise showed that some areas within the boundary of the Patapsco Wastewater Treatment Plant would experience water surface elevations above the ground elevation. The modeling conducted for this study did not show extensive damage from these future conditions. However, as the facility undergoes maintenance and upgrades, resilience to flooding should be considered for facility improvements.
Comment Number	5
Comment Submitter	The Nature Conservancy
Submitter Email	xxxxxxxxxx

Method	Website
Comment	Thank you for the opportunity to provide comment on the Baltimore Metropolitan Coastal Storm Risk Management Feasibility Study Draft Integrated Feasibility Report & Environmental Assessment. I am the Baltimore Community Project Manager with The Nature Conservancy Maryland/DC chapter's Baltimore Program; Our Program focuses on addressing community-based interests and concerns around conservation and climate resiliency within the Baltimore City and Baltimore County geographic area. I would like to raise concerns regarding the following items: 1. The lack of effort to address diversity, equity, inclusion, and justice (DEIJ) concerns 2. The insufficient account of nature-based solutions as an area of opportunity 3. The omission of the Patapsco River mouth within the study area While the report in section 2.4.14 and 2.4.15 provides data on the socioeconomic and environmental justice conditions of communities within the study area, it makes no attempt to address these issues in the solutions offered. As an example, throughout the whole report, the word 'equity' is mentioned once. We highly recommend the application of a substantial DEIJ lens to the assessment moving forward. In section 1.7, Problems and Opportunities, the report says the following "shorelines are developed with limited opportunity for storm surge and wave attenuation and storage of floodwaters. There is limited opportunity for application of natural and nature-based features (NNBF) in most of the study area." The report then proceeds to outline two plan alternatives that include nature- based solutions but then, eliminate them from consideration in the evaluation. The treatment of nature-based solutions feels cursory and insufficient given the potential co-benefits provided to communities adjacent to the study area. Because of this, we suggest a more thorough investigation into nature-based solutions as a storm risk management tool. The report's study area did not include the mouth of the Patapsco River which is an overlook of resiliency issues as system issues. Excluding this presents an incomplete picture of the challenges and opportunities of storm risk management and leaves out an important part of the estuary system that could support wave attenuation. We recommend expanding the study area to include the mouth of the Patapsco River. Thank you for your consideration of the above while adjusting the report.
Action Needed in Report/Appendices	

Response	1. Baltimore District believes the IFR/EA contains a robust Environmental Justice section. The section identifies 'EJ communities' from EPA screen and Disadvantaged communities from the Council of Environmental Quality Environmental and Economic Screening tool. Baltimore District hosted a public meeting at the Enoch Pratt Street Library – Southeast Anchor Branch, (which is adjacent to several disadvantaged areas according to the CEJST tool) to provide an opportunity for people in those communities to express their thoughts or concerns with the project. Section 4.2.14 includes that the project proponents are not expected to disproportionately impact EJ communities. Conversely, implementation of the alternatives proposed in the IFR/EA are expected to benefit EJ communities by ensuring public transportation through the Baltimore and Harbor tunnels is continually open, even during potential natural hazards or severe weather events. Please reference Section 5.3.4 Other Social Effects for additional information regarding health and safety, social vulnerability, economic vitality and community identity. 2. The Middle Branch area provides the best opportunity within the study area for development of NNBF solutions and as this study progressed the initial efforts of the Middle Branch Resilience Initiative received funding. Our study assumes that the Future Condition of Middle Branch includes the construction of the NNBF and the benefits that are derived from them. 3. The Patapsco River mouth was not totally in the Baltimore CSRM study area, and Baltimore County was not responsive with wanting to participate in the study.
Comment Number	6
Comment Submitter	South Baltimore Gateway Partnership
Submitter Email	xxxxxxxxxx
Method	Website
Comment	I read the draft Baltimore Coastal Storm Risk Management Study with great interest, and appreciate the work that went into it. However, I would like to suggest that the preferred Alternative 5A be augmented to include the enhanced NNBF features shown in Alternative 9 (plus the resiliency features being executed around MedStar Harbor Hospital, which were not included). This change more accurately reflects the reality that these NNBF features are currently being funded and executed under the Middle Branch Resiliency Initiative (MBRI). At present, the $47 million worth of work now underway under Stage 1 of the MBRI (along with the tens of millions of dollars in Stage 2 projects now in development) are relegated to background information about the study area. It is not even visible in Alternative 5A. This leads to an artificial and unnecessary splintering of the Patapsco-wide resiliency effort, dividing the "official" scenario of 5A from the "external" reality of work.

	If the MBRI were merely aspirational (e.g. a plan with no implementation capacity) or small in scale (e.g. a community-based tree-planting effort) I would understand this artificial distinction. But the fully-funded Stage 1 of MBRI constitutes a full third of the still-unfunded cost of Alternative 5A. It is also worth noting that the excluded MBRI work is in closest physical proximity to the low-income and minority communities shown in Figures 2-8 and 2-9. My intent in making this suggestion is not to obligate USACE to pay for NNBF elements in the Middle Branch, but rather to achieve a single unified strategy towards addressing resiliency across the Patapsco study area. This will assist all parties with policy, planning, permitting, and execution.
Action Needed in Report/Appendices	
Response	Thank you for your comment. Additional information on the Reimagine Middle Branch effort is included in Section 1.11 of the final report. Section 1.11 and 2.3.1 discusses how the Reimagine Middle Branch effort ties into the Baltimore Coastal Storm Risk Management Feasibility Effort to collectively enhance the resiliency in the Patapsco River Baltimore Metro Area.
Comment Number	7
Comment Submitter	Virginia Olyniec
Submitter Email	xxxxxxxxxx
Method	Website
Comment	While this was done in coordination with MDOT, I see no references to Transit assets. Currently, there are light rail tracks and stations in this area. Also, the Shot Tower Metro station is listed in the State Hazard Mitigation Plan because of flooding. This should be included in any Inner Harbor flood mitigation project. We do not want another New York City situation with flooded tunnels.
Action Needed in Report/Appendices	*Add text in section 3.3.3 with references to transit assets.*
Response	A reference to the Shot Tower Metro Station and its identification in the Climate Change Vulnerability Assessment has been added to the description of the Inner Harbor Planning Unit in Section 3.3.3. The assets of the Shot Tower Metro Station were evaluated within the economic model as outlined in the Economic Appendix (Appendix E, Section 4.1).
Comment Number	8
Comment Submitter	Henry Farkas
Submitter Email	xxxxxxxxxx
Method	Website

Comment	The Army Corps of Engineers isn't thinking big enough. Army Corps floats $134M plan for new flood walls, floodproofing to prevent future storm damage in Baltimore https://www.baltimoresun.com/news/environment/bs-md-army-corps-flooding-project-20220809-qgf4kdvepnhqvexwanl6zm4dq4-story.html The plan offer minimal protection for some places in Baltimore. That's silly. I know it's unusual for an old retired country doctor like me to tell a group of civil engineers that they're silly, but here's the plan they should be working on. They should emulate the flood control of the Netherlands. No, not the little Dutch boy with his finger in the little hole in the dike. The Netherlands have a flood control wall that normally sits on the bottom of the ocean where it won't impede shipping. When flooding is predicted, and flooding is always predictable, the wall is raised to prevent the flood. We need two of them. And the obvious places to put them are at the mouth of the Chesapeake Bay way down near Virginia Beach and at the mouth of the Chesapeake and Delaware Canal near Delaware City. Those two projects will protect all the communities along the Chesapeake Bay and its tributaries for a hundred years. If the Netherlands can do it, so can we.
Action Needed in Report/Appendices	
Response	A structure at the mouth of Chesapeake was outside the scope of this study. This study did examine two potential storm surge barrier locations within the Patapsco River. These were eliminated from consideration due to environmental concerns, economics, and real estate concerns.
Comment Number	9
Comment Submitter	Maryland Honey Shop – Nicole Poulos
Submitter Email	xxxxxxxxxx
Method	
Comment	I have 4 honey bee hives in the Locust Point community garden, this is their 3rd year thriving there. The community has really embraced them and us and value having them in the neighborhood, and I fear a major flood would wipe our their hives, and their resources. I absolutely would value having some protection taken by the city in the event of a flood.

	Once a honeybee colony gets wet, especially in cold weather months, their survival is doomed. Honeybees shiver and fan to monitor humidity and temperature within their hive, and once a major amount of water enters, they can not mitigate and will drown. Moving hives requires advanced planning, and, since bees navigate by the coordinates of the sun, hives cannot be moved more than two feet at a time, unless they are moved beyond a five mile radius. I fear that if the Haubert and Hull street location would flood, close to the harbor, we would not have a chance to save these colonies we've been nurturing over the last 3 years. Lastly, the bees source from the local garden, neighborhood clover and flowers, trees and plant. If Locust Point were to flood, and recovery of plants, vegetation and soil were to take a long time to recover, we would not be able to re-start hives potentially for at least an additional year. We started these hives because of the love of these insects, and hoped the community would not mind their presence. When we work in the hives, we constantly have people asking about their health, expressing their love of them and the honey, and if there's anything they could do to help. I really believe that we would all be devastated if Locust Point were to flood, and these colonies were to be wiped out. Feel free to reach out if you have any questions or concerns.
Action Needed in Report/Appendices	
Response	Thank you for your comment. The analysis of storm inundation indicates that the Locust Point Community Garden is at an elevation higher than projected flooding. Road and sidewalks are projected to be above flood elevations from Fort Avenue. Damage from winds, power outages, and other effects not directly related to inundation were not evaluated in this study.
Comment Number	10
Comment Submitter	Locust Point (LPCA)
Submitter Email	xxxxxxxxxx
Method	
Comment	Locust Point concerns include making sure policies address chemical and industrial sites due to increased risk caused by Climate Change (sea level rise, storm surges and large rain events). In Locust Point we have hazardous waste in storage farms, on trains/rail yards and in piles. We also have contaminated soils that, if flooded, could be detrimental to residents, houses and the harbor/bay.

	Locust Point does not have any evacuation or notification plans for residents or business in case of storm surges or flood events. Being a peninsula, there are only three exit roads out of the community and two of them have a strong potential of being flooded. In addition, Locust Point already gets some street flooding due to large rain events caused by having too much hardscape, lack of storm water retention areas and limited tree coverage. The US Army Corp of Engineers needs to work and plan with the EPA to support robust worst-case discharge planning regulations for above-ground tanks, other onshore facilities that store or use hazardous substances, rail yards and transportation of material out of the community(rails/truck). Below is our request to the items that is needed to be incorporated into the EPA's plans and subsequent USACE and MDOT plans. ● EPA needs to define “facility” in a way that reflects reality and prevents gamesmanship. EPA should adopt the common-ownership, -operation, or -control definition of “facility” from the EPCRA and Clean Air Act contexts to ensure owners and operators cannot dodge compliance simply by breaking their operations into numerous “mini-facilities” that won’t reach EPA’s screening thresholds. ● While EPA properly focuses the initial screening analysis on a facility’s location and storage capacity of hazardous substances, the proposed screening thresholds are too restrictive. Under the proposed rule many dangerous chemical facilities do not even need to assess the risk a worst-case discharge would pose to public health or the environment. In the final rule, EPA should decrease the hazardous substance storage threshold and base compliance with that threshold on the facility’s aggregate storage capacity for all hazardous substances on-site. EPA should also supplement its half-mile distance threshold with alternative thresholds based on real-world hazard-based criteria, including whether a facility is located within a FEMA-defined 500-year floodplain, in an area particularly susceptible to wildfires, or near a community that reflects environmental justice concerns. ● For facilities that pass the initial screening, EPA should expand its substantial-harm criteria to better account for facility discharge history, drinking water risks, and facility density. The final rule should require any facility with a hazardous substance discharge within the last ten years, located within a Source Water Protection Area, or within an area with a high density of hazardous substance facilities to prepare a facility response plan. ● EPA’s definition of “worst case discharge” is too narrow and therefore does not capture the largest foreseeable discharge in adverse weather conditions. The final rule should define “worst case discharge” based on a facility’s total hazardous substance capacity to capture the foreseeable occurrence of multi-tank discharges caused by natural hazards like floods, hurricanes, and earthquakes. Facilities should also have to separately analyze the worst-case

	discharge for each hazardous substance on site, unless the analysis prepared for another hazardous substance adequately accounts for the risks involved and the necessary response. ● For facilities preparing response plans, EPA should strengthen the required hazard evaluation by mandating consideration of all hazardous substances stored at a facility, as well as cascading effects on co-located or proximate facilities. The final rule should also require that hazard evaluations use up-to-date projections of climate risks as determined by EPA and prescribe specific types of analysis and consultation to assess hazards to environmental justice communities. ● For facilities preparing response plans, EPA should mandate consideration of—and to the extent practicable, the implementation of—inherently safer technologies and designs related to hazardous substance storage, discharge prevention, and discharge response on site. ● EPA should expand its criteria for when facilities must update response plans, require annual plan reviews to ensure plans are based on up-to-date information, and require, in any event, plan amendments every five years. ● EPA must prioritize the public's right to know by committing to setting up a searchable, online database with the current and past substantial harm analyses and facility response plans. The final rule should also require facilities to regularly share information and consult with nearby public drinking water systems. ● EPA should require facilities to contract with a third-party to assess and monitor community health effects following a discharge that reaches a public water system or public receptors, and to make the information publicly available. In conjunction with the EPA and MDOT, the USACE should at least once each calendar year, the owner or operator of a stationary source with any Program 2 or Program 3 process must conduct an exercise of the stationary source's emergency response notification mechanisms per 40 CFR 68.90(b)(3) or 68.95(a)(1)(i), as appropriate, before December 19, 2024, and annually thereafter (40 CFR Section 68.96(a)). Additionally, the owner or operator of a stationary source subject to the requirements of 40 CFR Section 68.95 must develop and implement an exercise program that includes field and/or tabletop exercises for its emergency response program (40 CFR Section 68.96(b)). We urge the USACE to adopt our recommendations to ensure the final plans lives up to its potential of providing robust protections for communities, public health, and the environment in the age of a changing climate. Thank you,

	Dave Arndt
Action Needed in Report/Appendices	
Response	USACE policy and guidance (ER 1165-2-132 and ER 1105-2-100) limits USACE participation in clean up of materials regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or by the Resource Conservation and Recovery Act (RCRA). While measures to improve water quality parameters may be included in projects with an ecosystem restoration component, the ecosystem restoration portion of these projects should not principally result in treating or otherwise abating pollution or other compliance responsibility. In short, policy is to avoid expenditure of Civil Works funds for HTRW remediation by avoiding contaminated areas where practicable. The objective of the current project was to reduce risk from coastal storms. The PDT avoided proposing constructing measures that would impact known areas with chromium ore contamination. Shoreline erosion from coastal storms was not identified as a problem in the study area. The location and potential damage to above-ground petroleum storage tanks were evaluated.