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

April 6, 2021

Environmental Resources Branch

Laura Mensch
Regulatory Programs Manager
Delaware Coastal Programs
100 W. Water Street, Suite 7B
Dover, DE 19904
laura.mensch@delaware.gov

Dear Ms. Mensch:

The Philadelphia District U.S. Army Corps of Engineers (USACE) has been conducting maintenance dredging at the Port of Wilmington on the Christina River since 1936. Previously, the maintenance dredging operation had been approved under a Section 401 Water Quality Certification (WQC) permit and consistency determination pursuant to Delaware's Coastal Zone Management Program. More recently (March 1, 2017) Section 401 WQC and concurrence with our Coastal Zone Consistency (CZC) determination were provided by your office for the Nationwide Permit (NWP) Program, as published in the Federal Register January 6, 2017. During our conference call of March 29, 2021 you requested that we update our CZC consistency determination for the period 2021-2031.

Enclosed please find a DCMP Fed Con Form v.2.0 Coastal Zone Management Act Federal Consistency Form requesting modification to the previous January 29, 2009 concurrence to our Coastal Zone Consistency Determination for a ten-year maintenance period and accompanying figures. USACE Philadelphia District conducts maintenance dredging at the authorized Federal navigation channel and turning basin within the Christina River at the Port of Wilmington approximately every 6-7 months. In an agreement with the Diamond State Port Corporation, the USACE dredging contractor also conducts maintenance dredging of the port's 7 berths within the Christina River. The purpose of ongoing maintenance activities is to provide safe access for deep-draft vessels entering and leaving the port.

Maintenance dredging is generally conducted via a hydraulic cutterhead dredge with placement of the dredged material pumped via pipeline into the Wilmington Harbor South or Pedricktown upland Confined Disposal Facilities (CDFs). Approximately 750,000 cy/year is removed annually (approximately 16-19% of the material is removed from the port berth area). The amount of material dredged during each cycle can vary (typically between 284,000 to 498,000 cy) depending on many factors such as weather

conditions (*i.e.* the effect of storms on shoaling rates), navigational needs, dredge availability, and each year's maintenance budget. Dredging contract duration is typically 21 to 30 days. This period takes into account potential delays due dredging contractor scheduling issues, bad weather conditions, or short-term equipment breakdowns. Some dredging cycles have been completed in 14 days in the past. The dredged material is pumped through one pipeline (24 to 30 inches in diameter) to an upland Confined Disposal Facility (CDF).

This letter requests modification to the previous state concurrence for our Coastal Zone Management consistency determination for maintenance dredging of the Port of Wilmington Federally authorized navigation project. The enclosed Fed Con form provides updated information on our maintenance dredging operations. As with all previous applications, the proposed action has been evaluated for consistency with the Rules on Coastal Zone Management. After a detailed review of all applicable regulations and policies associated with the proposed activity, it is our finding that the proposed activity complies with Delaware's approved Coastal Zone Management program and will be conducted in a manner consistent with the program.

We request your concurrence that the proposed maintenance dredging operation is consistent with Delaware's Coastal Zone Management Program by June 15, 2021. If you have any questions regarding this project, please contact Ms. Barbara Conlin of our Environmental Resources Branch, 215-656-6557, Barbara.E.Conlin@USACE.army.mil or Mr. Dan Kelly of our Operations Division, 215-656-6889, Daniel.J.Kelly@USACE.army.mil.

Sincerely,

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

Enclosures

cc:
Lieske, Kristi M (DNREC)
Kristi.Lieske@delaware.gov

Delaware Department of Natural Resources and Environmental Control
Delaware Coastal Management Program

Initial Review: _____
Updated On: _____
Complete: _____
Official Use Only

Coastal Zone Management Act Federal Consistency Form

This document provides the Delaware Coastal Management Program (DCMP) with a Federal Consistency Determination or Certification for activities regulated under the Coastal Zone Management Act of 1972, as amended, and NOAA's Federal Consistency Regulations, 15 C.F.R. Part 930. Federal agencies and other applicants for federal consistency are not required to use this form; it is provided to applicants to facilitate the submission of a Consistency Determination or Consistency Certification. In addition, federal agencies and applicants are only required to provide the information required by NOAA's Federal Consistency Regulations.

Project/Activity Name:	Port of Wilmington Christina River Navigation Channel Maintenance Dredging

I. Federal Agency or Non-Federal Applicant Contact Information:

Contact Name/Title: Dan Kelly, Project Manager / Barb Conlin, Project Biologist

Federal Agency Contractor Name (if applicable): N/A

Federal Agency: U.S. Army Corps of Engineers
(either the federal agency proposing an action or the federal agency issuing a federal license/permit or financial assistance to a non-federal applicant)

Mailing Address: 100 Penn Square East

City: Philadelphia State: PA Zip Code: 19107

E-mail: Daniel.J.Kelly@USACE.army.mil Telephone #: (215) 200-2340

II. Federal Consistency Category:

- (●) Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)
- ( ) Outer Continental Shelf Activity (15 C.F.R. Part 930, Subpart E)
- ( ) Federal Financial Assistance (15 C.F.R. Part 930, Subpart F)
- ( ) Federal License or Permit Activity (15 C.F.R. Part 930, Subpart D)
- ( ) Federal License or Permit Activity which occurs wholly in another state (interstate consistency activities identified in DCMP's Policy document)

III. Detailed Project Description (attach additional sheets if necessary):

The U.S. Army Corps of Engineers (USACE), Philadelphia District conducts maintenance dredging at the authorized Federal navigation channel and turning basin within Christina River at the Port of Wilmington approximately every 6-7 months. In an agreement with the Diamond State Port Corporation, the USACE dredging contractor also conducts maintenance dredging of the port's 7 berths within the Christina River. The purpose of ongoing maintenance activities is to provide safe access for deep-draft vessels entering and leaving the port. See enclosed figure.

Maintenance dredging is generally conducted via a hydraulic cutterhead dredge with placement of the dredged material pumped via pipeline into the Wilmington Harbor South or Pedricktown upland Confined Disposal Facilities (CDFs). Approximately 750,000 cy/year is removed annually (approximately 16-19% of the material is removed from the port berth area). The amount of material dredged during each cycle can vary (typically between 284,000 to 498,000 cy) depending on many factors such as weather conditions (i.e. the effect of previous storms on shoaling rates and navigational needs); each year's budget for maintenance, and dredge availability. Dredging contract duration is typically 21 to 30 days. This period takes into account potential delays due dredging contractor scheduling issues, bad weather conditions, or short-term equipment breakdowns. Some dredging cycles have been completed in 14 days in the past. The dredged material is pumped through one pipeline (24 to 30 inches in diameter) to an upland Confined Disposal Facility (CDF).

The Federally authorized navigation channel within the Port of Wilmington has been maintained since 1936. The channel is hydraulically dredged to a depth of 35 feet MLLW plus 1-foot allowable overdepth within the contract work limits from Station 0+000 to Station 1+650, with no side slopes delineated along the south channel edge (box cut). Dredging will be required to a distance of 25 feet outside the north channel edge when required dredging depths exist inside the channel along the perimeter of the north edge. Dredging will be required to a depth of 38 feet MLLW plus 1 foot allowable overdepth within the contract work limits from station 1+650 to station 6+236, when required dredging depths exist inside the channel and basin, along the perimeter of the aforementioned north limits, with no side slopes delineated.

IV. General Analysis of Coastal Effects (attach additional sheets if necessary):

Shoal material has been tested extensively over the past two decades and has been determined to be non-hazardous. USACE has consulted with both the Habitat Conservation Division (HCD) and the Protected Resources Division (PRD) of the National Marine Fisheries Service. All dredging will occur outside the recommended seasonal restricted period 1 March through 30 June, as identified by NMFS' HCD in December 2020 for the protection of diadromous fish. If future dredging cycles cannot be scheduled within this available window for any unforeseen reasons, USACE will re-initiate consultation with NMFS. Dredging operations will also follow all applicable terms and conditions as described in the 2019 Biological Opinion provided by NMFS' PRD for the protection of endangered sturgeon species. Elevated turbidity due to the dredging operation dissipates quickly due to tidal flow and currents. The upland CDF is monitored during maintenance dredging operations, including the outflow, for fish entrained at the dredge intake. Total suspended solids settle within the CDF prior to effluent release through use of a sluice gate.

V. Detailed Analysis of Consistency with DCMP Enforceable Policies (attach additional sheets if necessary):

Policy 5.1: Wetlands Management

N/A. No wetlands will be affected by the operation.

Policy 5.2: Beach Management

N/A. No beaches will be affected by the operation.

Policy 5.3: Coastal Waters Management (includes wells, water supply, and stormwater management. Attach additional sheets if necessary)

The dredging and placement operation will not affect wells or water supply.

A suction cutter head dredge has a rotating head with teeth at the end of a long arm that can be lowered to the channel bottom. It has large pumps that suck up water and sediment from the channel bottom to create a dredged material slurry than can be pumped through a pipeline to the CDF. The CDF is an area of open land contained with raised embankments. The dredged material slurry is pumped to one corner of the CDF, allowing the slurry to "meander" within the contained area so sediment solids can fall from suspension from the slurry and be retained in the CDF. Non-continuous, internal embankments called baffle dikes increase the amount of time it takes for the slurry to meander and allow more solids to drop out of suspension. At the far corner from the discharge point, the draining structure, the sluice, is typically made of steel with wood boards that can be raised and lowered to allow the water to skim over the top of the boards, into a pipe and returned to the waterway. The sluice is managed constantly during operations to maximize soil retention and minimize suspended solids in the return water. Samples are taken periodically to measure suspended solids in the return water to ensure it meets regulatory requirements.

All Delaware Surface Water Quality Standards will be achieved through application of technology based requirements, and effluent limitations.

Policy 5.4: Subaqueous Land and Coastal Strip Management

The Port of Wilmington is located in a heavily industrialized section of the Delaware River at the confluence with the Christina River. There is minimal natural environment located along the coastal strip. Ship traffic precludes the area from being utilized for the purpose of recreation, tourism, fishing and crabbing.

The operation will not result in further industrial development of the project area.

Policy 5.5: Public Lands Management

N/A. There are no public lands located within the project area managed for public recreational purposes or for the conservation and preservation of natural resources.

Policy 5.6: Natural Lands Management

N/A. There are no Natural Lands located within the immediate project area that are established for scientific research or teaching of natural environments.

Policy 5.7: Flood Hazard Areas Management

N/A. The proposed action will not affect state or local flood hazard areas nor will the proposed action cause flood hazards.

Policy 5.8: Port of Wilmington

The proposed activity contributes towards the long-term economic viability and competitiveness of the Port of Wilmington. Maintenance of the access channel to the port is necessary for ship traffic ingress/egress.

Policy 5.9: Woodlands and Agricultural Lands Management

N/A. There are no woodlands or agricultural lands within the project area to be affected.

Policy 5.10: Historic and Cultural Areas Management

USACE has been maintaining the federally-authorized navigation channels for the Port of Wilmington since 1936. The channel is typically dredged every 6-7 months due to significant shoaling in the Christina River. No cultural or historical resources have been impacted during these maintenance operations.

Policy 5.11: Living Resources

As noted above in Section IV: shoal material dredged from the channel has been tested extensively over the past two decades and ias been determined to be non-hazardous. USACE has consulted with both the Habitat Conservation Division (HCD) and the Protected Resources Division (PRD) of the National Marine Fisheries Service. All dredging will occur outside the recommended seasonal restricted period 1 March through 30 June, as identified by NMFS' HCD in December 2020 for the protection of diadromous fish. If future dredging cycles cannot be scheduled within this available window, USACE will re-initiate consultation with NMFS. Dredging operations will also follow all applicable terms and conditions as described in the 2019 Biological Opinion provided by NMFS' PRD for the protection of endangered sturgeon species. The upland CDF is monitoring during maintenance dredging operations, including the outflow, for fish entrained at the dredge intake. Total suspended solids settle within the CDF prior to effluent release through use of a sluice gate. Elevated turbidity due to the dredging operation dissipates quickly due to tidal flow and currents.
No upland habitats or terrestrial species would be impacted by the proposed project activities.

Policy 5.12 Mineral Resources Management

N/A. No leases for the extraction and production of minerals will occur.

Policy 5.13: State Owned Coastal Recreation and Conservation

N/A. There are no state owned natural lands in the proposed project area that are maintained as important recreation areas or wildlife habitat. There are no known cultural or historic resources within the proposed dredging and placement areas.

Policy 5.14: Public Trust Doctrine

N/A. The proposed activity will not infringe on public access to navigation on waterways. When the Pedricktown CDF is used, the dredge pipe rests on the Delaware River bottom and does not block waterborne vessel traffic.

Policy 5.15: Energy Facilities

The Port of Wilmington Federally-authorized navigation channel has been maintained since 1936. The Port is utilized for bulk product and container shipments and has been in operation prior to 28 June 1971. No new development or oil and gas exploration is proposed. The dredge pipe lays on the bottom of the river and does not result in the degradation of Delaware's natural sources. No state-designated wetlands will be impacted.

Policy 5.16: Public Investment

N/A. The proposed activity does not entail recycling and waste reduction. Shoal material is dredged from the channel and placed in an open upland CDF. The shoal material has been extensively sampled and analyzed for chemical contaminants over the past 20 years. The shoal material has been determined to be non-hazardous.

Policy 5.17: Recreation and Tourism

N/A. The Port of Wilmington is not considered an area for recreation and tourism.

Policy 5.18: National Defense and Aerospace Facilities

N/A. No national defense or aerospace facilities are located, or proposed to be located, within the project area.

Policy 5.19: Transportation Facilities

The proposed activity is maintenance dredging of an existing authorized Federal project. The dredge contractor is responsible for the clean-up of any accidental fuel spills that occur during operations.

Policy 5.20: Air Quality Management

Nitrogen oxides (NOx) and volatile organic compounds (VOCs) are emitted through combustion by the motorized vessels during the dredging operation. Exhaust will have an effect on air quality in the immediate area of operation but subside upon cessation of the dredging operation. The dredging contract duration is typically 21 to 30 days to account for equipment break-downs and foul weather delays, however, most dredging cycles can be completed within 14 days. The Federal action is short-term and will conform to the State Implementation Plan. Maintenance dredging activities are exempt from General Conformity review under 40 CFR Ch 1 Sec 93.153(c)(2)(ix).

Policy 5.21: Water Supply Management

The operation entails a suction cutter head dredge that vacuums both bottom sediments and surface water that is pumped through a pipeline to the CDF. The operation does not interfere with other permitted withdrawals and the water is returned to the river after a settlement period to remove solids retained in the CDF. The release water is monitored and meets the state's water quality standards. Elevated turbidity due to the dredging action dissipates quickly due to current and tidal processes.

Policy 5.22: Waste Disposal Management

No person shall dispose of wastewater, solid waste or hazardous wastes at the project location. The dredging contractor is responsible for the immediate cleanup of any accidental spills.

Policy 5.23: Development

N/A. No community, commercial or industrial development will occur.

Policy 5.24: Pollution Prevention

The dredging contractor is responsible for removing any waste generated during operations.

Policy 5.25: Coastal Management Coordination

It is assumed that DNREC will provide an opportunity for other federal, state or local agencies and interested parties to review and comment on the proposed action.

VI. JPP and RAS Review (Check all that apply)**:**

Has the project been reviewed in a monthly Joint Permit Processing and/or Regulatory Advisory Service meeting?

☐ JPP ☐ RAS ■ None

*If yes, provide the date of the meeting(s): _____

VII. Statement of Certification/Determination and Signature (Check one and sign below)**:**

☒ **FEDERAL AGENCY CONSISTENCY DETERMINATION.** Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Delaware Coastal Management Program.

OR

☐ **FEDERAL AGENCY NEGATIVE DETERMINATION.** Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity will not have any reasonably foreseeable effects on Delaware's coastal uses or resources (Negative Determination) and is therefore consistent with the enforceable policies of the Delaware Coastal Management Program.

OR

☐ **NON-FEDERAL APPLICANT'S CONSISTENCY CERTIFICATION.** Based upon the information, data, and analysis included herein, the non-federal applicant for a federal license or permit, or state or local government agency applying for federal funding, listed in (I) above, finds that this proposed activity complies with the enforceable policies of the Delaware Coastal Management Program and will be conducted in a manner consistent with such program.

Signature:			
Printed Name:	Barbara E. Conlin	Date:	

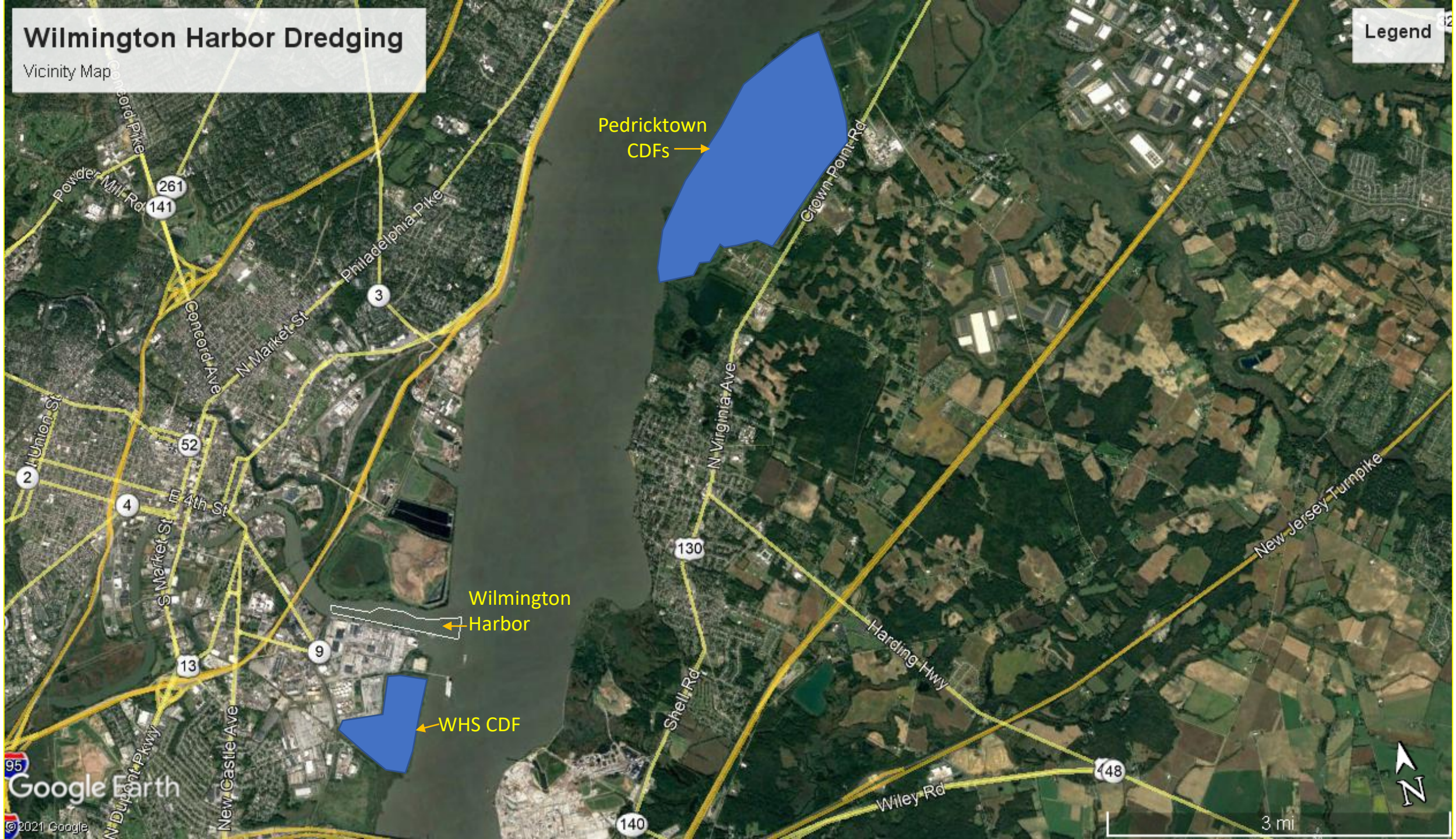
Pursuant to 15 C.F.R. Part 930, the Delaware Coastal Management Program must provide its concurrence with or objection to this consistency determination or consistency certification in accordance with the deadlines listed below. Concurrence will be presumed if the state's response is not received within the allowable timeframe.

Federal Consistency Review Deadlines:

Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)	60 days with option to extend an additional 15 days or stay review (15 C.F.R. § 930.41)
Federal License or Permit (15 C.F.R. Part 930, Subpart D)	Six months, with a status letter at three months. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.63)
Outer Continental Shelf Activity (15 C.F.R. Part 930, Subpart E)	Six months, with a status letter at three months. If three month status letter not issued, then concurrence presumed. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.78)
Federal Financial Assistance to State or Local Governments (15 C.F.R. Part 930, Subpart F)	State Clearinghouse schedule

OFFICIAL USE ONLY:

Reviewed By:	Fed Con ID:	Date Received:
Public notice dates: to	Comments Received: ☐ NO ☐ YES *[attach comments]*	
Decision type: *(objections or conditions attach details)*	_ Decision Date:	


Wilmington Harbor Dredging
Vicinity Map
Legend
Pedricktown CDFs
Wilmington Harbor
WHS CDF
Powder Mill Rd
Concord Pike
Philadelphia Pike
N Market St
Concord Ave
Union St
S Market St
4th St
New Castle Ave
N Dupont Pkwy
N Virginia Ave
Crown Point Rd
Shell Rd
Harding Hwy
New Jersey Turnpike
Wiley Rd
261
141
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52
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13
130
448
140
95
Google Earth
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Wilmington Harbor, Christina River Navigation Project
Sta. 0+000
35 ft channel
Sta. 2+000
Turning basin
Sta. 4+050
38 ft channel
Sta. 6+236
Non-Federal berth area
(red cross-hatching)
Delaware River Main Channel