



DEPARTMENT OF THE ARMY  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
ATTN: REGULATORY BRANCH  
2 HOPKINS PLAZA  
BALTIMORE MD 21201

**MAY 17 2018**

Operations Division

Mr. Christopher Judy  
Director, Shellfish Division  
Maryland Department of Natural Resources  
Tawes State Office Building, B-2  
580 Taylor Avenue  
Annapolis, Maryland 21401-2397

Dear Mr. Judy:

This is in reference to the application by the Maryland Department of Natural Resource (MDNR) for a Department of the Army (DA) permit, **CENAB-OP-RMN (MDNR/ Fisheries Service/Man O' War Shoal Shell Dredging) 2009-61802-M04**, dated July 17, 2015. Enclosed is an initial proffered provisional permit.

**This provisional permit is NOT VALID and does not authorize you to perform the work.** The provisional permit describes the work that will be authorized and the General and Special Conditions, if any, which will be placed on your final DA permit if the State of Maryland Section 401 Water Quality Certification (WQC) and Coastal Zone Management (CZM) requirements are satisfied. No work is to be performed in waters of the U.S., including jurisdictional wetlands, until you have received a validated copy of the DA permit.

By Federal law, no DA permit can be issued until the State has concurred with a permit applicant's CZM consistency and WQC certification, or concurrence has been presumed. As of this date, the State of Maryland has not concurred with your CZM consistency and WQC certification. The State has advised the Corps that its concurrence with your consistency certifications will be included in the State's wetlands and waterways authorization for your proposed project. It is your responsibility to contact the Tidal Wetlands Division, Maryland Department of the Environment (MDE) to satisfy the State WQC and/or CZM requirements.

Should the State's action on the required certification or concurrence preclude validation of the provisional permit in its current form, a modification to the provisional permit will be evaluated and you will be notified as appropriate. Substantial changes may require a new permit evaluation process, including issuing a new public notice.

You are requested to indicate your acceptance of the terms and conditions set forth in the enclosed provisional permit by placing your signature and the date on the provisional permit where indicated.

Please note that, on March 28, 2000, the final rule was established for an administrative appeal process for the Regulatory Program of the Corps of Engineers for approved jurisdictional determinations (JD), permit denials, and declined individual permits. Enclosed you will find a Notification of Administrative Appeal Options and Process (NAO/NAP) fact sheet and Request for Appeal (RFA) form. You may accept or object to this initial proffered permit. To accept this initial proffered provisional permit you must sign the provisional permit document and return to this office. A self-addressed, franked envelope is enclosed for this purpose. Please note that we have moved our office effective January 16, 2018 and the letterhead address is our new mailing address.

Upon Corps receipt of the signed provisional permit and your submission of the State's CZM consistency concurrence and 401 WQC certification or presumption of consistency certification, the DA permit will be validated by this office. Your signature on this provisional permit means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and any approved JD associated with this permit.

Failure to submit a copy of the signed permit and initiating the work before receiving the validated permit from the District, could result in Federal enforcement proceedings. You are also advised that you are responsible for obtaining all other required state and/or local authorizations before starting construction on any of the work approved by this DA permit.

To object to the permit because of certain terms and conditions therein, a letter outlining your objections to this initial proffered permit, including any additional information to clarify your objections, must be received by our District Engineer at the address below by JUL 17 2018, or you will forfeit your right to appeal the permit in the future. The letter must be mailed to the following address:

Commander, Baltimore District  
U.S. Army Corps of Engineers  
Attn: CENAB-OPR-M  
2 Hopkins Plaza  
Baltimore, Maryland 21201

Please note that if you decline this initial proffered provisional individual permit, you do not have a valid permit to conduct regulated activities in waters of the United States, and must not begin construction of the work requiring a Corps permit unless or until you receive and accept a valid Corps permit.

A copy of this permit is being furnished to MDE, Wetlands and Waterways Program, for informational purposes. If you have any questions concerning this matter, please contact Ms. Abbie Hopkins of this office at 410.962.6080 or by email at [abbie.hopkins@usace.army.mil](mailto:abbie.hopkins@usace.army.mil) .

Sincerely,

A handwritten signature in blue ink, appearing to read "Joseph P. DaVia".

Joseph P. DaVia  
Chief, Maryland Section Northern

Enclosures

Cc (via e-mail):

Mr. Justin Berezna, MDE Tidal Wetlands Division

Mr. William Morgante, MD Board of Public Works

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To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at:  
<http://www.nab.usace.army.mil/Missions/Regulatory.aspx>



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PROVISIONAL PERMIT

NOT VALID

**DO NOT BEGIN WORK**

Application Name and Permit Number: CENAB-OPR-MN (MDNR /Fisheries Service/Man O' War Shoal Shell Dredging) 2009-61802-M04

This provisional permit is **NOT VALID** until:

1. You obtain:

X	Section 401 Water Quality Certification (WQC) from the State of Maryland
X	Coastal Zone Management (CZM) consistency determination from the State of Maryland

2. You sign and return the enclosed provisional permit with the State WQC and CZM concurrence/determination and the appropriate permit fee as indicated below:

\$10.00	\$100.00	X	No Fee Required
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3. The Corps signs the permit and returns it to you.

Your permit is denied without prejudice if the State denies your WQC and/or does not concur with your CZM consistency.

**DO NOT BEGIN WORK**





DEPARTMENT OF THE ARMY  
BALTIMORE DISTRICT, CORPS OF ENGINEERS  
ATTN: REGULATORY BRANCH  
2 HOPKINS PLAZA  
BALTIMORE, MD 21201

DEPARTMENT OF THE ARMY PERMIT

Application Name and Permit Number: CENAB-OPR-MN (MDNR/Fisheries Service/Man O' War Shoal Shell Dredging) 2009-61802-M04

Issuing Office:

U.S. Army Engineer District, Baltimore  
Corps of Engineers  
2 Hopkins Plaza  
Baltimore, Maryland 21201

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

To hydraulically dredge approximately 5 million bushels (300,000 cubic yards) of fossil oyster shell as part of a comprehensive research and development effort to monitor and assess the ecological consequences of removing oyster shell from the Man O' War shoal. The dredging is to be performed as "cuts" along the shoal's periphery. Hydraulic dredging with a cutterhead is the method to be used to obtain the shell. An estimated ten dredge cuts will impact approximately 32 acres of the total 214-acre shoal. Each cut will be no wider than 500 feet and will extend no more than 1/3 of the distance through the shoal, which equates to an average of 275 feet each. The initial cut depth is expected to be approximately 30 feet deep but the cut will then be partially backfilled by sediment and fines from the shell washing and sorting process on the dredge, resulting in a final depth of the cut being 10 to 15 feet below mean low water.

The work is scheduled to proceed as follows over the five-year term limits of the Corps permit:

- Year 1 - Data is to be collected seasonally on water quality, oyster populations, and fish and benthic communities at one to three proposed dredging sites and two reference shoal locations.
- Year 2 - Approximately 2 million bushels of shell will be removed by hydraulically dredging at approximately four locations along the shoal's perimeter. Water quality will be monitored prior to, during, and after the dredging operation. In addition, monitoring of water quality, oyster populations, and fish and benthic communities will be performed seasonally in the dredge cut(s) and in two undisturbed reference sites at the shoal.



- Year 3 - Monitoring of water quality, oyster populations, and fish and benthic communities will continue seasonally in the dredge cut(s) and in the two undisturbed reference sites at the shoal.
- Year 4 – Results of the monitoring program will be analyzed for Years 1, 2, and 3 and a report will be prepared and submitted to the resource agencies [Corps of Engineers, National Marine Fisheries Service (NMFS), Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), and Maryland Department of the Environment (MDE)] by the end of Year 4. In addition to performing acoustic sonar surveys of the dredge cuts, the permittee will also continue monitoring water quality, oyster populations, and fish and benthic communities.
- Year 5 – The permittee will continue monitoring water quality, oyster populations, and fish and benthic communities. If the report's findings submitted at the end of Year 4 indicate that the "test dredge" of Year 2 has produced no adverse effects, and the resource agencies listed above concur, an additional 3 million bushels of shell will be dredged using peripheral cuts.

All work is to be completed in accordance with the attached plan(s), work description, and general and special conditions.

Project Location: The Man O' War Shoal, site of the proposed oyster shell dredging, is located north of the Chesapeake Bay Bridge in the Chesapeake Bay near the mouth of the Patapsco River, Baltimore County, Maryland.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31 of the fifth year from the year of issuance of the Water Quality Certification by Maryland Department of the Environment. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places. Construction activities that may affect the resources or remains must be avoided until the required coordination has been completed.



4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.
7. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
8. The U.S. Code of Federal Regulations, Title 33, Subpart 64 states that all structures erected in navigable waters require obstruction lights unless the applicant is advised to the contrary by the Coast Guard District Commander. If the structures authorized by this permit are to be built in navigable waters, then you must contact the Commander (oan), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, Virginia, 23704 to ascertain the need for obstruction lights.

Special Conditions:

1. The dredged oyster shell is to be planted throughout Maryland's portion of the Chesapeake Bay and its tributaries. It is to be used at sanctuaries or other non-harvest bars, managed public harvest sites, and aquaculture sites for the purpose of restoring oyster populations and oyster fisheries, only.
2. No dredging is allowed from June 1 through September 30, of any year, to protect potential oyster spat in the area. This restriction may be waived, with the Corps and NMFS written approval, if the dredged oyster shell will be immediately planted at sites that are expected to take advantage of natural oyster reproduction.
3. No dredging is allowed from February 15 through June 15, of any year, to protect spawning anadromous fish from potential impacts caused by noise and turbidity created by the dredging as they migrate past the dredge area.
4. The monitoring program for Years 1 through 5 must be performed as outlined in Table #1, attached. Acoustic sonar surveys are to be performed of the dredge cuts.
5. Oyster surveys are to be used to guide dredging locations, especially to ensure any spat set detected in the fall survey is avoided. Maps and details of the selected dredge cut locations must be submitted with any surveys to the Corps and the NMFS for written approval prior to starting the work.

6. Total dredging during the life of the permit is not to exceed 5 million bushels of shell from no more than 10 cuts. Dredging in Year 2 is limited to 2 million bushels of shell. If there is less than 2 million bushels available to be dredged in Year 2 than was estimated, and more than 10 dredge cuts are necessary to obtain the final target 5 million bushels of shell over the life of the permit, Maryland Department of Natural Resources (MDNR) must obtain authorization or a permit modification, whichever is applicable, by submitting an application to the Corps requesting additional shell dredging. The additional proposed activities will then be coordinated with the resource agencies as part of the evaluation of this request.

7. Coordination with the resource agencies is required prior to proceeding with the Year 5 dredging. This includes the resource agencies' written concurrence with the monitoring report findings which are to be submitted by MDNR to the Corps no later than the end of Year 4, and approval to proceed with Year 5 dredging.

8. Continue water quality monitoring in accordance with the monitoring timeline outlined in Table #1 throughout Years 4 and 5 (pre- & post- Year 5 dredging), and provide a comprehensive monitoring report at end of Year 5.

9. MDNR must submit in writing to the Corps an accounting of the dredged shell use once the final allocation of the shell has been determined and placed for each of the dredging years, Year 2 and Year 5. This must include the placement site location, by whom, the amount of shell, and type of use (by indicating Sanctuary, Managed Public Harvest, or Aquaculture use).

10. The permittee's equipment shall not obscure or interfere with any aids to navigation (33 CFR 70), specifically, the Craighill Channel Range Front Light (LLNR 8040) depicted on Figure 1, which has an advertised height of 22 feet.

11. Any mooring or other aids to navigation established to support the dredging will need to be approved through the 5<sup>th</sup> Coast Guard District. Their POC is:

Mr. Doug Simpson  
Marine Information Specialist  
USCD 5<sup>th</sup> District Waterways Management Branch  
Phone: (757) 398-6346  
Email: [Douglas.C.Simpson@uscg.mil](mailto:Douglas.C.Simpson@uscg.mil)

12. There shall be no deviation in the location or design of the dredging operation without prior approval of the Corps. Project plans and a description of any additional work, structures, or fill in waters of the U.S., other than that shown on the enclosed approved project plans dated February 2017 must be submitted to the Corps for review and approval two weeks prior to commencing work. This includes any work or structures for hydraulic dredging such pilings, hydraulic dredge pipeline, barges, booster pumps, etc.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).



( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law or to comply with the appropriate local critical area regulations.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and

conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

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(PERMITTEE) (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Issued for and in behalf of Colonel Edward P. Chamberlayne, P.E.  
Colonel, U.S. Army  
Commander and District Engineer

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Joseph P. DaVia Date  
Chief, Maryland Section Northern  
Regulatory Branch

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

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(TRANSFEREE) (DATE)

# Maryland Department of Natural Resources

## Man O War Shoal Shell Dredging Permit Application Plan Map and Dredge Cut Diagram

February 2017

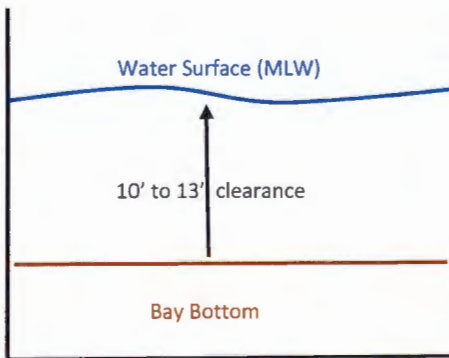
Dredge cut locations are potential, not actual sites. Actual cut sites will be determined before dredging occurs as per conditions in the permit



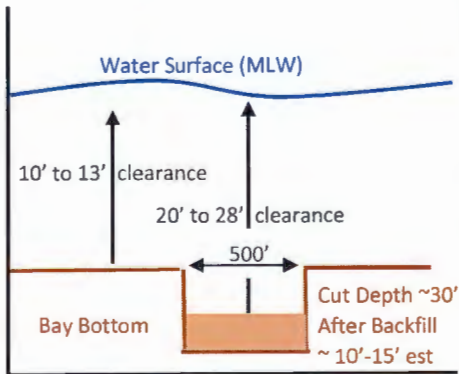
SIDE VIEW of Dredge Cut

TOP VIEW of Dredge Cuts

**SIDE VIEW** before dredging



**SIDE VIEW** after dredging



- The proposed shell dredging area is the crosshatched area.
- Locations of dredge cuts are conceptual, for illustration purposes.
- Actual locations determined before dredging and according to the permit.
- Cut dimensions will be 500' maximum width and a length no greater than 1/3 of the way into the charted edge of the shoal (average of 275' long).
- Undredged bottom will be left between cuts.
- No greater than 10 cuts will be made to remove the proposed 5 million bushels of shell.



TABLE 1: Monitoring timeline to assess potential impacts from Man O'War Shoal dredging

Year	Event	Location	Season	Monitoring Type
1	Pre-Dredging Monitoring	3 Treatment Sites & 2 Control Sites	Spring	oyster patent tongs, fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Summer	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Fall	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
2	Dredging	Man-O-War Shoal	Subject to time-of-year limits	Water quality sampling one week prior to dredging, during dredging, the day after dredging activities cease, a week after dredging activity ceases, and one month after dredging activities cease. Includes turbidity, nutrients (ammonium, nitrate, total Kjeldahl nitrogen, orthophosphorus, and total phosphorus), chlorophyll, metals, and other water quality characteristics (dissolved oxygen, temperature, salinity, pH).
	During-Dredging Monitoring	3 Treatment Sites & 2 Control Sites	Spring	oyster patent tongs, fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Summer	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
Fall			fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)	
3	Post-Dredging Monitoring	3 Treatment Sites & 2 Control Sites	Spring	oyster patent tongs, fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Summer	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Fall	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
4	Post-Dredging Monitoring and Reporting	3 Treatment Sites & 2 Control Sites * Dredge Cuts	Spring	oyster patent tongs, fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature) * Acoustic sonar surveys of dredge cuts
			Summer	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Fall	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)  Report of findings of first 3 years

TABLE 1: Monitoring timeline to assess potential impacts from Man O'War Shoal dredging

5	Dredging	Man-O-War Shoal	Subject to time-of-year limits	If no significant negative impacts were found, then dredging can occur with resource agencies' required concurrence
	During –Dredging Monitoring	3 Treatment Sites & 2 Control Sites	Spring	oyster patent tongs, fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Summer	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
			Fall	fish bottom trawls, sediment samples and benthic samples, and water quality (bottom and surface salinity, dissolved oxygen, conductivity, turbidity, and water temperature)
Spring = March, April, May. Summer = June, July, August. Fall = September, October, November.				