



NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



December 23, 2014

Re: Coordination relative to USACE, NOAA, USFWS, USEPA and MDNR
Oyster Restoration in the Chesapeake Bay

Dear Carroll County Commissioners,

The partnering agencies listed above have received your subject letter dated October 23, 2014.

We are providing this coordinated response to clarify how and why we conduct our inter-agency oyster restoration efforts.

As you mention, oysters are great filter feeders that improve water quality. The current collaborative efforts of the U.S. Army Corps of Engineers (USACE), the National Oceanic and Atmospheric Administration (NOAA), and the Maryland Department of Natural Resources (DNR) to restore the Chesapeake Bay's oyster population is the result of scientifically-based, public processes that have transpired over several years. These processes have been conducted in compliance with federal and state law.

USACE, NOAA and DNR represent the lead federal and state agencies conducting oyster restoration in Maryland's tidal waters. This Maryland Interagency Workgroup facilitates oyster restoration by working together and consulting with scientific, academic and oyster restoration experts to ensure environmentally-sound and cost-effective efforts.

Through an authority under Section 704(b) of the Water Resources Development Act (WRDA) of 1986, as amended, USACE provides construction assistance for certain oyster restoration projects through its Civil Works program. Under the statute, federal funding for oyster restoration program construction can only be used for sites that cannot be harvested. Therefore, 704(b) program restoration only takes place in pre-existing sanctuaries, which are established by DNR. The federal government does not make the determination to designate specific tributaries as sanctuaries. Sanctuaries are areas that are closed to harvest; however, oysters within sanctuaries are expected to increase the abundance of adult oysters whose larvae are expected to settle not only within the sanctuary, but also on public shellfish fishery areas in the vicinity of the sanctuaries. In order for selective harvesting to be permitted, the standing statute would need to be modified through Congressional authorization, or there would need to be additional Congressional authorization. For more information on sanctuaries:
<http://bit.ly/MDNRSanctuaries>.



Upcoming restoration work in Harris Creek and the Tred Avon River includes constructing 1-foot reefs using rock and mixed-shell materials. Constructed reefs are made of: 1) rock only 2) combination of rock and mixed shell, or 3) mixed shell only. The shell comes from processing plants in the mid-Atlantic region and is permitted to be imported and placed in the river. Surveys are completed prior to site design to ensure that new sites are not placed on currently thriving reefs and that new sites will be constructed on hard-surface bottoms.

There is not sufficient natural shell to restore oyster habitat; therefore, artificial reefs have been constructed at locations throughout the Bay. The first large-scale reef construction at Harris Creek began in 2012, and the site is already thriving, rich with oyster beds that continue to grow and reproduce.

With respect to your suggestion that oyster reef restoration could be used to offset load reductions required by the 2010 Chesapeake Bay Total Maximum Daily Load (TMDL), there are several outstanding issues that need to be resolved before oysters could be considered as a basis to "offset" these requirements:

- 1) A recent review by the Chesapeake Bay Program's Scientific and Technical Advisory Committee (STAC) found "Although enhanced denitrification has been observed in association with oyster reefs, the effect has been highly variable and it currently is not possible to provide reliable rates for inclusion in the TMDL implementation process without direct measurements on individual reefs."¹
- 2) The policy of allowing nutrient pollution to enter the Bay and be removed after it is already in the water is controversial and not supported by all stakeholders.

The Chesapeake Bay Program partnership, through its Water Quality, Habitat and Fisheries Goal Implementation Teams, is currently considering convening a Best Management Practices (BMP) expert panel to review the current state of the science and recommend back to the Partnership possible approaches to quantify and credit the nutrient and sediment reduction potential of filter feeders (including oysters). This work will follow the procedures outlined within the Partnership's *Protocol for the Development, Review, and Approval of Loading and Effectiveness Estimates for Nutrient and Sediment Controls in the Chesapeake Bay Watershed Model*.

We hope that the information provided in this letter has sufficiently addressed your concerns. If you should have further questions, do not hesitate to contact us.

Below outlines further information on partner responsibilities and the basis of our actions.

Roles and Responsibilities of Partner Agencies

USACE is involved in oyster restoration in two ways. Through an authority under Section 704(b) of the Water Resources Development Act (WRDA) of 1986, as amended, USACE provides construction assistance for certain oyster restoration projects through its Civil Works program.

¹ Luckenbach, M., D. Bilkovic, C. Bott, R. Chambers, M. Ford, N. Gardner, J. Meisinger, G. Yagow. (2013). *Evaluation of the Use of Shelfish as a Method of Nutrient Reduction in the Chesapeake Bay*.

For work undertaken by others, USACE evaluates the impact of the discharge of dredged or fill material into all Waters of the United States under Section 404 of the Clean Water Act, and any structures/work proposed in navigable waters under Section 10 of the Rivers and Harbors Act through a permitting process managed by the USACE Regulatory Program.

DNR is responsible for maintaining the network of oyster sanctuaries established in 2010 after extensive scientific study and public outreach. A key aspect of ensuring the success of sanctuaries is protecting them through the Natural Resource Police. In addition, DNR conducts initial sonar surveys of every sanctuary, monitors water quality, and funds and coordinates reef construction. DNR provides funding for spat on shell oyster production as well as purchasing, aging and delivering the oyster shells necessary for the hatchery to operate. DNR also conducts annual bay-wide surveys of oyster bars to track disease pressure, relative oyster abundance and distribution.

NOAA works with federal, state, and local partners in Maryland to implement large-scale oyster restoration. NOAA's financial support is used to address infrastructure needs such as shell handling and hatchery production of seed oysters. NOAA also provides habitat mapping and assessment to inform planting and conducts monitoring of restored reefs to evaluate success.

USFWS is involved as a commenting agency and provides support to the lead federal agency under either USACE or NOAA under the authorities of the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The U.S. Environmental Protection Agency is responsible for the continued oversight of the seven watershed jurisdictions' implementation of their Watershed Implementation Plans and achievement of their two-year milestones under the 2010 Chesapeake Bay TMDL. This oversight and accountability responsibility includes factoring in the annually reported nutrient and sediment pollutant load reduction implementation actions by the six states and the District of Columbia and assessing the anticipated pollutant load reductions compared with their obligations under the Chesapeake Bay TMDL and their commitments within their two-year milestones. For more information on TMDL, please visit:

<http://www.epa.gov/chesapeakebaytmdl/>.

The Basis for Oyster Restoration Actions in Sanctuaries

There are two important documents that guide how oyster restoration actions are conducted in the Maryland portion of the Bay. The USACE Native Oyster Restoration Master Plan (2012) (<http://bit.ly/OysterMasterPlan>) guides those projects that are funded for USACE construction. The State's restoration actions are conducted in accordance with Maryland's 10-Point Oyster Restoration Plan (DNR 2010) found at <http://tinyurl.com/my22df3>. Federal actions are supported by NEPA documents that have been completed to date. Supplemental NEPA documents would be needed for restoration actions not covered under existing documents. USACE is now preparing a supplemental Environmental Assessment (EA) evaluating upcoming proposed shallow water restoration in the Tred Avon River. USACE issued a permit for the work currently ongoing in Little Choptank and is currently evaluating a request relating to additional work. Each of the EAs includes a section on public involvement and agency coordination, describing how public input is considered for federal action. The DNR plan is a policy document that guides state action. As such, it does not constitute a major federal action that would trigger NEPA.

For the 704(b) program oyster restoration projects in Maryland, USACE is the lead federal agency, and DNR is the non-federal sponsor. Additional project partners include NOAA and the Oyster Recovery Partnership (ORP). NOAA maps available restorable water bottom using sonar in conjunction with various ground-truthing methods, and provides funding for production and planting of seed oysters. USACE constructs reef structure where none currently exists. ORP plants seed oysters grown at the University of Maryland Horn Point Hatchery on restoration sites.

All NOAA-funded Chesapeake Bay oyster restoration activities are reviewed for compliance with NEPA. The NOAA funds provided to DNR and Chesapeake Bay Foundation for production and planting of oyster seed in Harris Creek and the Little Choptank River were similarly reviewed, and are covered within the scope of NOAA's Programmatic and Supplemental Programmatic Environmental Assessment for the Community-based Restoration Program. NOAA will continue this review process for future NOAA-funded oyster restoration activities.

Although there is no specific NEPA obligation to coordinate with local jurisdictions, the agencies recognize that stakeholder engagement is a critical aspect of our work, and we remain committed to transparency with interested parties. Our mission is to be stewards of our environment, and we realize that we need public input in order to carry out this mission.

To engage stakeholders and the public, beyond NEPA requirements, USACE, DNR and NOAA held a series of public open houses to seek input on large-scale oyster restoration. These were held on March 21, 2012, in St. Michaels, MD (for proposed Harris Creek work); November 7, 2013, in Oxford, MD (for proposed Tred Avon work); and February 27, 2014, in Cambridge, MD (for proposed Little Choptank River work.) Input received at these events was reviewed and incorporated into restoration plans where appropriate.

Additional Information and References

For more information and to view full EAs, please visit: <http://bit.ly/NABoysters>. To view Regulatory public notices, please visit: <http://bit.ly/NABRegulatory>.

The following are links to the various decision documents and NEPA documents that have been completed for the 704(b) program in Maryland:

1996 Chesapeake Bay Oyster Recovery Project EA and Finding of No Significant Impact (FONSI): <http://bit.ly/1996oysterEA>; Coordination can be found in Section 6 of the document.

2002 Chesapeake Bay Oyster Recovery Project Maryland Decision Document: <http://bit.ly/2002oysterdoc>

2009 Alternate Substrate Supplemental EA: <http://bit.ly/AlternatesubstrateEA>

A Study Initiation Notice announcing that an EA was being prepared for the project was issued December 22, 2008. A public notice announcing the availability of the draft document was issued April 13, 2009. The 30-day public review period ended May 13, 2009. Environmental Compliance and Coordination can be found in Section 6.

2009 PEIS for Oyster Restoration in Chesapeake Bay Including the Use of Native and/or Non-native Oyster: <http://bit.ly/oysterPEIS>

USACE, Norfolk District, in cooperation with DNR and the Virginia Marine Resource Commission (VMRC), as well as USACE, the Potomac River Fisheries Commission (PRFC), the Environmental Protection Agency (EPA), NOAA, the U.S. Fish and Wildlife Service (USFWS), and the Atlantic States Marine Fisheries Commission (ASMFC), prepared the 2009 *Programmatic Environmental Impact Statement (PEIS) for Oyster Restoration in Chesapeake Bay Including the Use of Native and/or Non-native Oyster*. The PEIS was initiated in 2004 and published after extensive public outreach in both Maryland and Virginia. The document recommends pursuing only native oyster restoration in the Chesapeake Bay and serves as an umbrella document to USACE Native Oyster Restoration Master Plan. Public Outreach documented in Section 5 of PEIS.

2010 Maryland Regulations Expanding Sanctuary Network: <http://tinyurl.com/mwp4xat>

Following the release of the PEIS, DNR created a statewide network of oyster sanctuaries through their regulatory process that included 24 percent of the bay's remaining oyster grounds. Part of the stated reasoning for establishing these sanctuaries was to conduct large-scale reef restoration. The establishment of this sanctuary network involved over 100 meetings with constituents, in addition to the meetings required by the state regulatory process.

Based on these scientific and public processes, the multi-State Bay Agreement, which was signed and released in June 2014 after an extensive public comment process, set a goal for restoring oysters in 10 bay tributaries by 2025.

2012 Native Oyster Restoration Master Plan: <http://bit.ly/OysterMasterPlan>

In 2009, the *Chesapeake Bay Protection and Restoration Executive Order* (E.O. 13508) was issued. In response to E.O. 13508, USACE completed the 2012 USACE *Native Oyster Restoration Master Plan*. During the development of the master plan, the project team used several communication methods to widely distribute information to the public, including three public meetings in April 2012, and periodic agency coordination meetings. Agency and Public Coordination can be found in Section 8 of the plan.

Harris Creek Supplemental EA: <http://bit.ly/HarrisCreekEA>

Public involvement was initiated with an open house held in March 2012 that presented the Harris Creek Tributary Plan developed by the Maryland Interagency Workgroup. The draft EA underwent public review from March 20 - April 21, 2014. The supplemental EA determined there would be no significant environmental impact as a result of this proposed action, and a FONSI was signed June 2014. Public Involvement and Agency Coordination can be found in Section 8 of the EA.

Tred Avon River Supplemental EA

Public involvement was initiated with an open house held November 2013. The Tred Avon River Tributary Plan developed by the Maryland Interagency Workgroup was presented. The supplemental EA for proposed future oyster restoration work in the shallow water areas (6-9 feet deep) is expected to be released for public review in spring 2015.

Upcoming Work

Oyster restoration construction efforts are continuing in Harris Creek by both USACE and DNR. New construction under the 704(b) program in the deep water portions of the Tred Avon River will follow (9-20 feet deep).

These efforts are outlined within the Native Oyster Restoration Master Plan. An informal comment period closed October 15, 2014, requesting information from users of the Tred Avon River, which will assist in developing the supplemental EA for proposed work to be done in the shallow water portions (6-9 feet deep), starting as early as winter 2015/2016.

The following are USACE Regulatory Program permit decisions that have taken place for oyster restoration efforts. These include permit decisions (which comply with NEPA) and public outreach and engagement associated with those permits. You can find the related documents by typing in the permit identifier through the search box on <http://bit.ly/NABRegulatory>.

DNR Alternate Materials Permit

1. DNR submitted a permit application July 16, 2007, requesting Department of the Army (DA) authorization to place alternate materials (non-oyster shell) within chartered oyster bars in the Chesapeake Bay. A public notice was issued December 26, 2007, with the comment period extending through January 26, 2008. In compliance with NEPA, an EA was prepared and signed August 13, 2008. The final DA permit was issued September 22, 2008. The permit number is 2007-03659-M24.

DNR Harris Creek Permit

1. DNR requested a modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, September 11, 2012, to conduct oyster restoration work in Harris Creek. The name and number for this permit is MD DNR Fisheries/Harris Creek/Oyster Restoration/Alternate Materials & Oyster Shell (2012-61332-M24). A public notice was issued January 15, 2013, with a comment period extending through March 21, 2013. A public information meeting/hearing was held February 2013. In compliance with NEPA, a new EA for the Harris Creek work was signed June 10, 2013. The final DA permit was issued August 12, 2013.

DNR Little Choptank River Permit

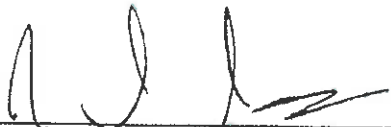
1. A modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, was requested by DNR November 13, 2013, proposing the placement of alternate materials and/or shells within the Little Choptank River (greater than 9 feet deep). Because this work was previously authorized under the original Alternate Materials permit, and the permittee requested authorization for oyster restoration in specific polygons in a reduced area than was previously approved, an EA was not prepared. This request was reviewed and found to be "not contrary to the public interest." The DA permit modification was issued March 4, 2014.
2. Also proposed was the placement of alternate materials and spat on shell in shallow water areas (4 – 9 feet deep) within the Little Choptank River. As this was additional work not previously reviewed or authorized, a new public notice was issued March 14, 2014, a joint public information meeting/public hearing was held April 2014, and the comment period extended through May 9, 2014. The shallow water permit modification is still under review and NEPA documents will be prepared as required.

Additional DNR Permit Modifications

1. A modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, was requested September 2, 2008, for the applicant to conduct oyster restoration work in the Cooks Point Historic Bar/NOB 11-6 (Choptank River) using reef balls.

This request was reviewed and found to be "not contrary to the public interest." The DA permit modification was issued September 30, 2008.

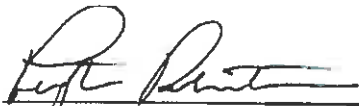
2. A modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, was requested May 3, 2011, proposing the use of approximately 50 cubic yards of larger concrete and granite material as an alternate material. This request was reviewed and found to be "not contrary to the public interest." Because the project did not extend beyond the scope of the original permit, no public notice, comment period, or hearing was held. The DA permit modification was issued May 23, 2011.
3. A modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, was requested August 17, 2011, proposing the use of fresh oyster shell (e.g., from shucking houses) as an alternate material. This request was found to be "not contrary to the public interest." Because the project did not extend beyond the scope of the original permit, no public notice, comment period, or hearing was held. The DA permit modification was issued September 7, 2011.
4. A modification to DA permit CENAB-OP-RMN (MD DNR Fisheries/Harris Creek/Oyster Restoration/Alternate Materials & Oyster Shell) 2012-61332-M24, was requested November 22, 2013, requesting a +5-inch construction tolerance above the DA approved alternate material and shell discharge limit of 13 inches in Harris Creek. This request was found to be "not contrary to the public interest." Because the project did not extend beyond the scope of the original permit, no public notice, comment period, or hearing was held. The DA permit modification was issued November 27, 2013.
5. A modification to DA permit CENAB-OP-RMN (MD DNR/Alternate Material) 2007-03659-M24, was requested May 21, 2014, requesting a modification to a Special Condition in the March 4, 2014, DA permit modification for work in the Little Choptank River. The request was to change the authorized size of alternate materials, so as to minimize potential impacts to recreational and commercial fishing and crabbing in the Little Choptank River. This request was found to be "not contrary to the public interest." Because the project did not extend beyond the scope of the original permit, no public notice, comment period, or hearing was held. The DA permit modification was issued June 9, 2014.



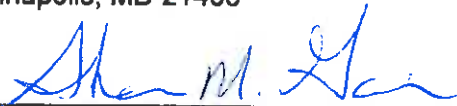
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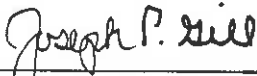
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