

FINDING OF NO SIGNIFICANT IMPACT
OYSTER RESTORATION IN TRED AVON RIVER OYSTER SANCTUARY,
MARYLAND

The Baltimore District of the U.S. Army Corps of Engineers (USACE-Baltimore) is proposing to expand oyster reef restoration efforts into water depths between 6.5 and 9 feet mean lower low water (MLLW) within the Tred Avon River Oyster Sanctuary, Talbot County, Maryland. The Tred Avon River Oyster Sanctuary encompasses all waters of the Tred Avon River upstream from Oxford, MD. For the purposes of this environmental assessment (EA), ‘oyster reef restoration efforts’ to be evaluated include 1) substrate reef restoration, 2) planting of spat-on-shell (seeding) on substrate reefs, and 3) planting of spat-on-shell on existing oyster reef habitat. The Tred Avon River Oyster Sanctuary Tributary Plan, developed by the Maryland Oyster Restoration Interagency Workgroup (MIW) identifies a restoration target of 146 acres. With this supplemental EA, USACE is proposing to expand USACE-conducted oyster reef construction through substrate placement into water depths between 6.5 to 9 feet MLLW resulting in at least 6 feet of navigational water clearance across 52 acres. Additionally, USACE is evaluating the Maryland Department of Natural Resources (MD DNR)-led planting of spat-on-shell on constructed reefs and on existing oyster reef within the sanctuary on 71 acres.

This EA is prepared in accordance with the National Environmental Policy Act (NEPA), as amended. Previous NEPA documentation completed in 1996, 1999, 2002, and 2009 evaluated the impacts of oyster reef restoration at water depths that maintained at least an 8 foot water column (navigational clearance) above restored reefs, including 26 acres in the Tred Avon River. Currently, one foot of material is placed on the bottom to restore reef habitat which limits restoration to water depths deeper than 9 feet MLLW. At the proposed restoration sites, a minimum 6 foot water column would be maintained above restored substrate reefs following placement of 6 to 12 inches of substrate material and 1 to 3 inches of spat-on-shell. Adding spat-on-shell to existing oyster habitat between 4 and 20 feet MLLW is not subject to requirements to maintain a designated navigational clearance, but impacts from this action are evaluated.

The proposed reef restoration is expected to be accomplished using alternate substrates including stone and non-oyster shell, because native oyster shell quantities are not sufficiently available to support the stated restoration targets. However, native oyster shell is the preferred substrate by many stakeholders and would be used for restoration if it were to become available at a future time. The proposed actions evaluated in this supplemental EA are a significant part of a multi-agency restoration effort outlined in the *Tred Avon River Oyster Restoration Tributary Plan: A blueprint for sanctuary restoration* (MIW 2015).

In 1996, USACE-Baltimore produced a report entitled *Chesapeake Bay Oyster Recovery Project, Maryland* that identified six Oyster Recovery Areas (ORA’s) including the Choptank River complex. In 1999, a supplemental EA was conducted to evaluate the impacts associated with constructing 18 acres of seed bar habitat in Eastern Bay. In May 2002, the Baltimore District prepared the *Chesapeake Bay Oyster Recovery Project, Maryland Decision Document* to include project construction beyond 2000 and to increase the total project cost. This construction, known as Phase II, continues today. In May 2009, USACE-Baltimore completed a separate stand-alone EA that evaluated the use of alternate substrate materials for constructing reef habitat due to the

shortage of oyster shell entitled *Chesapeake Bay Oyster Restoration Using Alternate Substrate, Maryland*. These reports are hereby incorporated by reference.

Potential impacts from the proposed action were assessed to the physical, chemical, and biological characteristics of the aquatic and terrestrial ecosystem, endangered and threatened species, hazardous and toxic materials, aesthetics, recreation, cultural resources, commercial and recreational fishing, boating, navigation, and the general needs and welfare of the public. This EA documents the overall effects of the proposed action and finds that there will be minor, temporary impacts during construction of the reefs to benthic organisms, local turbidity, some lifestages of fish (eggs, larval, and juvenile stages), noise, and aesthetics for residents from placement of material, and recreational and commercial fishermen from the short-term presence of the construction equipment.

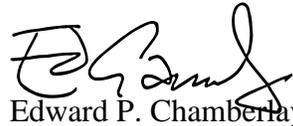
Specific attention was given to potential impacts to navigation by reducing the navigational clearance from 8 to 6 feet MLLW. There are two federally-maintained channels in the area, the Tred Avon River and Town Creek. No substrate placement is proposed within federally-maintained channels or within a 150 ft buffer of the channels. Recreational boaters, commercial watermen, and commercial barging operations are the primary users of the waterway. USACE-Baltimore coordinated with 500 residents along the Tred Avon River, several marinas, and the Tred Avon Yacht Club to determine common pathways and where boat users traverse. Any sites that posed a problem for navigation were eliminated. Coordination was also conducted with the U.S. Coast Guard (USCG). USCG recommendations to minimize navigation risks due to the proposed oyster restoration were implemented. A navigational pathway was identified throughout the course of the Tred Avon River. Potential substrate sites within this navigational pathway that would have resulted in reduced navigational clearance were removed from proposed plans. Another primary concern was the potential impact the use of alternate substrates (stone) may pose for commercial crabbers who use trotlines. To minimize potential impacts, input from commercial crabbers was sought through public outreach.

As a result of this outreach effort, USACE increased the proposed navigational clearance above substrate reef restoration sites from 5 feet MLLW to 6 feet MLLW, revised restoration areas in the shallowest areas to be 6 inch high reefs rather than 12 inch high reefs in order to maintain the necessary navigational clearance, and cut nearly 22 acres of potential reef habitat from the draft Tributary Plan that posed a direct impact to navigation.

In accordance with Section 404 of the Clean Water Act, a Section 404(b)(1) analysis was conducted for the proposed action and determined that expanding oyster restoration into shallower waters would not result in negative impacts to the aquatic environment. A Clean Water Act, Section 401 water quality certification and Federal Coastal Zone Management Act, Section 307 Federal Consistency determination have been issued by the Maryland Department of the Environment.

Upon reviewing the EA, I find that the potential negative impacts to benthic and open water habitat associated with the implementation of the project will occur over a small area and will be minimal and short-term. There will be no significant impacts to the natural or human environment considered. The project will produce a net beneficial impact to the environment by creating habitat

for oysters and other species associated with oyster communities and does not constitute a major federal action significantly affecting the quality of the human environment. Based upon this finding, preparation of an environmental impact statement is not required.



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