# Chesapeake Bay Native Oyster Restoration Program

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Tred Avon River Environmental Assessment

August 9, 2016



US Army Corps of Engineers BUILDING STRONG<sub>®</sub> **Public Meeting Agenda** 

- <u>6:00 PM</u> Welcome and Review of the Public Meeting
  - Facilitator, Agency
- <u>6:10 PM</u> Study Overview Presentation
- <u>6:40</u> Panel Question and Answer Period Begins
- <u>8:00</u> Panel Question and Answer Period Ends -

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# **Meeting Adjourned**



## **Public Review**

- Draft Report Available <u>NOW</u>.
  - Available: http://go.usa.gov/cswPh
- Submit Comments:
  - Email: MD.OysterRestoration@usace.army.mil
  - <u>Mail</u>: U.S. Army Corps of Engineers, Baltimore District

Attn: Angie Sowers P.O. Box 1715

Baltimore, MD 21203

- Comment Period: July 19, 2014 August 19, 2016
- Final Report: Anticipated for September 2016



## **STUDY OVERVIEW**

## • Dr. Angie Sowers, USACE....





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## **Policy Authorization**



### Section 704(b) Of The Water Resources Development Act (WRDA) Of 1986, as amended

 Established Authority to implement projects to provide alternative or beneficial habitats for native fish and wildlife.

### Executive Order 13508 (2009):

Federal Government shall lead a renewed effort to restore the Chesapeake Bay and its watershed.

### 2014 New Chesapeake Bay Agreement:

 Established goal by EPA, MD, VA, PA, NY, DE, WV, & DC) to restore native oyster populations in 10 tributaries in Virginia and Maryland by 2025.

# Oyster Advisory Commission (OAC) – Recent Agreements

1. DNR will apply for permits to dredge oyster shell from three upper Bay sites, in addition to the current application for Man O War Shoals. The three sites for consideration are: Worton Point, Plum Point, and Shad Battery Shoals.

2. Oyster shell will be the priority material for future reef construction, followed by mixed shell/clam shell, followed by rock. If rock is proposed for any new reef building, the proposal must come before the OAC for their advice before a decision is made.

3. USACE and NOAA, with DNR, will work with local watermen to see if any past shell plantings in the Tred Avon can be recovered for future restoration work in the river.

4. DNR, NOAA and USACE will consult with local watermen and stakeholders about future oyster restoration projects in their areas.

5. The OAC will set a timeline for the other two tasks posed by DNR.

- Provide recommendation of two additional tributaries for restoration
- Re-examine oyster management areas



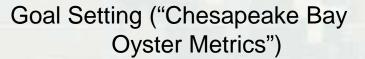
# **Overarching Goal**

Restoring abundant self-sustaining oyster populations in priority tributaries of the Chesapeake Bay in an environmentally, technically, and economically sound manner.



**US Army Corps of Engineers – Baltimore District** 

### Interagency Workgroup Process (USACE, DNR, NOAA, ORP)



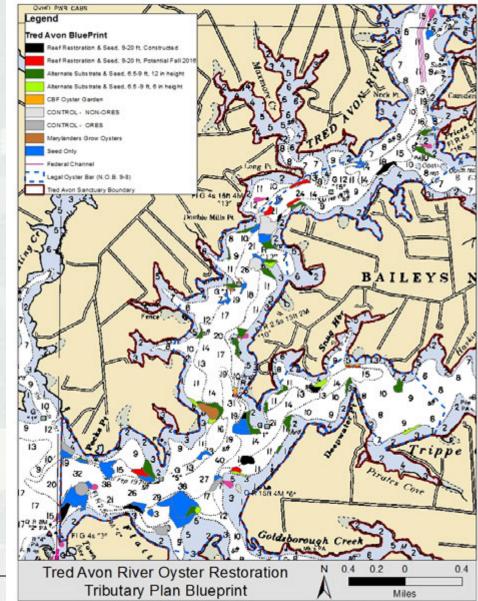
**Select Tributaries** 

**Develop Tributary Plans/NEPA** 

**Implement Restoration** 

Monitor

Adaptive Management

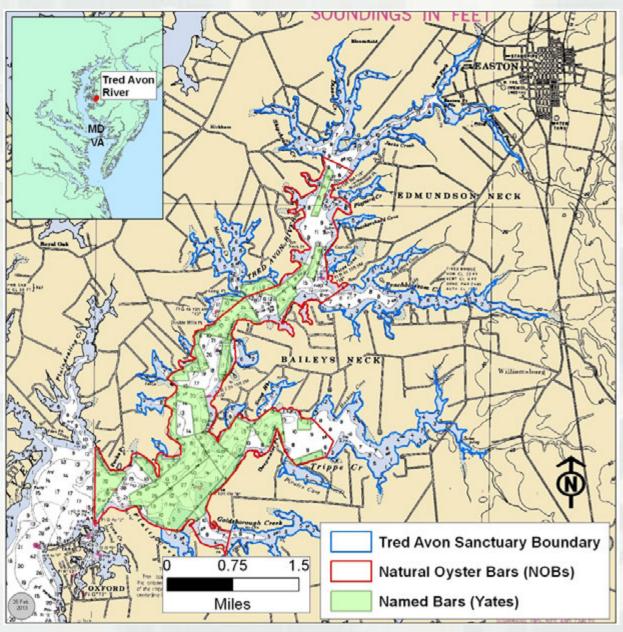


Created by USACE on August 4, 2016

# Purpose of National Environmental Policy Act (NEPA) Effort

- Currently, NEPA clearance to restore reefs in water depths greater than 9 ft mean lower low water (MLLW)
- Evaluate the expansion of oyster reef restoration efforts into water depths between 6.5 and 9 ft MLLW
- Replace the 8-foot minimum navigational depth clearance for previously authorized activities under the 704(b) Program with a 6-foot minimum navigational depth clearance
- The goal is large-scale restoration at diverse depths throughout the tributary to capture the full expanse of historical habitat coverage and to provide a diversity of reef habitat
- Work also includes placing spat-on-shell on existing degraded reefs between 4 and 20 ft MLLW





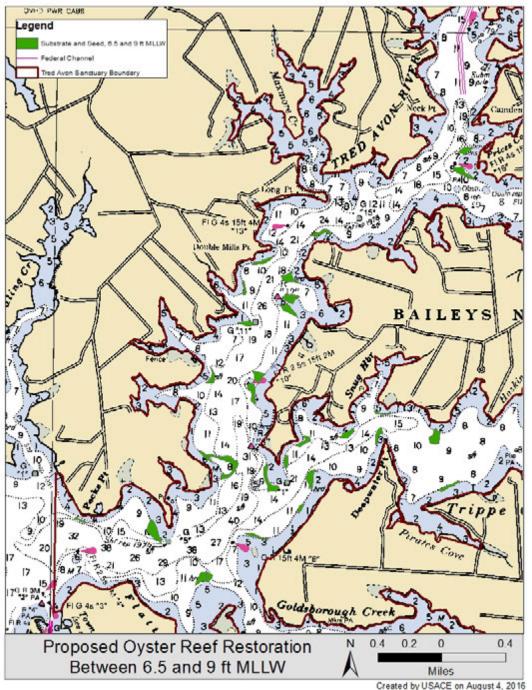
### Tred Avon River Sanctuary Snapshot

Sanctuary: 3,937 acres Historical Oyster Bottom: 851 acres Projected Restorable Bottom: 251 acres Targeted Restoration: 146 acres

Constructed Substrate Reefs: 16 acres Seed-only Plantings: 19 acres Completed Restoration: 35 acres



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## **Evaluation**

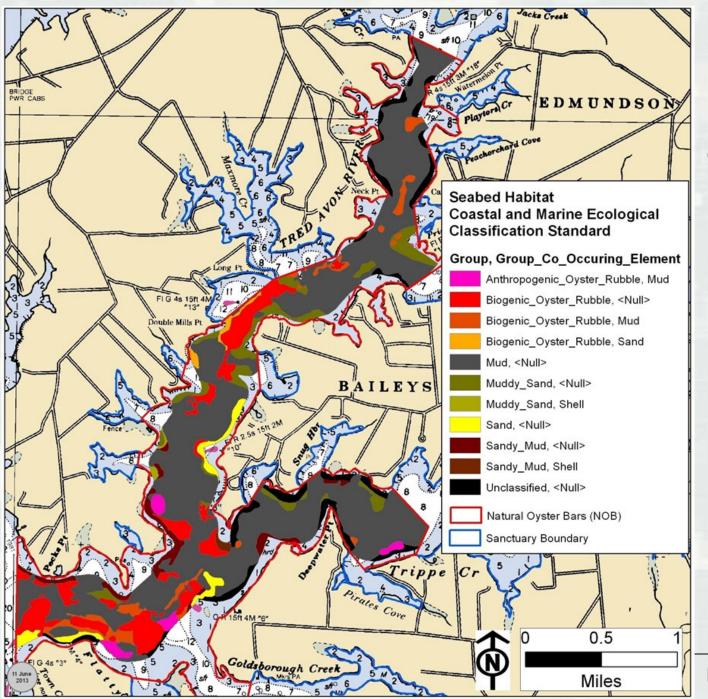
7 Alternatives evaluated – included no action, plus 6 combinations of seed only sites, substrate sites between 6.5 and 9 ft, planting on substrate sites

# **Proposed Alternative**

- Full restoration with limits placed within navigational pathway.
- Oyster reef restoration in water depths between 6.5 and 9 ft mean lower low water = 54 acres
- Placing spat-on-shell (seed only sites) on existing degraded reefs = 71 acres
- Currently, NEPA clearance to restore reefs in water depths greater than 9 ft mean lower low water = 26 acres

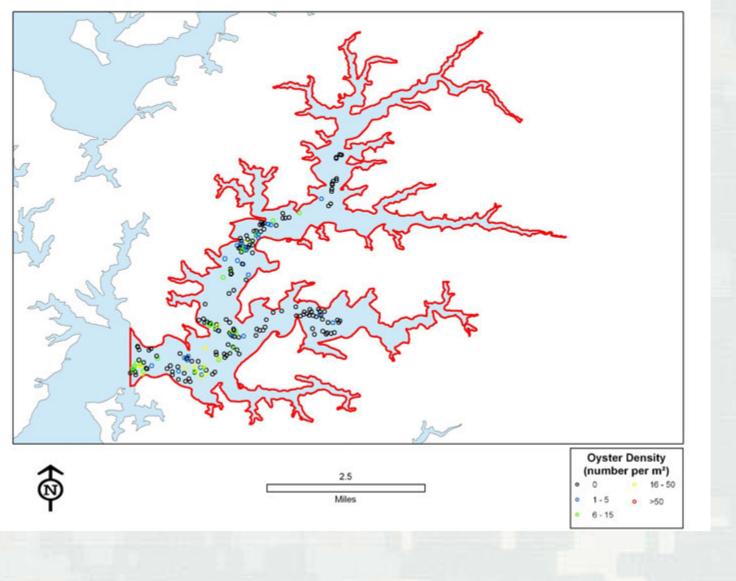
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How did we develop this plan and select this alternative?



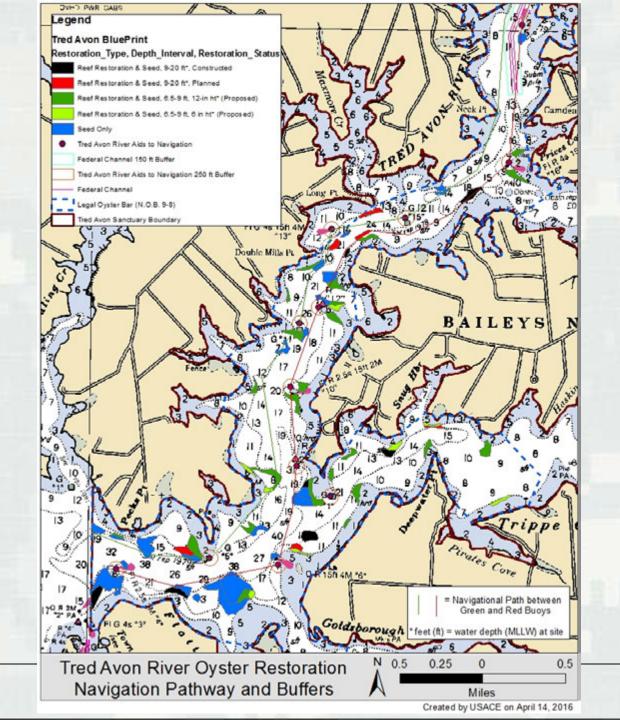
## Bottom Habitat Classification





Existing Oyster Densities

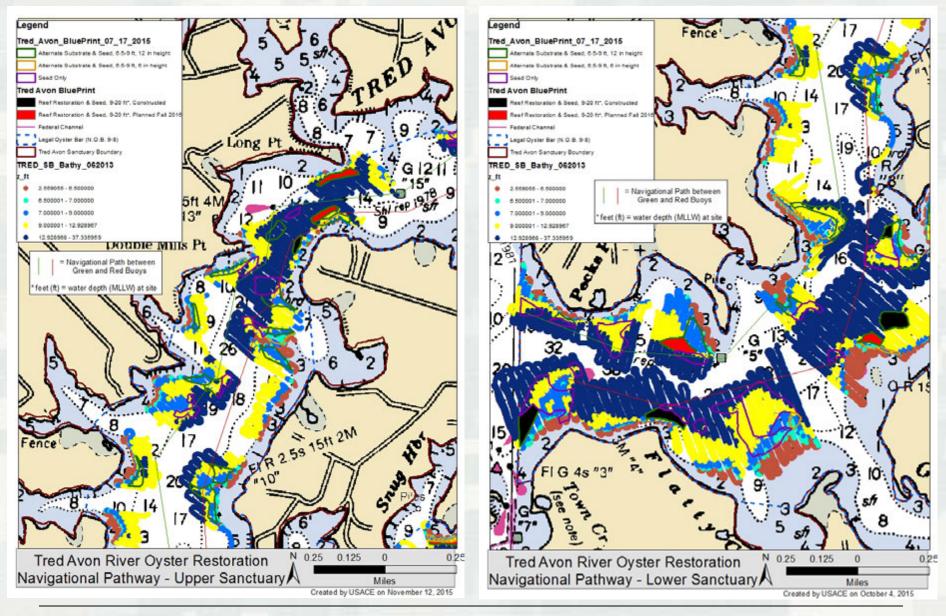




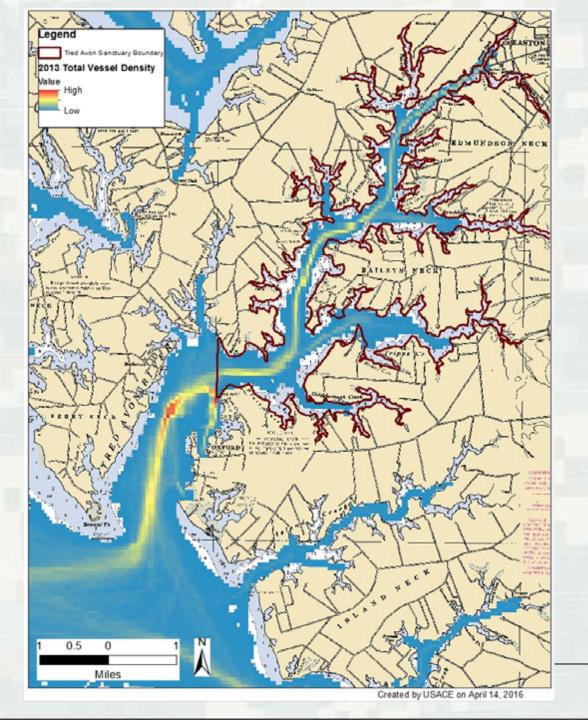
## Navigational Pathway



### Water Depths



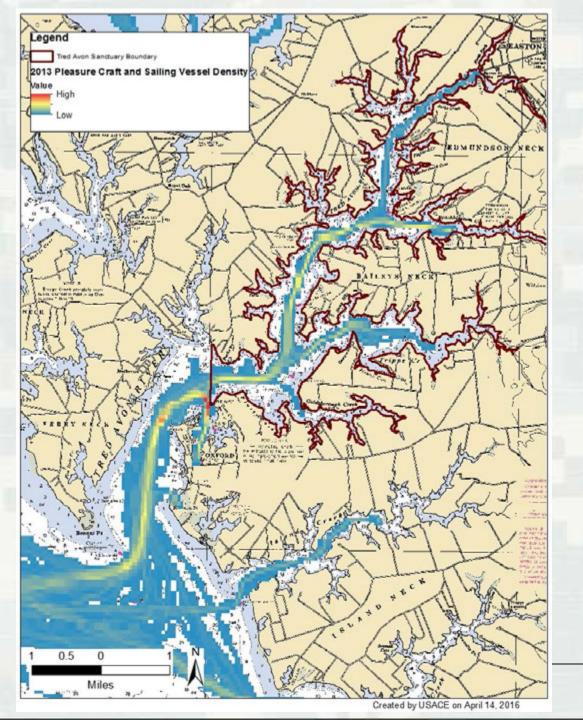
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Total Vessel Density in the Tred Avon (2013)

(from USCG – Automatic Identification System data)

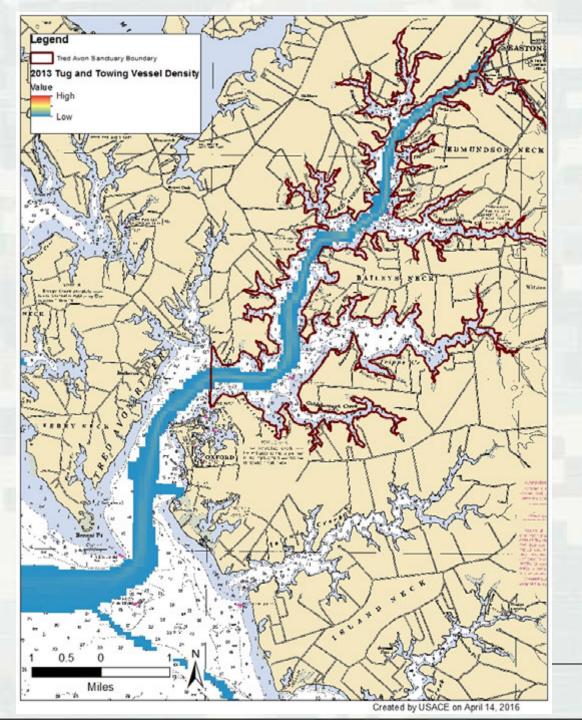




Pleasure Craft and Sailing Vessel Density in the Tred Avon River (2013)

(from USCG – Automatic Identification System data)

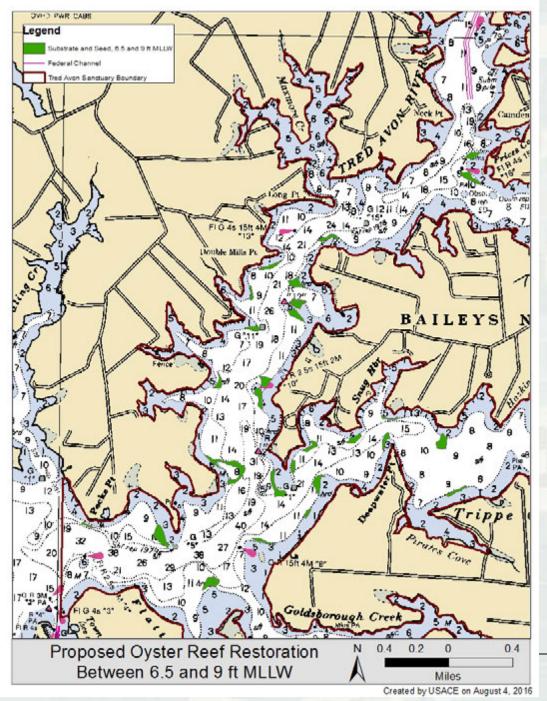




Tug and Towing Vessel Density in the Tred Avon (2013)

(from USCG – Automatic Identification System data)





## **Proposed Alternative**

- Full restoration with limits placed within navigational pathway.
- 54 acres of substrate reefs across 31 sites where navigational clearance would be at least 6 feet
- Placing spat-on-shell (seed only sites) on existing degraded reefs = 71 acres



## **Panelist Question and Answer Period**

- Moderator: Ellen Kandell
- Panelists:
  - Angie Sowers U.S. Army Corps
  - Eric Weissberger Maryland DNR
  - David Bruce NOAA



## **Public Review**

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