**Annual Update on** 

# **Oyster Restoration Progress**

toward the Chesapeake Bay Watershed Agreement 'Ten Tributaries by 2025' Oyster Outcome

#### Partners include:

Chesapeake Bay Foundation Christopher Newport University City of Norfolk City of Virginia Beach CSX

Elizabeth River Project Lynnhaven River NOW

Maryland Department of Natural Resources

National Fish and Wildlife Foundation

National Oceanic and Atmospheric Administration

The Nature Conservancy

**Oyster Recovery Partnership** 

The Pew Charitable Trusts

Pleasure House Oysters/Ludford Brothers Oyster Company

**University of Maryland** 

U.S. Army Corps of Engineers

Virginia Commonwealth University

Virginia Institute of Marine Science

Virginia Marine Resources Commission

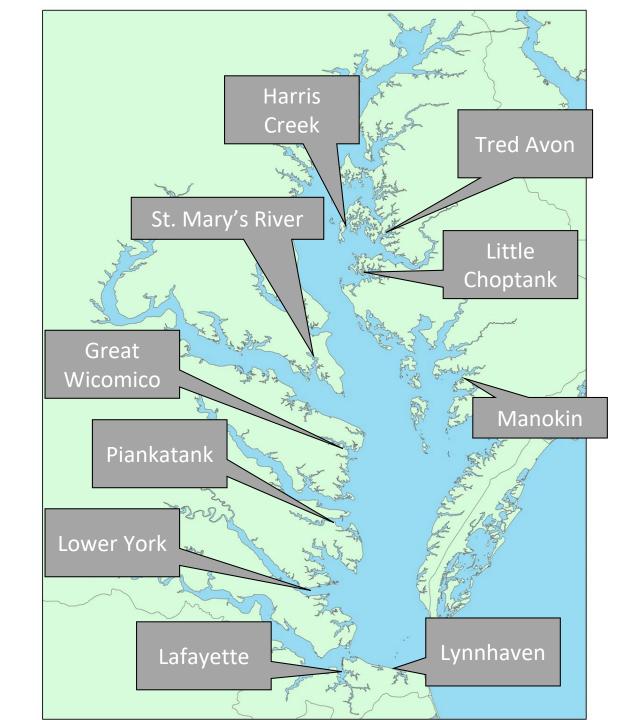
Andrew Button, VMRC
Stephanie Reynolds Westby, NOAA
on behalf of the
MD and VA Interagency Oyster Restoration Workgroups
of the Sustainable Fisheries Goal Implementation Team



## **Bay-Wide Progress toward the '10 Tributaries' Outcome**

Planning: 100% complete

- Ten tributaries selected.
- Ten Blueprints (restoration plans) completed.



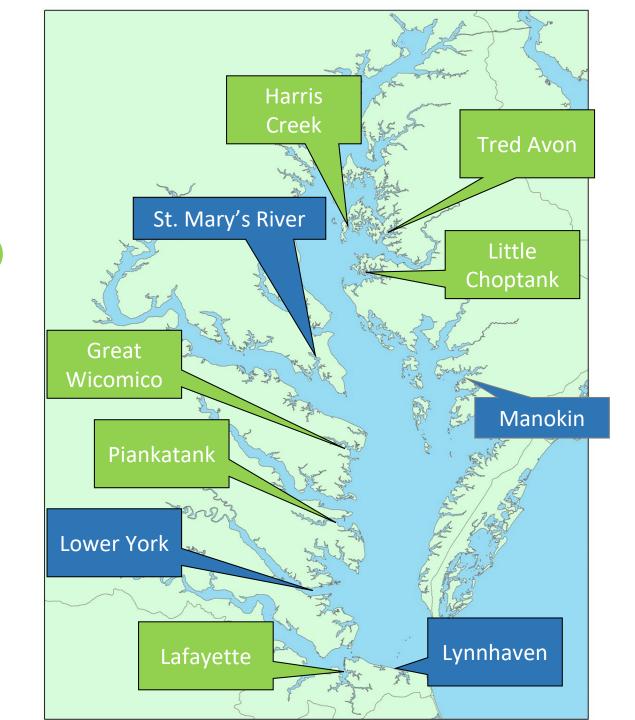
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- In-water restoration work is ongoing in the remaining four tributaries



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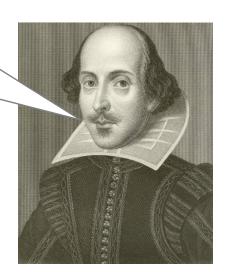
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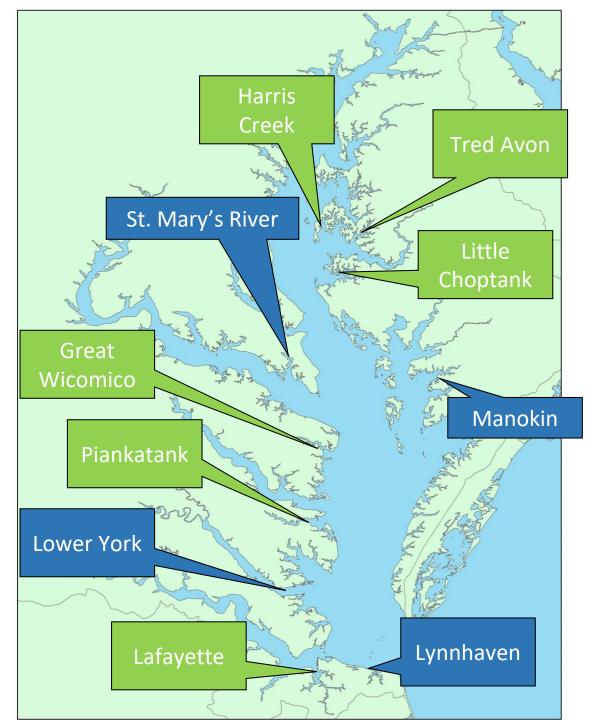
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An acre by any other name....

Are you seriously not using that 'the world's mine oyster' line here...?

A Synopsis of Research on the Ecosystem Services Provided by Large-Scale Oyster Restoration in the Chesapeake Bay <a href="https://spo.nmfs.noaa.gov/sites/default/files/TMOHC8.pdf">https://spo.nmfs.noaa.gov/sites/default/files/TMOHC8.pdf</a>





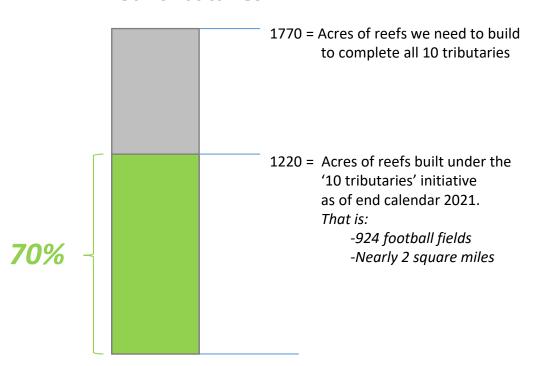
### **Bay-Wide Progress**

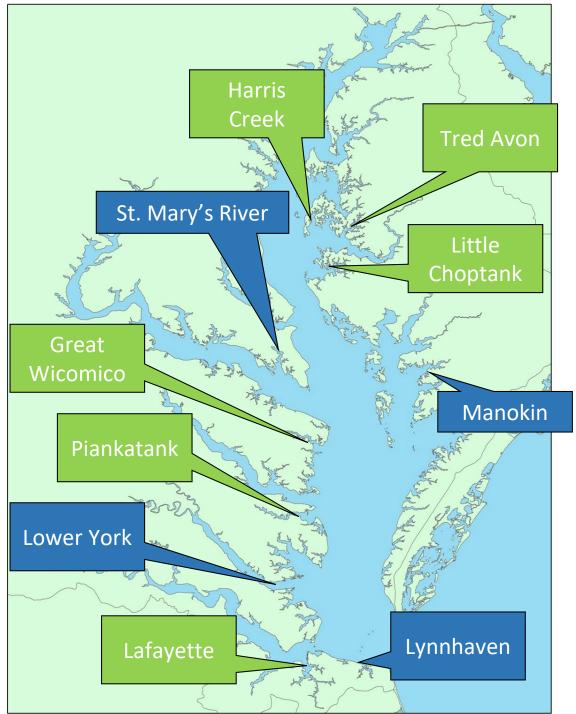
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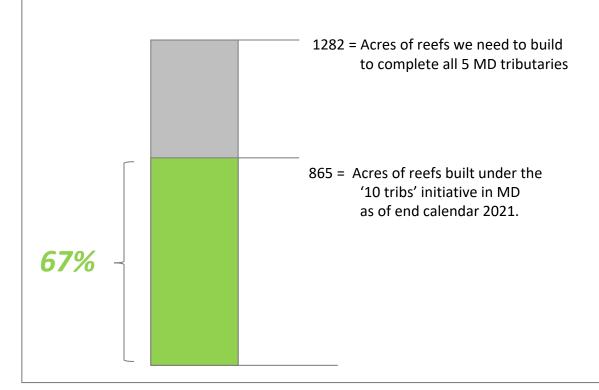
### **MD Summary**

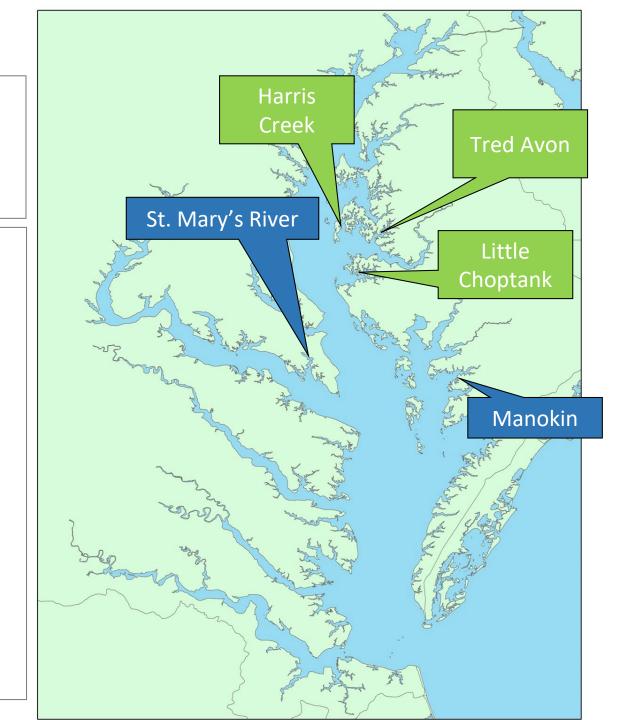
#### By Number of Tributaries:

- 60% complete (3 of 5 complete)
- St Mary's: slated for 2022 completion
- Manokin: slated for 2025 completion

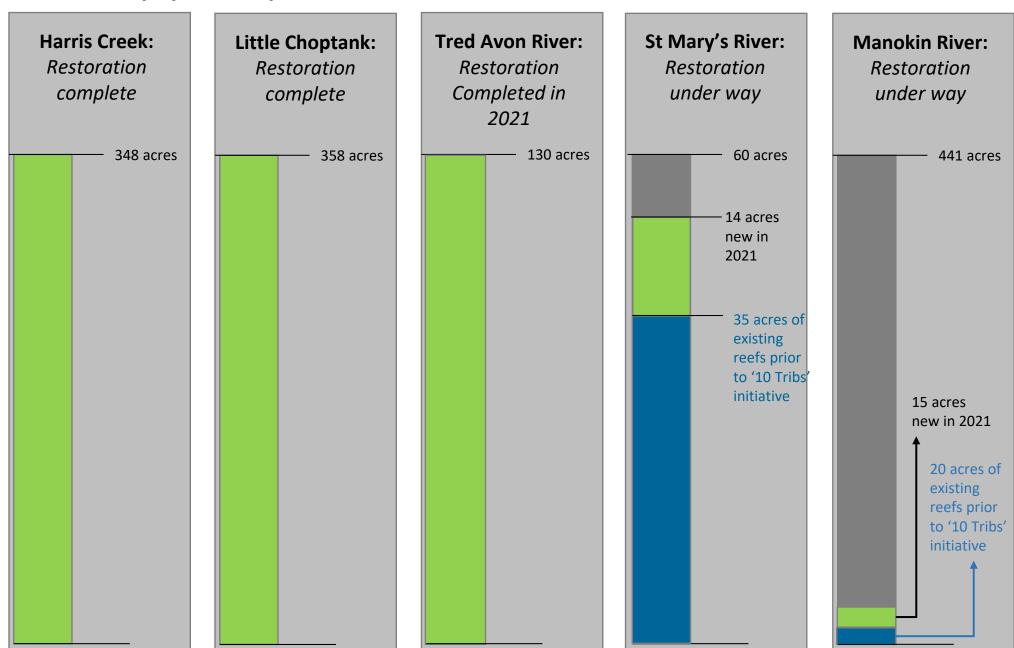
### By Acres in Need of Restoration:

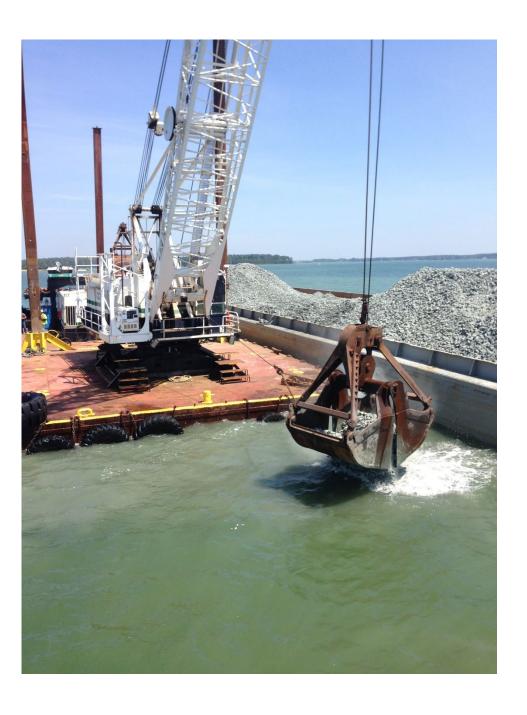
67% complete
 (865 of 1282 in need of restoration are complete)





### **MD Summary by Tributary:**





#### **MD Highlights and Challenges**

#### **Highlights**

- Good natural spat set in 2021- including in Tred Avon, which is a lower natural recruitment area
- Completed Tred Avon River
- Reef substrate placement complete in St Mary's—remaining oyster plantings should be complete in 2022.
- ORP Bay Paddle returned this year as a team relay
  - -nearly 100 people participated in the 8 day journey from Havre de Grace, MD to VA Beach
  - -proceeds were split between ORP and the Chesapeake Conservancy (funding used to seed Severn River reefs)
- U of MD Horn Point Hatchery produced nearly 700 million spaton-shell for the five MD restoration sanctuaries.

#### Challenges:

- Opposition from wild harvest industry
- Manokin is the largest tributary yet in terms of acreage.

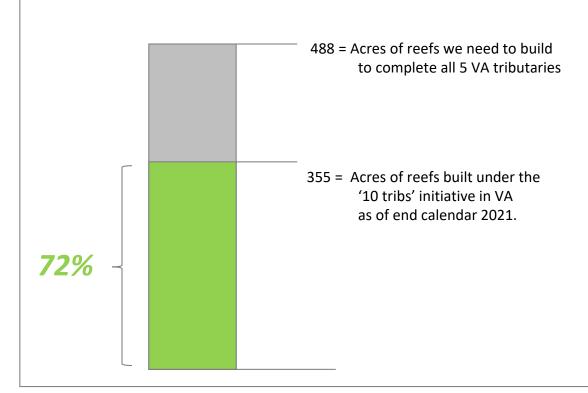
### **VA Summary**

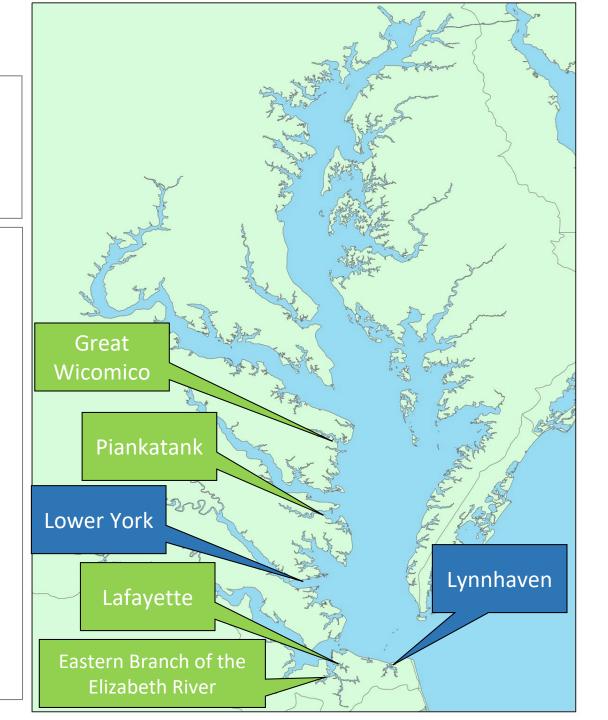
### Progress by Number of Tributaries:

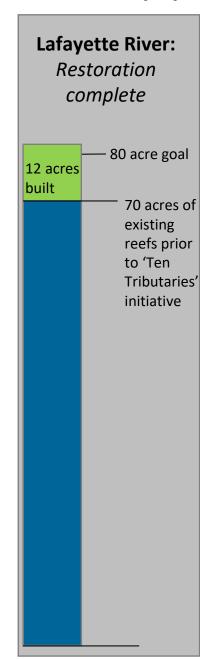
- 60% complete (3 of 5 complete)
- Lower York: slated for 2022 completion
- Lynnhaven: slated for completion by 2025

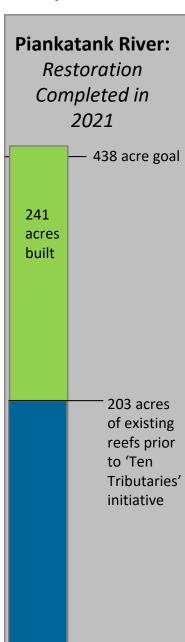
### Progress by Acres in Need of Restoration:

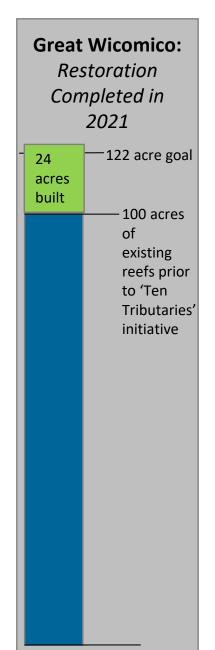
72% complete
 (355 of 488 in need of restoration are complete)

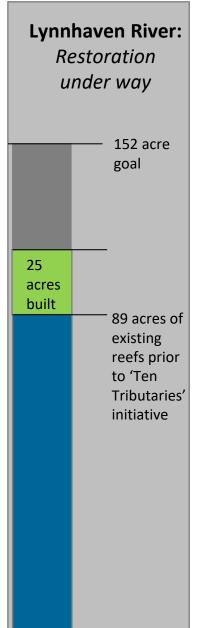


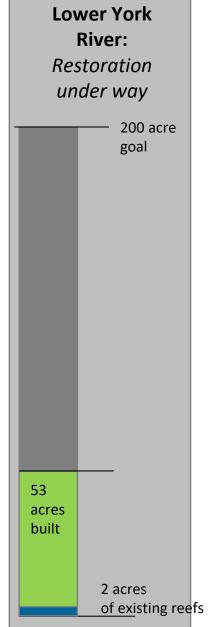


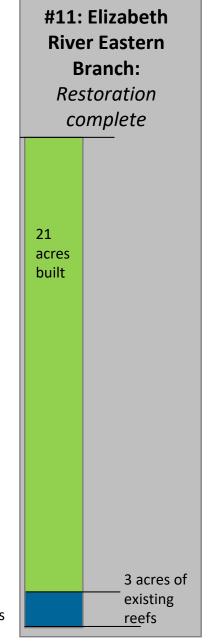












### **VA Highlights and Challenges:**



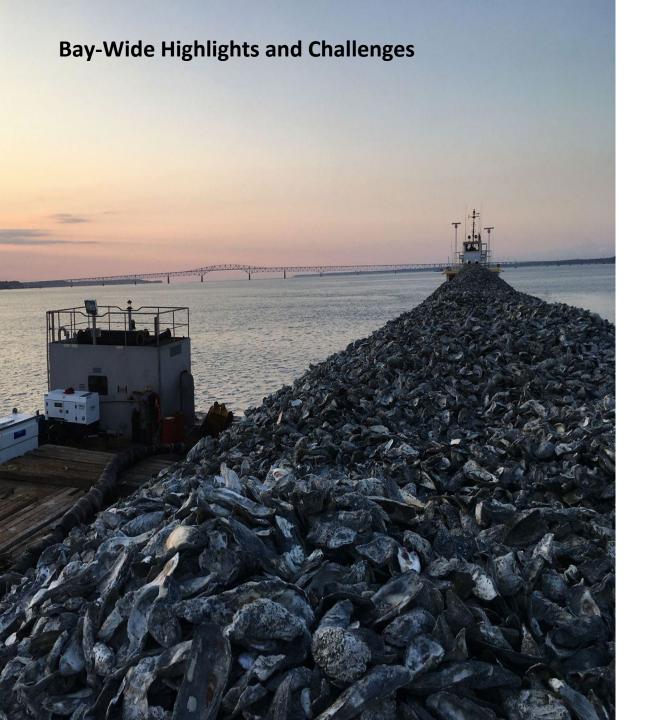
Gov. Northam places substrate onto a reef in the Piankatank River. photo: @governorVA

### **Highlights**

- Completed two tribs in 2021 (Piankatank and Great Wicomico); Gov. Northam attended the celebration event.
- 30% of the '10 tribs' acreage in VA was constructed in 2021.
- Funding is in place to finish construction in the two remaining tribs (Lower York and Lynnhaven).
- Construction progress was made in both the Lower York and Lynnhaven, both are on track for completion by 2025 or earlier.

### **Challenges**

- Opposition to some proposed projects, by other user groups (ex: boating public, adjacent private lease holders, waterfront property owners, watermen).
- "Final Mile Delivery"- as targets are almost reached, the last remaining acreage may become more difficult and/or expensive per acre of restoration on some tributaries.



#### **Highlights**

- Three tribs completed in 2021: Tred Avon, Piankatank, Great Wicomico.
- Partnerships remain strong and are a key element
- Monitoring shows success across the vast majority of three-year-old and six-year-old reefs.
- This effort remains a national and international example of large-scale restoration success.
- Infrastructure funding-- TBD

#### **Challenges**

- People don't seem to know about this
- This is expensive. \$76+ million spent Bay wide under the '10 tribs' initiative (in-water restoration cost).
- Monitoring- likely could be streamlined
- The fickle nature of mother nature.
- Not every acre of every project will be a success.
- Need better inclusivity, and to better serve EJ communities
- What's next in oyster restoration?



For more detailed information:

# 2021 MD and VA Annual Updates

To be posted after receiving GIT input on this presentation, at <a href="https://www.chesapeakebay.net/who/publications-archive/maryland">https://www.chesapeakebay.net/who/publications-archive/maryland</a> and virginia oyster restoration interagency teams

(Also use this link to access all restoration Blueprints, technical reports, past Annual Updates, etc)