

2024 Progress toward the 'Ten Tributaries' Oyster Outcome



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*on behalf of the MD & VA Oyster Restoration Workgroups under the
Sustainable Fisheries Goal Implementation Team*

MD & VA Oyster Restoration Workgroup Partners

It takes a village...

Chesapeake Bay Foundation

Christopher Newport University

City of Norfolk

City of Virginia Beach

Department of Defense/ U.S. Navy

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 U.S. Army Corps of Engineers

Virginia Commonwealth University

Virginia Institute of Marine Science

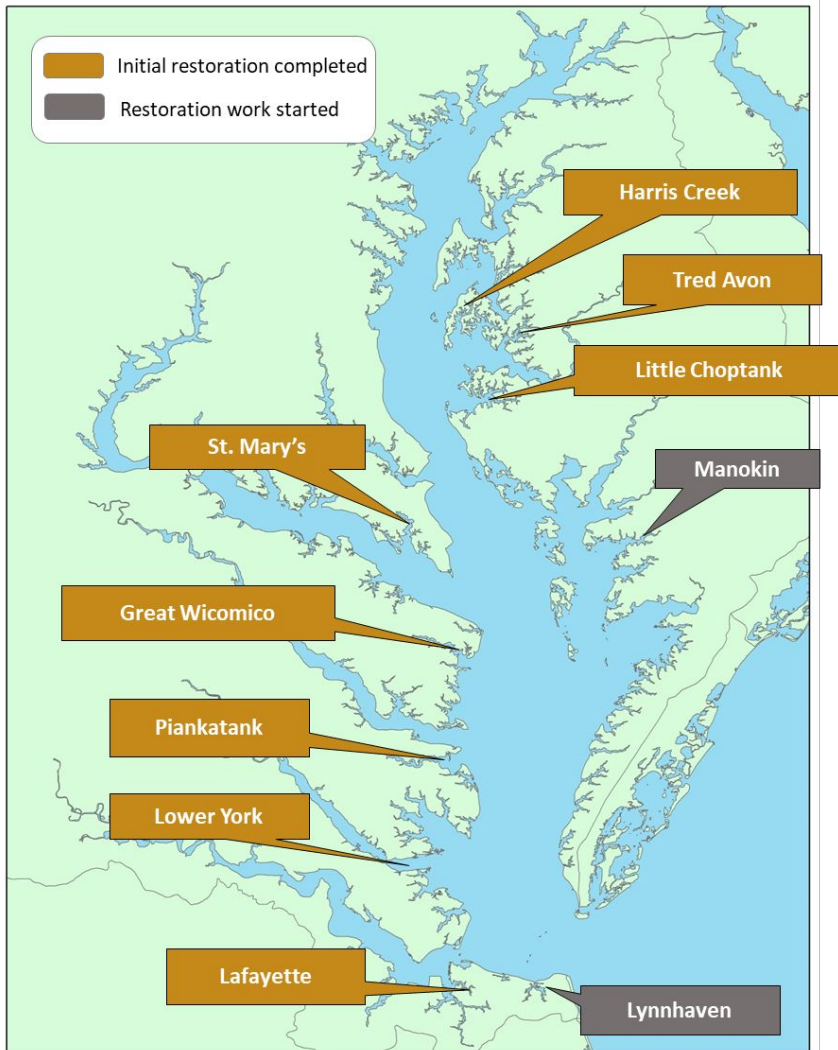
Virginia Marine Resources Commission

...and many more engaged in oyster restoration.

Numbers in this presentation are draft, rounded, and approximate.

Bay-wide Progress to Date

Tributaries Complete: Eight of Ten Planned, Bay Wide



It looks like we will make 10 Tributaries by 2025!

- 11, in fact, including the VA bonus tributary (Eastern Branch of the Elizabeth River)
- Considered the world's largest non-harvest oyster restoration project
- Quick Bay-wide stats:
 - 80% done by number of tributaries complete (8/10)
 - 93% done by restored acres (1769 acres restored; 122 additional acres planned)
 - 1769 acres restored =
 - 13,384 football fields
 - 2.76 square miles
 - Progression: basketball courts to football fields to Malls on Washington to square miles
- Bay-wide cost approx. \$114.68 million

Bay-wide Progress to Date

Large-Scale Oyster Restoration 'Secret Sauce':

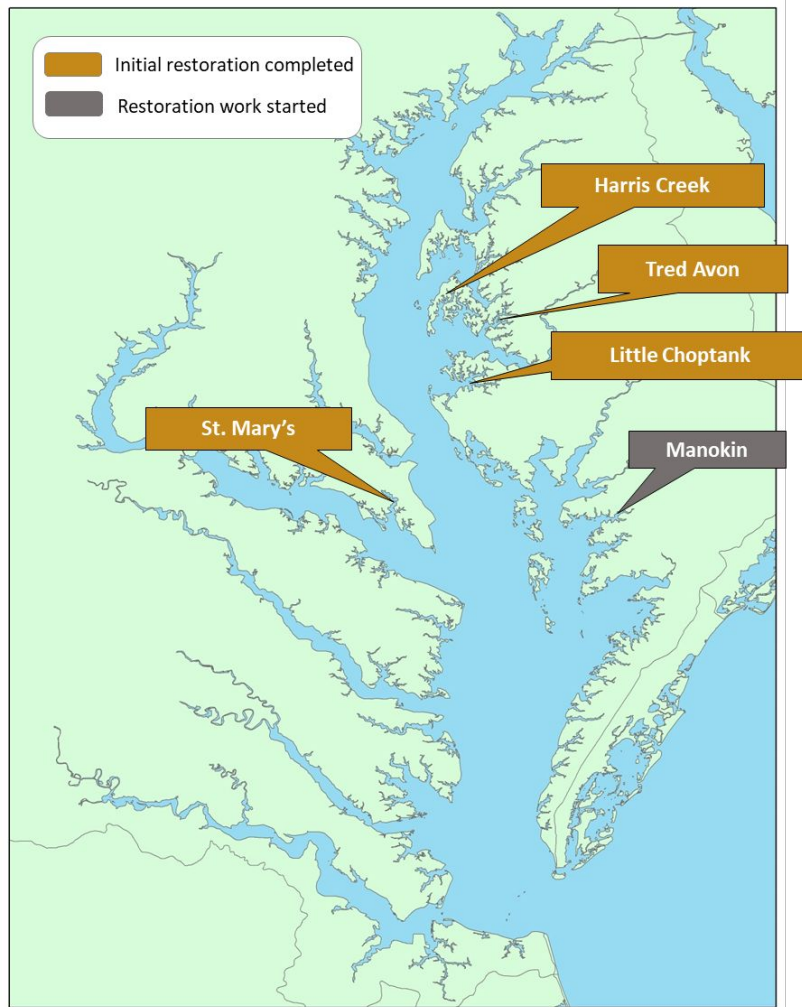
- Partnerships are key:
 - Only way to achieve restoration at this scale
 - Maximizes strengths & contributions (financial, technical, policy, etc.)
 - Allows for durability through the rough patches
- Common goal setting (SMART goal)
- Common definitions of success (Oyster Metrics)
- Common planning
- Reef-level implementation by individual organizations
- Common progress tracking
- Communication around all facets of oysters by all partners
- Staying the course for a decade+

**To 10 tributaries,
and beyond...!**

Updated oyster outcome under development



Maryland Progress



Quick Stats:

- 80% complete by number of tributaries (4/5)
- 92% complete by restored reef acres (1200 complete; 96 more planned)
- In-water cost to date: \$92.82 million
- Manokin River work expected to be complete by late summer 2025

	Restored Acres	Existing reef acres ('premet')	Remaining Acres (... but partners may build more!)	Total Acres
Harris Creek	343	0	0	343
Little Choptank	356	2	0	358
Tred Avon	131	0	0	131
Upper St. Mary's	25	35	0	60
Manokin	345	0	96	441
MD total	1200	37	96	1333

Maryland Monitoring



Photo:
Oyster Recovery Partnership

- Watermen, with their vessels, are hired to take scientists to the reefs for patent tong sampling
- Commercial divers are hired for dive sampling
- Coordinated by Oyster Recovery Partnership
- Funded by NOAA and USACE- Baltimore District
- From 2015-2023, across all five MD tributaries:
 - collected (& returned) more than ½ million oysters
 - 4,012 patent tong samples
 - 1,140 dive samples
 - 98% of reefs meeting oyster density threshold
 - 83% of reefs are meeting the oyster density target

Maryland.... *to 2025 and beyond!*

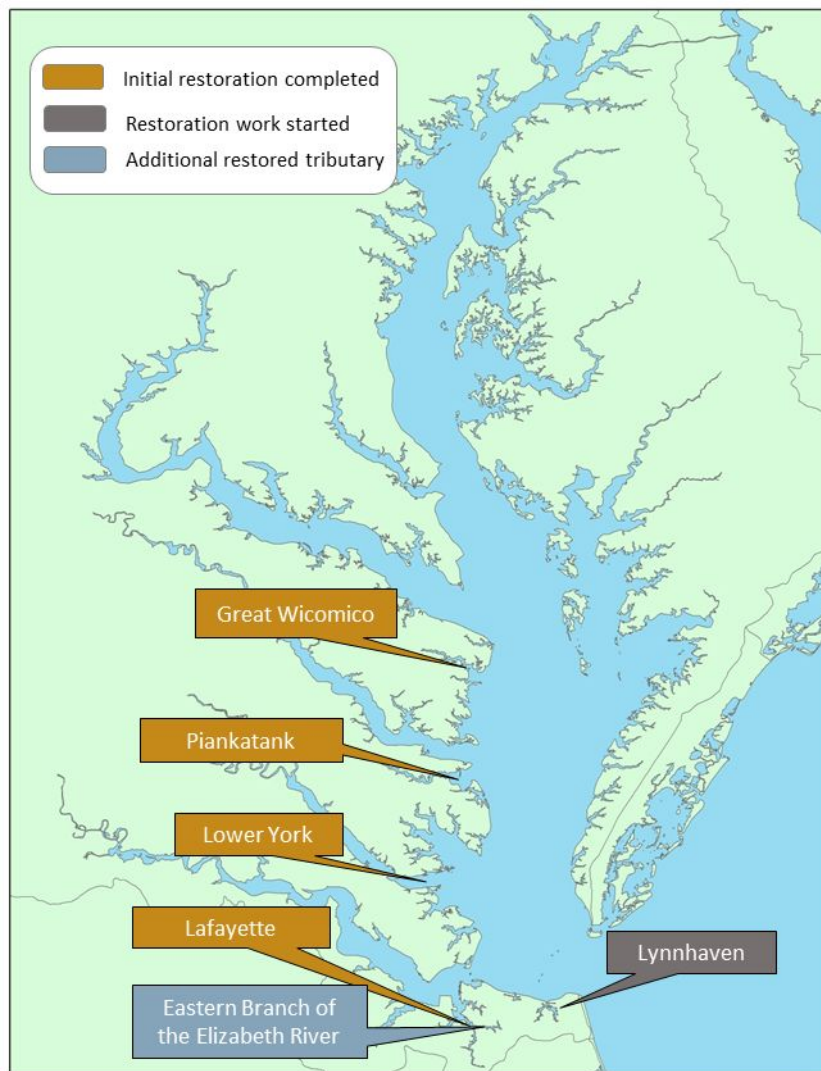
A few MD 'Beyond 10 Tributaries'

Large-Scale Oyster Reefs Projects Under Development:

- Eastern Bay Coalition - multiple partners
- MD DNR Hooper's Strait project
(with NOAA funding)
- USACE- Baltimore District Mid-Chesapeake Bay Islands Ecosystem Restoration at James Island
- Potential USACE- Baltimore District and MD DNR Herring Bay
- Potential multi-partner oyster reef restoration in Severn River
- Potential reef seeding in the Nanticoke River (MD DNR, NOAA)



Virginia Progress



Quick Stats:

- 80% complete by number of tributaries (4/5)
Plus Eastern branch Elizabeth River
- 95% complete by restored reef acres
(569 complete; 26 more planned- *as of end 2024*)
- In-water cost to as of end 2024: \$21.86 million
- Lynnhaven River work expected to be complete in spring 2025

	Restored Acres	Existing reef acres ('premet')	Remaining Acres (... but partners may build more!)	Total Acres
Lafayette	12	70	0	82
Lynnhaven	37	89	26	152
Piankatank	294	203	0	497
Great Wicomico	24	100	0	124
Lower York	202	2	0	204
VA total	569	464	26	1059

Virginia Monitoring

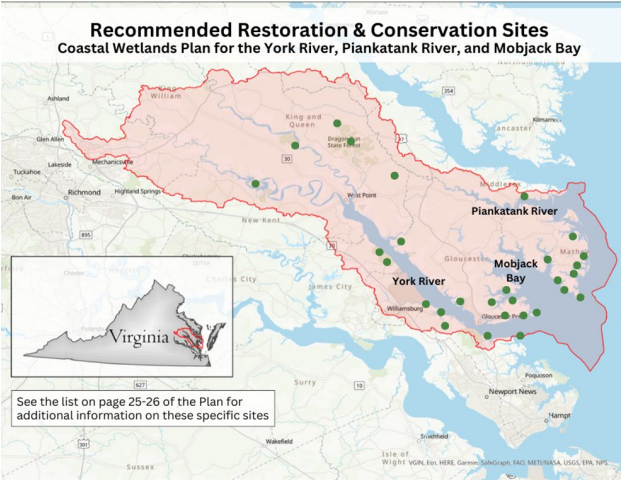
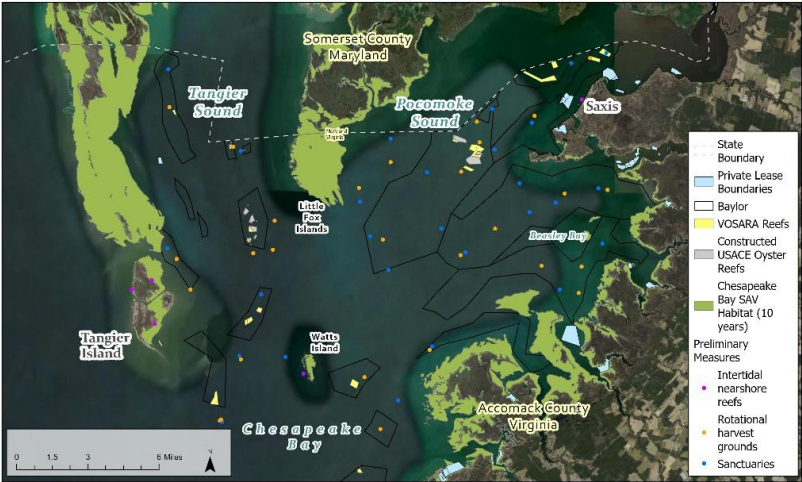


- Monitoring done by multiple partners, including VMRC, USACE-Norfolk District; Chesapeake Bay Foundation.
- Restored reef oyster density target: 50 oysters/m²
- Lynnhaven (2023 USACE monitoring results):
 - 4,275.1 oysters/m²
- Piankatank (2020 USACE monitoring results)
 - 85.2 oysters/m²
- Piankatank (2024 VMRC monitoring results):
 - 108.9 oysters/ m²
- Future monitoring planned in all tributaries

Virginia... to 2025 and beyond!

A few VA 'Beyond 10 Tributaries' Large-Scale Oyster Reefs Projects Under Development:

- Hampton River- Chesapeake Bay Foundation
- Mobjack Bay, within the Middle Peninsula Habitat Focus Area- NOAA & VMRC
- Tangier & Pocomoke Sound- USACE & VMRC



Questions & Discussion



Photo: Oyster Recovery Partnership



For reference: Bay-wide stats through end calendar 2024

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Piankatank	294	203	0	497
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Bay-Wide	1769	501	122	2392

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