



## Outcome Summary Review

### OYSTER OUTCOME – 2022-2023

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#### Looking Back: Learning from the Last Two Years

##### Celebrate our Accomplishments & Best Practices

1. Since your last QPM, what key successes would you like to highlight to the Management Board? *NOTE: This is not intended to be a comprehensive review of the green actions in your action plan. Reflect on what you will continue in your post-QPM work/action plan.*

We are ON TRACK to meet the oyster outcome by the end of calendar 2025. Currently, we have completed work in eight of the ten planned tributaries (plus a 'bonus trib' in Virginia). Funding and permits are in place to complete all remaining work, and work is under way in both remaining tributaries. Of the restored reefs monitored, 99% are meeting the established success criteria for healthy oyster reefs. This represents an unprecedented scale of shellfish restoration globally, and is considered an ecological restoration success story nationally and internationally. Prior to working on the '10 Tributaries' outcome, Chesapeake Bay oyster restoration projects were typically less than two acres in size, and were scattered throughout the Bay. We are now on track to restore more than 1,800 acres of reefs Bay wide by 2025. (That's nearly three square miles). The fact that these reefs are clustered together in target tributaries could increase resilience by allowing for reseeding through larval transport, as well as local improvements in water quality through oyster filtration. Our challenge now is setting the 'Next Gen' oyster outcome, a process we have already started (see #11 below).

Healthy oyster reefs are an essential element of a restored Chesapeake Bay, as oysters are an ecological keystone species. Reefs provide water filtration, nitrogen and phosphorus reduction, and critical habitat for many species of fish and crabs. This, in turn, is beneficial for all Bay usergroups, including recreational anglers and commercial harvesters. Although the reef construction under this Outcome is being done in sanctuary (non-harvest) areas, the offspring from these reefs can populate nearby harvest reefs.

##### Evaluate our Progress

*NOTE: Your responses related to outlook and recent progress will be used to update your outcome page on ChesapeakeProgress and the outcome status page.*

2. Are we, as a partnership, making progress at a rate that is necessary to achieve this outcome? Would you define our **outlook** as on course, off course, uncertain, or completed? Upon what basis are you forecasting this outlook?

We are on course to achieve the oyster outcome by 2025. This is based on the fact that initial oyster restoration work in eight of the ten targeted tributaries has been completed, totaling more than 1450 acres Bay wide. (Figure 1). The Maryland tributaries targeted for restoration are Harris Creek, and the Tred Avon, Little Choptank, St. Mary's, and Manokin rivers in Maryland; the Virginia tributaries are Great Wicomico, Piankatank, lower York, Lafayette and Lynnhaven rivers, plus a 'bonus tributary', the Eastern branch of the Elizabeth River in Virginia.

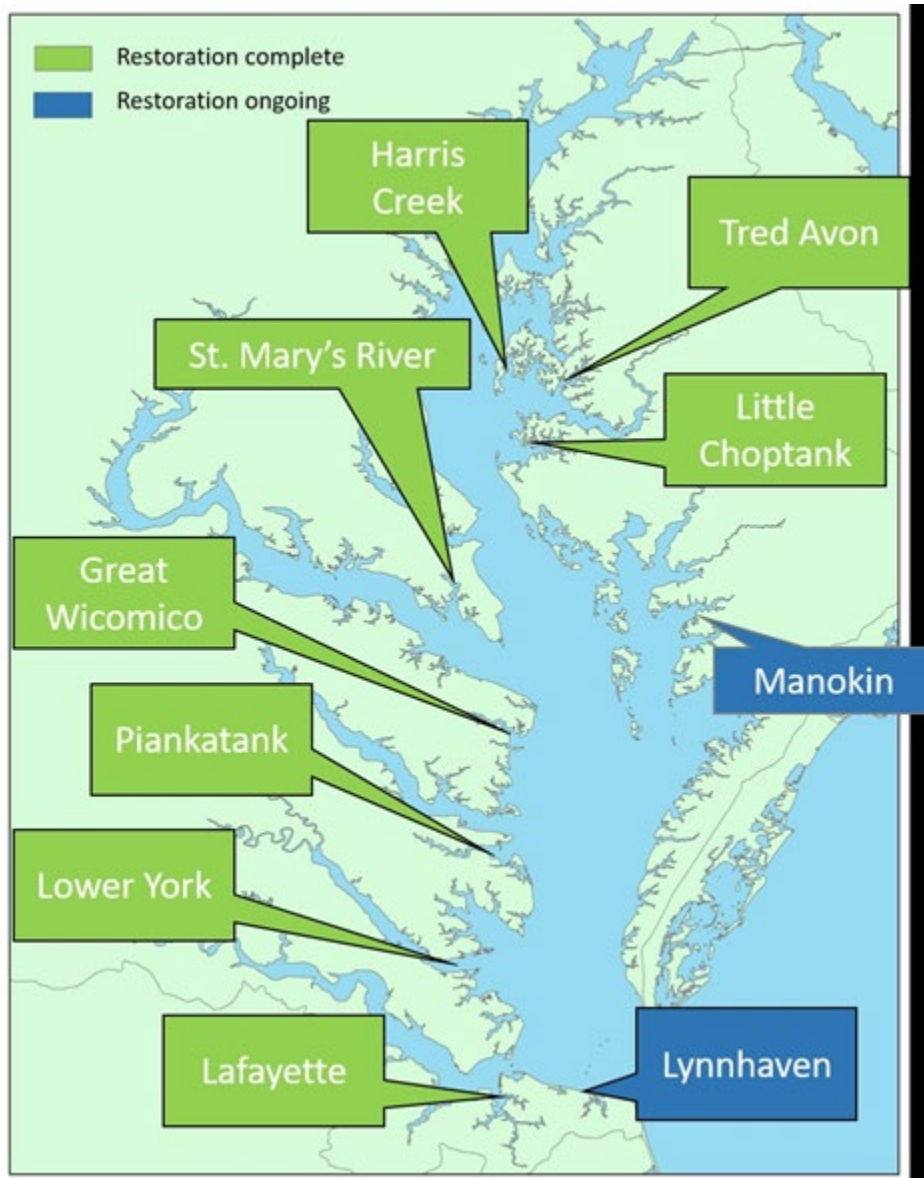


Figure 1. Locations of the ten tributaries selected for large-scale oyster restoration under the 2014 Chesapeake Bay Agreement Oyster Outcome. The green flags indicate initially completed tributaries; the blue flags indicate tributaries where restoration is under way. Not pictured is the 'bonus tributary', the Eastern Branch of the Elizabeth River in Virginia, which has also been restored.

3. How would you summarize your **recent progress** toward achieving your outcome (since your last QPM)? If you don't have an indicator, would you characterize this progress as an increase, decrease, no change, or completed? (*Tip: If you have an indicator and it was updated since your last QPM, use your answer to question 16 from your Analysis and Methods document.*)

As for our last check in (late 2021), we had initially restored six tributaries; now we have completed eight. That equates to approximately 220 acres restored since our last check in. All funds and permits are in hand to complete initial restoration in the remaining tributaries (Manokin River in Maryland and the Lynnhaven River in Virginia).

### Lessons Learned

4. If our outlook is off course, what has been the most critical influencing factor or gap that needs to be addressed to accelerate progress?

N/A

5. For "red" actions, what is preventing us from taking action? Are these actions still needed?

N/A

6. What have we learned over the past two years that we'll need to consider in the coming two years?

Strong partnership and collective impact have been essential in making progress toward the Oyster Outcome (see details in Question 8). We want to maintain and expand the strong partnership network, and maintain momentum, by establishing the Next Generation Oyster Outcome well ahead of the 2025 deadline for the current Chesapeake Bay Agreement. If not, we risk losing momentum, and having groups fracture into solo efforts, which was where the oyster restoration effort stood prior to the 2014 Chesapeake Bay Agreement. We want to move forward, building on our collective successes, and not backslide.

Additionally, partners recognize that, particularly in areas with low natural oyster reproduction, some degree of maintenance seeding may be necessary to keep the restored reefs at optimal population levels.

### **Assessing our Efforts and Gaps**

*Reflection: Review the factors currently identified in your [Management Strategy](#) as influencing our ability to meet our outcome by reflecting on the following questions. What influences our success or our effectiveness in meeting our outcome? What has limited our ability as a Partnership (or GIT/workgroup) to get this work done? Update your Management Strategy if anything has changed.*

### Factors

7. Summarize any newly identified influencing factors, and why they were added to your Management Strategy. If any factors have been deleted, are they the result of our actions, and what have we learned as a result?

N/A

8. Prioritize and summarize here the factors best tackled as a Partnership (or GIT/workgroup), that have the greatest impact to achieve our outcome.

Partnerships have been absolutely essential to the progress we've made to date toward the Oyster Outcome. The key formula that has made the oyster outcome achievable can be attributed largely to this framework:

- Common goal setting (and a SMART goal, particularly the 'S' - specific, and the 'M' measurable, in SMART)
- Common definition of success (at the reef and tributary levels, developed prior to selecting tributaries, planning, or implementation). These were clear and measurable definitions for success.
- Common planning (developing restoration blueprints for each tributary, including setting sub-goals for each selected tributary)
- Reef-level implementation by individual organizations or small groups of partners
- Common progress tracking
- Communication around all facets of oysters by all partners, together and as individual organizations, depending on focus (iconic species; culinary aspect; traditional; ecological importance as a keystone species, etc.)

Strong partnerships have allowed for more resources, and durability through the inevitable bumps in the road. The detailed restoration plans, developed jointly by all partners, also laid out clear funding needs. Having this information allowed partners to advocate for internal and external funding for restoration implementation.

#### Gaps

9. For those high priority factors summarized above, what is getting in the way of addressing them or what gaps continue to exist despite the current efforts to address those factors?

N/A

#### **Focusing on the Next Two Years: Actions and Needed Support**

10. Describe any scientific (including the impacts of climate change), fiscal, or policy-related developments that have already or may influence your work over the next two years.

All funding and permits for initial restoration are in hand to achieve the 2014 Bay Agreement Oyster Outcome. The focus for the next two years will be in-water implementation to complete the planned reef construction and initial seeding.

The recent [CESR report](#) laid out some recommendations that can be related to oyster restoration. First, one of its key recommendations is to focus on habitat restoration in shallower-water areas of the Bay. Large-scale oyster restoration is focused on just that. We have been physically rebuilding oyster reefs, which serve as important fish habitat, which provide additional benefits of water filtration and provision of broodstock that can reseed both sanctuary (restored) reefs and nearby commercially harvested reefs. This reef construction is done in shallow water, typically between four feet and 16 feet of water depth. Second, the CESR Report recommended focusing work in certain Bay geographies. Many of these are suitable for large-scale oyster restoration work, and can be considered prime areas for implementation of the Next Gen oyster outcome.

Reef construction for restoration (non-harvest purposes) has [recently been approved](#) as a nitrogen and phosphorus reduction best management practice (BMP ) in Chesapeake Bay. This could mean more reef construction in the future by jurisdictions looking to offset nitrogen loading, and increased incentive to set aside areas for restoration (non-harvest) reef construction.

11. Based on these developments and the learning discussed in the previous sections, summarize any new actions you are planning to address these gaps over the next two years.

To maintain the strong partnerships and momentum established under the current Oyster Outcome, partners are now working to develop the Next Gen Oyster Outcome. We have convened numerous discussion groups and work sessions centered on this. We've developed a logic model and goal structure that will allow us to build on our success, while addressing some of the areas in need of improvement (ex: more diversity, equitability, inclusion, and justice; and better connections with other habitat types and whole-ecosystem approaches). Given the state of this process, we are hopeful that a final Next Gen Oyster Outcome can be developed soon.

12. Have you identified new needs, or have previously unmet needs that are beyond the ability of your group to meet and, therefore, you need the assistance of the Management Board to achieve? If yes, provide any detail that would assist the Management Board in assessing this need.

The states (Maryland and Virginia) manage the submerged Bay bottom, including the oyster resource. Since the large-scale oyster restoration work occurs on state-managed Bay bottom, and states have jurisdiction over harvest or sanctuary status for all oyster reefs, the states are absolutely essential players in achieving the Oyster Outcome. Both states to date have not only promoted sanctuary (non-harvest) oyster restoration work within their jurisdictions, they also have been major funders of the work Bay wide and hands-on partners in restoration planning and implementation. It would be tremendously helpful for the Management Board to encourage the states to maintain this high level of policy and fiscal support for oyster restoration and monitoring. This is critical for both completing the current Oyster Outcome and setting and making progress

on the Next Gen oyster outcome. Keeping state policy and funding support in play may also unlock significant federal dollars.

13. What steps are you continuing, or can you take, to ensure your actions and work will be equitably distributed and focused in geographic areas and communities that have been underserved in the past?

The vision for large-scale oyster restoration is that it will benefit many Chesapeake communities, through provision for fish habitat and water quality improvements. Most of the targeted tributaries under the oyster outcome are in communities that can be considered underserved, per the [Biden Administration definition](#), because they are in rural areas. This work has the potential to improve fishing for both recreational and commercial harvest communities. One tributary, the Lafayette River, is in a particularly racially diverse community. Going forward, we hope to be more inclusive and serve a greater diversity of communities. Several partners are already planning work in additional areas that will better engage underserved communities, including work in the Hampton River, Mobjack Bay, Tangier-Pocomoke Sound, and near Blackwater National Wildlife Refuge.