

Oyster Outcome

Outcome:

Restore native oyster habitat and populations in 20 tributaries out of 35 to 40 candidate tributaries by 2025.

Current Condition:

- Zero tributaries with fully restored oyster populations; several tributaries with successful living oyster reef habitat.
- Disease and overfishing have reduced oyster populations to less than 1 percent of historical levels. Most oyster restoration efforts since the 1990s have been small scale and aimed at restoring the fishery. Recent large scale efforts in the Great Wicomico and Lynnhaven Rivers in Virginia show signs of success, with living reefs having been restored in these tributaries. However, large (tributary) scale projects supporting “fully restored” and “self-sustaining” oyster populations have not yet been achieved. For this reason, the baseline of tributaries restored on a large scale with self sustaining populations is set at 0.
- The number of candidate tributaries is an initial estimate based on the Draft Maryland Oyster Restoration and Aquaculture Development Plan, the Virginia Oyster Reef Restoration Map Atlas and the Draft USACE Native Oyster Restoration Master Plan. Based on these maps and their associated information, there are at least 35-40 tributaries or segments of rivers identified for potential oyster restoration (most of these are not designated as sanctuaries at this point).

Methodology for tracking progress:

Progress toward the oyster goal will be tracked following actions identified in the EO Strategy. NOAA and USACE will coordinate with MD, VA, PRFC to develop and implement a bay-wide native oyster restoration strategy. This strategy will identify a set of priority tributaries for restoration based on the best available science and existing state and federal plans (i.e. MD Oyster Restoration and Aquaculture Development plan which identifies oyster sanctuary areas for restoration and the USACE Native Oyster Master Plan). Development of the strategy will begin in 2011 and be completed by 2012.

In addition to selecting priority tributaries for restoration, we need to define what successful restoration will look like in these tributaries. The Sustainable Fisheries Goal Implementation Team has established a workgroup/technical team to develop common, bay-wide restoration goals, success metrics and monitoring and assessment protocols. Their challenge is to define “restoration success” through ecological metrics such as reef community composition and structure, water filtration and nutrient cycling, and self-sustaining populations that can be scientifically evaluated using common monitoring and assessment protocols.

These goals and metrics will promote progress and facilitate accountability in restoration efforts. The following will be considered by the team over the next 4 months (March 15, 2011) in consultation with experts from across the region:

- 1) Develop bay wide restoration goals (success/performance metrics) for a sustainable oyster populations that include specific, compatible and quantitative goals for ecological function and ecosystem services from restored oyster populations.
- 2) Develop and identify support for a bay-wide complementary survey and monitoring and assessment program of oyster abundance and other key physical, chemical, and ecological parameters that will allow consistent evaluation of progress toward the oyster restoration goals.

Core team members:

Stephanie Westby (NOAA)

Eric Weissberger (MDDNR)

Jim Wesson (VMRC)

AC Carpenter or Ellen Cosby (PRFC)

Angie Sowers (USACE-MD)

Craig Seltzer (USACE-VA) (Note-may be replaced with another USACE rep from the Norfolk District)

Mark Luckenbach (VIMS)

Ken Paynter (UMCES)

Issues:

1. NOAA and USACE are the lead federal agencies for the oyster outcome and associated EO Strategy and Action Plan commitments, however it was always assumed and discussed with the states that the oyster outcome includes state efforts. We expect that the planning for which tributaries will be restored will be done jointly with NOAA, USACE, and states. In Maryland this means supporting the Maryland Oyster Restoration and Aquaculture Development Plan which increases oyster sanctuary areas for ecological restoration and in Virginia the Blue Ribbon Oyster Panel recommendations to expand sanctuary restoration in key tributaries. Without federal and state coordination in identifying the tributaries for restoration, agreed upon performance/success metrics that are applied consistently bay wide, and agreed to protocols for measuring success tracking, this outcome will be difficult. The Sustainable Fisheries Goal Implementation Team (Fisheries GIT) has agreed to serve as the coordinating body to provide guidance and oversight in aligning oyster restoration efforts and ensure bay-wide scientific and technical capabilities are leveraged to address challenges.
2. The outcome was based on an expectation that through joint federal and state efforts/resources restoration would begin in at least one tributary in each state per year. Current funding projections and realities may slow or inhibit the approach and pace of restoration.