



## **Ecosystem-Based Restoration and Fishery Management of Native Oyster**

A Scoping Paper from the Fisheries Ecosystem Workgroup

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Future restoration efforts of native oyster populations in Chesapeake Bay will need to address ecological, fishery and ecosystem benefits. Ecological benefits pertain to the recovery of oyster populations that persist over the long term in the absence of fishing pressure. Fishery benefits refer to the economic value gained from commercially and recreationally fished populations, as well as that obtained via aquaculture. Ecosystem benefits are those services provided to the ecosystem by thriving oyster populations, such as improved habitat and water quality. To determine whether or not ecological, fishery and ecosystem restoration are succeeding, it is essential that specific goals and metrics of success be developed for each of the restoration approaches. These goals and metrics will promote progress and facilitate accountability in restoration efforts. The recent Executive Order and efforts to develop ecosystem-based management of Chesapeake Bay fisheries provides a vehicle for accomplishing this objective. The following issues should be considered by GIT in the near term (6-12 months).

- 1) Develop goals for a sustainable oyster population that includes specific, compatible and quantitative goals for ecological function, broader ecosystem services and fishery yields from a restored oyster population. These general goals will require expansion into a series of specific and integrated objectives for each goal. These goals should be explored within the context of an ecosystem-based model of the Chesapeake Bay such that the impacts of achieving the stated goals can be fully understood.
- 2) Develop, identify support for, and implement a baywide complementary survey of oyster abundance. A key feature of any restoration goal for the Chesapeake Bay oyster population is an accurate, and ideally, precise measure of abundance. Currently, an integrated baywide oyster survey is lacking. In the absence of such a survey it will not be possible for managers and stakeholders to determine whether any goals established in item (1) above have been attained.

We suggest that these be developed through the EBFM vehicle, and specifically under the current structure of FEW.