



Overview of the 5 Year Oyster Review Report

To be Completed by July 2016



Purpose of the Report

“The Department has committed to reviewing the effectiveness of the locations of sanctuaries, public shellfish fishery areas, and aquaculture areas every 5 years and to propose changes where needed.”

Preamble in the 2010 proposed oyster regulation in the Maryland Register, Vol 37, Issue 14, p. 943. Friday July 2, 2010



Three Oyster Management Areas

- **Sanctuaries** – Areas permanently closed to oyster harvest. Some sanctuaries have been targeted for extensive oyster restoration projects to potentially accelerate the enhancement of the native oyster populations for their environmental benefits.
- **Public Shellfish Fishery Areas** – Areas where shellfish are harvested for commercial purposes and no oyster aquaculture leases are allowed unless the area is declassified. For declassification to occur, an area is petitioned to have a lease and is found to have specific criteria of a low oyster density by a biological survey.
- **Aquaculture Areas** – Areas in Maryland’s jurisdictional waters of the Chesapeake Bay where aquaculture leases are issued by the state for private enterprise.



Defining Effectiveness

Effectiveness should be defined relative to the original management objectives of the 2010 proposal: *“To restore the ecological function of oysters and to enhance the commercial fishery for its economic and cultural benefits.”*

For sanctuaries, key objectives included:

- 1) Protect half of the bay’s most productive oyster grounds and investigate why these areas are still productive;
- 2) Facilitate development of natural disease resistance;
- 3) Provide essential natural ecological functions that cannot be obtained on a harvest bar; and
- 4) Serve as a reservoir of reproductive capacity, generating larvae to populate other areas including public shellfish fishery areas.

For public shellfish fishery areas, key objectives included:

- 1) Maintain 168,000 acres of natural oyster bars and 75 percent of the remaining productive oyster habitat; and
- 2) Maintain a more targeted and scientifically managed wild oyster fishery.

For aquaculture, key objectives included:

- 1) Streamline the regulatory process for aquaculture;
- 2) Open new areas to leasing to promote industry growth; and
- 3) Provide alternative economic opportunities for watermen.



Report Outline

Chapter 1: Executive Summary

Chapter 2: Purpose of the Report and Background Information

Chapter 3: Description of the Three Management Areas

Chapter 4: Effectiveness of Management Areas and Importance of Location

Chapter 5: Conclusions and Proposed Future Alternatives

Appendix A: Characterization of Individual Sanctuaries

Appendix B: Characterization of Individual NOAA Code Areas (Public Fishery)



Report Outline: Chapter 2 and 3

Chapter 2: Purpose of the report and background information

- Discuss the purpose of the report
- Define effectiveness (see slide 4)
- Timeline of how the current management areas were developed

Chapter 3: Description of the Three Management Areas

- Discuss the general description of each management area
- Number, acreage, and location of sanctuaries
- Number, acreage, and location of PSFAs
- Number and acreage of aquaculture leases



Report Outline: Chapter 4 and 5

Chapter 4: Effectiveness of Management Areas and Importance of Location

- Conduct an assessment on each objective for each management area
- Determine if each objective is met
- Provide future research recommendations to assist in the determination if the objective is met

Chapter 5: Conclusions and Proposed Future Alternatives

- Provide alternatives for the future management of sanctuaries, public shellfish fishery areas, and aquaculture



Report Outline: Appendix A

Appendix A: Characterization of Individual Sanctuaries

- Discuss each of the 51 sanctuaries
- Present information that may assist in the assessment of the four key objectives (see slide 4)
- For each sanctuary, provide a general characterization of the:
 - Oyster population over time (abundance, recruitment, survivorship, oyster height distribution)
 - Disease prevalence and intensity over time
 - Environmental conditions over time using water quality



Report Outline: Appendix B

Appendix B: Characterization of Individual National Oceanic and Atmospheric Administration Code Areas

- Discuss each of the 39 code areas that is currently open to the public fishery
- Present information that may assist in the assessment of the two key objectives (see slide 4)
- For each code, provide a general characterization of the:
 - Oyster population over time (abundance, recruitment, survivorship, oyster height distribution)
 - Disease prevalence and intensity over time



Independent Peer Review

- Department staff are writing the report
- Three private consultants are assisting the department with the report by:
 - Review the outline and sections to identify information that should or should not be included
 - Review the analysis conducted
 - Suggest alternate analyses or approaches
 - Edit draft sections for grammar, etc.
 - Provide general guidance and comments
 - Assist in incorporating public comments after the report is released in July 2016
- Consultants are:
 - **Dr. William Richkus** (Retired Vice President of Versar, Inc., a private environmental consulting firm specializing in natural resource science)
 - **Dr. Susan Ford** (Professor Emeritus at Rutgers University in the Haskins Shellfish Research Laboratory)
 - **Dr. Pete Peterson** (Alumni Distinguished Professor of Marine Sciences, Biology, and Ecology, University of North Carolina at Chapel Hill)



Timeline

