



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Mark Belton, Secretary
Joanne Throwe, Deputy Secretary

December 1, 2017

The Honorable Larry Hogan
Governor
State House
Annapolis, Maryland 21401

The Honorable Thomas V. Mike Miller
President, The Senate of Maryland
H107 State House
Annapolis, Maryland 21401

The Honorable Michael E. Busch
Speaker, Maryland House of Delegates
H101 State House
Annapolis, Maryland 21401

The Oyster Advisory Commission
580 Taylor Avenue
Annapolis, MD 21401

Re: Submission of Report on Sustainable Oyster Population and Fishery Act of 2016
Agency: Maryland Department of Natural Resources
Report Authority: Natural Resources Article § 4-215(e)(3)(iii)2 (MSAR 10996)

Dear Governor, President, Speaker and Commission:

In accordance with Section 4-215(e)(3)(iii) of the Natural Resources Article, the Department of Natural Resources hereby submits the second of three reports regarding sustainable oyster population and fishery.

If you have any questions about this submission, please do not hesitate to contact Allison Cordell, Legislative Director, at 410-260-8112 or Allison.cordell@maryland.gov.

Sincerely,

Mark Belton
Secretary

enclosure

cc: Sarah Albert, Legislative Library (5 hard copies)
Jeannie Haddaway-Riccio
Mathew Palmer



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Second Progress Report
Sustainable Oyster Population and Fishery Act of 2016 (2016 Senate Bill 937 / Statute §4-215)
December 1, 2017

The Sustainable Oyster Population and Fishery Act of 2016 requires the Maryland Department of Natural Resources, in consultation with the University of Maryland Center for Environmental Science (UMCES), to conduct a study related to the public oyster fishery and identify oyster management strategies to address the maintenance of a sustainable oyster population and fishery. The bill also requires three reports to be submitted to the Oyster Advisory Commission (OAC), Governor, and General Assembly before Dec. 1, 2018. This is the second interim progress report to be submitted on or before Dec. 1, 2017.

In accordance with the Act, the department will, in consultation with UMCES, conduct a stock assessment and develop biological reference points based on the biological characteristics of the oyster population and other appropriate factors affecting the population. The assessment will be conducted by a scientific team comprised of the department and university personnel, and will be conducted in a transparent manner with opportunity for stakeholder engagement. The stock assessment will be reviewed by an independent panel of individuals with expertise in fisheries stock assessment. The results of the stock assessment will provide the basis for the department to work with stakeholders to determine if additional management approaches are necessary, and if so, identify a suite of possible management approaches. While possible management approaches will be identified within the final report, the process for selecting, refining, and implementing specific management approaches will require extensive and ongoing public and stakeholder input.

The objectives of this study include:

- Develop Terms of Reference (TORs) for the stock assessment in consultation with the OAC. TORs are the protocols and responsibilities when developing a stock assessment for peer review, and include details about elements to be included in the assessment, questions to be addressed and approaches to explore.
- Complete a peer-reviewed, scientifically credible stock assessment that provides guidance for the development of biological reference points.
- Based on the stock assessment outcomes, work with the OAC, the county oyster committees, and the Tidal and Sport Fisheries Advisory Commissions to identify a suite of potential management approaches for the public oyster fishery.

To date, the first phase of the study has been completed (November 2016 to May 2017). Tasks completed included:

- The department convened a team to develop TORs, developed an educational presentation about stock assessments and mapped out a detailed timeline for completing the stock assessment. The department developed an inventory of available data sources for assessment.
- 1st OAC Meeting¹: During the December 12, 2016 OAC meeting a presentation was given providing information on educational materials about stock assessments and draft TORs. Commissioners asked questions about stock assessments in general and provided feedback on the TORs.
- 2nd OAC Meeting²: During the May 15, 2017 OAC meeting a presentation was given which reviewed the final TORs, reviewed available data sources to be used in the assessment, and reviewed types of assessment approaches the data may support. The commissioners approved the TORs and provided feedback on additional datasets that could potentially be used in the assessment.
- Note: The third proposed presentation to the OAC regarding the assessment did not need to occur because all the information was combined and presented in the May 15, 2017 meeting.
- The OAC was updated on the status of the assessment during the November 20, 2017 meeting. A copy of this second progress report will be provided to the commissioners during the next OAC meeting.

The second phase of the study is currently ongoing (June 2017 – May 2018). These tasks focus on conducting the stock assessment and include the follow components:

- Process data so it can be used in the assessment model(s) (e.g., calculate harvest on the relevant spatial resolution, develop indices of recruitment, abundance, etc.)
- Develop the assessment model(s)
- Implement model(s), test their performance and choose a “base” model
- The department will identify and engage the independent review panel
- Submit the model and assessment to a peer review panel composed of stock assessment experts
- Potential meeting 3: Stock assessment update for the OAC

The third phase of the study will occur approximately from June 2018 – November 2018. It will focus on presenting the stock assessment and developing potential management strategies, and include the following components:

- The department will work with stakeholders to identify a suite of potential management approaches based on assessment outcomes.
- Potential meeting 4: The team will present the outcomes of the stock assessment and a member of the peer review panel will present the results of the peer review to the OAC. Initiate discussion with the OAC on possible management approaches.

¹ <http://dnrweb.dnr.state.md.us/fisheries/calendar/events/1257/03%20SB937%20OAC%20Meeting%202016-12-12.pdf>

² http://dnrweb.dnr.state.md.us/fisheries/calendar/events/1303/OAC_StockAssessment_20170515.pdf

- Potential meeting 5: Refine a list of possible management approaches. This list will serve as a starting point for a broader stakeholder process to determine if additional management approaches are needed, and if so, to identify a suite of possible management approaches. Additional meetings with the county oyster committees, the Tidal and Sport Fisheries Advisory Commissions will be held during this phase.

The report required by the Sustainable Oyster Population and Fishery Act of 2016 will be submitted on or before Dec. 1, 2018. This will be the final report for the assessment.

Table 1: Timeline for completing obligations under Maryland 2016 Senate Bill 937 / Statute §4–215. Tasks that have been completed to date are denoted with gray text,		
Month-Year	Tasks	Phase
Nov-16	1) Complete a contract with UMCES for hiring of postdoctoral student to lead the stock assessment 2) Begin recruitment search (advertising) for postdoctoral student candidates 3) Meet with UMCES to discuss TOR and preliminary data needs 4) Begin internal data assembly 5) Determine funding source for project	1
Dec-16	1) Postdoctoral student recruitment continues; Applications accepted 2) Finalize draft TOR 3) Internal data assembly 4) First interim report due 5) OAC meeting #1	
Jan-17	1) Interview postdoctoral student candidates 2) Internal data assembly 3) Select a postdoctoral student	
Feb-17	1) Postdoctoral student to start work 2) Review TOR and tasking with postdoctoral student	
Mar-17	1) Review and preparation of data sources	
Apr-17	1) Prepare for OAC meeting #2 2) Review and preparation of data sources	
May-17	1) OAC meeting #2 2) Present final TORs and timeline for project to the OAC 3) Present proposed data sources to use in the assessment 4) Review feedback on TOR from the OAC 5) Review feedback on data sources from the OAC	
Jun-17	1) Stock assessment work (processing data, creating and running model)	2
Jul-17	1) Stock assessment work (processing data, creating and running model)	
Aug-17	1) Stock assessment work (processing data, creating and running model)	
Sep-17	1) Stock assessment work (processing data, creating and running model)	
Oct-17	1) Stock assessment work (processing data, creating and running model) 2) Prepare for OAC meeting #3	
Nov-17	1) OAC meeting #3 2) Present stock assessment progress to the OAC	

	3) Begin peer review planning	
Dec-17	1) Stock assessment work (processing data, creating and running model) 2) Second interim report due 3) Peer review planning	
Jan-18	1) Stock assessment work (processing data, creating and running model) 2) Peer review planning	
Feb-18	1) Stock assessment work (processing data, creating and running model) 2) Peer review planning	
Mar-18	1) Stock assessment work (processing data, creating and running model) 2) Peer review planning	
Apr-18	1) Peer review	
May-18	1) Finalize peer review report 2) Finalize assessment report 3) Internal discussion of potential management approaches 4) Prepare for OAC meeting #5	
Jun-18	1) OAC meeting #4 2) Assessment and peer review presentation to the OAC 3) Initiate discussion of possible management approaches and review process for selecting refining and implementing management 4) Solicit input from county oyster committees, Tidal and Sport Fisheries Advisory Commissions	3
Jul-18	1) OAC meeting #5 2) Refine list of management approaches	
Aug-18	1) Prepare final report	
Sep-18	1) Prepare final report	
Oct-18	1) Prepare final report	
Nov-18	1) OAC meeting #6 2) Review final report to the OAC 3) Conduct meetings with county oyster committees, Tidal and Sport Fisheries Advisory Commissions, and other stakeholders to present the final report findings	
Dec-18	1) Submit final report	