

Meeting Summary
Oyster Advisory Commission (OAC) Meeting
Maryland Department of Natural Resources (DNR), Tawes State Office Building
Annapolis, MD
(7:00 PM – 9:00 PM)
July 11, 2016

LIST OF ATTENDEES

Commissioners Present:

Kelley Cox (Co-Chair)	Phillips Wharf Environmental Center (PWEC)
Scott Eglseder (Co-Chair)	Eglseder Wealth Management Group, Inc.
J.D. Blackwell	38° North Oysters
Don Boesch	University of Maryland Center for Environmental Science (UMCES)
Robert T. Brown	Maryland Watermen's Association
Kelton Clark	Morgan State University (MSU)
Ron Fithian	Kent County Commissioners
Bill Goldsborough	Chesapeake Bay Foundation (CBF)
Jeff Harrison	Talbot County Watermen's Association
Steve Hershey	State Delegate
Bill Kilinski	Charles County Watermen's Association
Ken Lewis	Coastal Conservation Association (CCA)
Jim Mathias	State Senator
Johnny Mautz	State Delegate
Jim Mullin	Maryland Oystermen's Association (MOA)
Anthony O'Donnell	State Delegate
Ben Parks	Maryland Watermen, Dorchester County
Peyton Robertson	National Oceanic and Atmospheric Administration (NOAA) Chesapeake Bay Office
Jason Schmidt	Talbot County Seafood Heritage Association
Eric Schott	University of Maryland Center for Environmental Science (UMCES)
Angie Sowers	U.S. Army Corps of Engineers (USACE), Baltimore District
Ann Swanson	Chesapeake Bay Commission

Commissioners Unable to Attend:

Deborah Rey	State Delegate
Aubrey Vincent	Lindy Seafood

Other Meeting Attendees Present:

Maryland Department of Natural Resources (DNR): Secretary Mark Belton, Deputy Secretary Joanne Throwe, Mr. Dave Blazer, Mr. Dave Goshorn, Mr. Chris Judy, Ms. Jodi Baxter, Mr. Mitch Tarnowski, Mr. Steve Schatz, Mr. George O'Donnell, Mr. Eric Weissberger, Mr. Mitch Cannon

Oyster Recovery Partnership (ORP): Mr. Ward Slacum

Chesapeake Bay Foundation: Mr. Karl Willey

Chesapeake Bay Commission: Ms. Bevin Buchheister

Coastal Conservation Association (CCA): Mr. David Sikorski, Mr. Larry Jennings

Phillips Wharf Environmental Center (PWEC): Ms. Carol McCollough

Delegate Hershey's Office: Ms. Erica Howard

Maryland Environmental Service (MES): Ms. Kate Meade, Ms. Christine Holmburg

Chesapeake Beach Oyster Cultivation Society (CBOCS): Mr. John Bacon

Past Commissioner: Mr. Doug Legum

Baltimore Sun: Mr. Scott Dance

Handouts:

- Meeting Agenda
 - Legislation Establishing the OAC, April 2007
 - Memo for the Commission from Secretary Belton
 - OAC Operating Guidelines (2007)
 - Maryland Oyster Overview Presentation
 - Tred Avon Oyster Status Presentation
 - DNR 5-Year Oyster Review Report Overview Presentation
 - Expense Account Form
- Note: Meeting agendas, handouts and approved meeting summaries will be available on the OAC webpage:
<http://dnrweb.dnr.state.md.us/fisheries/management/?com=oac&page=meetings>

Action Items:

- DNR will work with waterman, USACE, and NOAA to set up a field meeting in Harris Creek to investigate and solve the high spots that are causing problems to boaters in Harris Creek.
- DNR will attend the Maryland Aquaculture Coordinating Council to provide the Council with a presentation on the DNR 5-Year Oyster Review Report. (**Action Item Completed**)

- DNR will contact the USACE, Baltimore District and NOAA and ask them to provide data and presentations on their agencies' oyster restoration efforts at the next OAC meeting on July 25th. **(Action Item Completed)**
- DNR will provide the Commission with review materials for the July 25th OAC meeting including sections from the Draft 5-Year Oyster Review Report that relates to the Tred Avon River sanctuary project. **(Action Item Completed - The following materials were e-mailed to the Commissioners on July 15th in preparation for the OAC meeting on July 25th):**
 - Agenda for July 25th Meeting
 - Tred Avon Sanctuary (Appendix A, Section 47 from the Draft DNR 5-Year Oyster Review Report)
 - Tred Avon River Oyster Restoration Tributary Plan (Prepared by MD Interagency Oyster Restoration Workgroup of the Sustainable Fisheries Goal Implementation Team)
 - 2015 Oyster Restoration Implementation Update (Choptank Complex)
 - Initial Analysis of Harris Creek Oyster Restoration, 2015 ("3 year check-in")
 - E- mail regarding the upcoming August 9, 2016 public meeting at the Talbot County Community Center regarding USACE proposed work in the Tred Avon River and a link to the USACE Draft Supplemental Environmental Assessment document: http://www.nab.usace.army.mil/Portals/63/docs/Environmental/Oysters/TredAvonEA_expanded_PublicReview_July2016.pdf?ver=2016-07-18-140152-877
- DNR will provide the Commission with the complete draft DNR 5-Year Oyster Review Report including the data appendices by July 31st or sooner if possible.
- DNR will provide data to the Commission to help them to understand where oyster sanctuaries would likely not be successful so that Commission does not spend time looking at these locations.
- DNR will consider whether they would be able to provide data on where current oyster license owners are living and working and whether it would be possible to provide data on total oyster harvest broken down by catch per unit effort (CPUE) per NOAA Code harvest reporting area.
- DNR will consider whether it would be possible to provide a website for the use of the OAC members to share information.

Topics for Discussion for Future Commission Meetings:

- The problem of boats running aground in shallow water created during oyster reef restoration.
- Potential future sources of shell for restoration projects. Mr. Mullins suggested that the Commission could work on getting several specific dredge permits for obtaining shell.
- Recommendations that were made by the OAC in past years.

- Land use patterns along the Chesapeake Bay shore and how land use affects oyster populations and the commercial fishing industry.
- Economic and cultural issues related to oyster harvests and sanctuaries.
- Preference of oyster spat for various substrates.
- Presentation by Virginia watermen about the Virginia program.

MEETING SUMMARY:

Welcome and Introductions (Mark Belton, DNR Secretary)

Secretary Belton opened the meeting and introduced the Committee Co-chairs, Ms. Kelley Cox and Mr. Scott Eglseder.

OAC Mission and Charge (Mark Belton and OAC Members)

The Committee members were asked to refer to three of the handouts, a copy of the legislation that established the Commission in 2007, the current OAC operating guidelines, and a memo from Secretary Belton to the Commission that presents the priority work for the upcoming OAC meetings. Secretary Belton reviewed the memo with the Commission members and asked them to work on the following three priority tasks over the coming weeks and months:

- (1) Recommend whether or not the USACE, Baltimore District should be directed to continue the oyster restoration work that was started in the Tred Avon River and which is currently on hold. The OAC was asked to review the current available oyster population data (including the DNR 5-Year Oyster Review Report) in order to determine whether continuation of the current USACE work plan should continue, should be ended, or should be revised in some way. The OAC's recommendation is needed by August 5, 2016 so that federal funding can be set aside for this work if it is to continue.

Maryland is committed to the restoration of 5 tributaries to historical oyster population levels by 2025 per the Chesapeake Bay Agreement. The Tred Avon is one of the three tributaries that have already been selected for the placement of substrate material and oyster spat to meet this commitment. The Little Choptank River and Harris Creek were also selected for oyster restoration efforts. The remaining two tributaries have not yet been selected.

- (2) Make recommendations for the two remaining tributaries to be restored in order to meet the Chesapeake Bay Agreement goal of 5 tributaries. Members were asked to make a decision based on the information in the DNR 5-Year Oyster Review Report and to consider fiscal responsibility when making their recommendations. Secretary Belton pointed out that the three tributaries where intensive restoration is currently taking place (Harris Creek, the Tred Avon River, and the Little Choptank River) are located close to each other within the same region of the Bay. The OAC members were advised to consider how to avoid choosing locations for sanctuaries that could put a disproportionate financial strain on commercial harvesters who may be impacted by the location of the sanctuaries.

- 1.) Provide DNR with recommendations for changes to oyster sanctuaries and public fishing areas based on the available data in the DNR 5-Year Oyster Review Report. The OAC was advised to consider the public fishing areas in making their recommendation. The goal of the sanctuary program is to protect 20-30% of the designated oyster bottom in Maryland as area for restoration and sanctuary. Currently 24% of the oyster bottom in Maryland is protected as sanctuary and 76% is open to use for the public fishery.

Secretary Belton informed the OAC that they are not limited to only addressing these three questions. Mr. Goldsborough asked if the OAC is being reconvened on a temporary basis only. Secretary Belton explained that the legislation is unclear on the duration of the OAC. DNR felt that the release of the Draft DNR 5-Year Oyster Review Report would provide a good opportunity to reconvene the OAC. DNR would not mind having the OAC continue meeting after the report is reviewed and the three tasks have been completed. Mr. Clark requested that the recommendations and outcomes from the OAC meetings that occurred in the past be provided to the group for consideration. Secretary Belton replied that the information can be provided and discussed at future meetings.

Ms. Sowers requested clarification on Maryland's definition of oyster sanctuaries and asked whether they were intended to be protected in perpetuity. Secretary Belton stated that DNR has committed to reporting on the status of oyster populations every 5 years and to making necessary changes in the status of oyster bottom based on these reports. Mr. Boesch noted that the legislation that established the OAC indicates that the OAC should review the best possible science to recommend changes for building and managing oyster populations. Mr. Boesch asked if those requirements would be satisfied by the DNR 5-Year Oyster Review Report. Secretary Belton stated that the report will provide much of the information and will be very comprehensive, however, OAC members can request additional information if necessary. The report is due for release to the public by the end of July but DNR will release excerpts of the report to the OAC in the next few weeks in order to allow the OAC members the opportunity to review the pertinent information related to the Tred Avon River issue.

Oyster Management 101 Briefing (Chris Judy, DNR)

Mr. Judy gave a general summary and overview of oyster management in Maryland, presenting the three oyster management areas utilized to date: sanctuaries which are closed to harvest, public shellfish fishery areas (PSFAs) which are for harvest by the fishery, and aquaculture areas which are leased for the private production of shellfish. Mr. Judy presented an historical summary of harvest from the late 1880's to present, showing the decline and low status of oysters today. The main drivers of the recent decline (1980s forward) were disease and spat setting patterns, as well as habitat issues, supported by Fall Survey data collected on the oyster population. He said this presentation is a general overview and that more details on oyster status and management could be provided at future meetings. Mr. Blackwell asked how long the sanctuaries have been in place. Mr. Judy stated that the majority of sanctuaries have been in place since 2010, but a few have been in place since the late 1980's. Mr. Harrison observed that there has been an economic impact to commercial oyster harvesters related to having 24% of the oyster bottom designated as sanctuary; the harvests shown in the presentation would have been greater if oystermen had access to those areas. Mr. Clark noted that there are other impacts to be considered when looking at harvest data besides disease, spat production, and environmental

conditions; social, economic, and factors such as regulations also impact harvest numbers. Mr. Judy stated that the main drivers affecting recent harvests are salinity, disease and spat set. Mr. Mullin asked if there is a rough correlation between the harvest numbers and actual oyster population numbers. Mr. Judy replied that exact oyster population numbers are not available just estimates. However, it has been shown that harvest numbers and stock assessment estimates do track each other. Mr. Clark pointed out that harvest data is being used as a surrogate for the actual oyster population numbers. He cautioned that there is no evidence for the assumption that the harvest data and the true oyster population numbers track each other and he advised caution when making those types of statements. Mr. Goldsborough noted that during the 5 year period since the areas were designated as sanctuary there has been a four-fold increase in catch. Mr. Schott noted that recruitment is what should be looked at when discussing the catch. The goal should not be to have the oysters clean the bay, but to clean the bay in order to provide better conditions for the oysters to survive in. Mr. Blackwell asked if the numbers provided were from public fisheries, not aquaculture, and Mr. Judy agreed that this was true. Mr. Robertson asked if there was similar data for fishing effort that is reflected in harvest. Mr. Judy replied yes, and that more information can be provided later since this is an overview presentation.

Ms. Sowers explained that the USACE is currently in the process of preparing an Environmental Assessment (EA) regarding the creation of shallower water reefs in the Ted Avon River and that this document will be provided to the OAC to help with making a decision regarding the completion of oyster reefs in the Tred Avon River. In addition, the USACE will be discussing their assessment of the potential impacts associated the creation of shallow water reefs in the Ted Avon river at a public meeting in early August (August 9). Ms. Sowers explained that the USACE worked with the U.S. Coast Guard to determine the types of boats and traffic in the proposed sanctuary areas. As a result of these discussions, the USACE determined that for the Tred Avon restoration project, 6ft of navigation clearance will be provided over the restoration sites (as opposed to the 5ft of clearance which is normally required and that was originally planned). Ms. Sowers noted that 24 acres were investigated by the USACE for oyster restoration in the Tred Avon River and the sites that were selected for the placement were found to have no oysters or few oysters on them. A combination of shell and rock was originally going to be placed on the Tred Avon restoration sites; however it was decided that a larger percentage of shell would be placed at the Tred Avon sites. In order to maximize the amount of shell which would be available for placement in the Tred Avon, a larger percentage of rock was placed at the Harris Creek restoration sites than was originally planned. The Tred Avon project was put on hold before the project was completed leaving 8 acres which still need to be completed.

Ms. Swanson asked about the federal funding for the Tred Avon reef project which was transferred to Virginia. Ms. Sowers replied that some of the Tred Avon funding (\$1 Million) was transferred to Virginia, but there is still enough money left to complete the remaining 8 acres as well as for the USACE to work to address concerns about the creation of shallow water.

Mr. Harrison stated that boaters and fishermen have been having problems with the constructed reef areas that were built in Harris Creek because they are shallow. So far 28 incidences of boats hitting the shallow areas have been reported and the issue is an ongoing problem that is currently

not being addressed. The buoys do not clearly mark the shallow sanctuary areas and some of the reef material needs to be hauled away in order to prevent further issues. Delegate O'Donnell noted that although legislation from this past legislative session regarding the shallow water issue did not pass, the proposed legislation has started a discussion within the legislature regarding the navigation hazards which are present. Ms. Sowers suggested that the shallow water issue could be a future topic for the Commission to discuss. Secretary Belton agreed with Ms. Sowers' suggestion. Mr. Judy noted that that a public meeting on the USACE's Environmental Assessment will be held soon (Tuesday August 9, 2016) and this will be a good opportunity for watermen to present these issues and have them heard by the agencies and recorded as part of the public record.

Overview of the DNR 5-Year Oyster Review Report (Dave Blazer, DNR)

Mr. Blazer presented an outline of the report and noted that once the report is completed it will be presented to the public and to various outreach groups including the County Oyster Committees. Delegate O'Donnell requested that DNR provide a presentation on the report to the Aquaculture Coordination Committee which will be meeting in the next week.

Mr. Blazer indicated that data from the 2015 Fall Oyster Survey would be provided in the DNR 5-Year Oyster Review Report. Mr. Boesch noted that "Chapter 5 - Conclusion and Proposed Future Alternatives" could be used as a starting place for the OAC in developing recommendations for changes to oyster sanctuaries and public fishing areas based on the available data. Mr. Boesch asked what criteria are being used to score the alternatives proposed by DNR. Mr. Blazer stated that the alternatives presented in the report are scored by criteria related to effectiveness and that data will be provided in the report appendices that will support the recommendations. DNR will ask the OAC if they agree with the scoring and the alternatives.

Mr. Robertson noted that the annual harvest data shows that a total of 350,000 bushels of oysters were harvested and roughly 17% of the total harvest (50,000 bushels) was from aquaculture. He asked if the Report will discuss future oyster management policy in light of the changing context and advancement of aquaculture in Maryland. Mr. Blazer stated that this discussion is beyond the current scope for the DNR 5-Year Oyster Review Report, however it could be considered for inclusion in the objectives for the next set of reports.

Mr. Clark noted that he has reviewed some of the recent NOAA project reports on the Tred Avon which indicate that the project (as built) is meeting the project goals. He asked if the DNR 5-Year Oyster Review Report has similar data and findings. Mr. Weissberger stated that the NOAA reports present data on the progress that has been made on the construction of the restoration project (progress made on substrate and oyster placement) while the DNR 5-Year Oyster Review Report provides data on the performance of the sanctuary areas. Mr. Blazer stated that representatives from NOAA will to be asked to present data on the progress that they have made constructing the reefs in the Tred Avon sanctuary area at the next OAC meeting. Mr. Harrison asked whether there is data available related to the ecological value associated with the construction of reefs in the Ted Avon River such as the reduction in nitrogen. Mr. Blazer replied that he was unsure. Mr. Harrison stated that it is his understanding that the sanctuaries that have been designated in the past have been either neutral in regards to nitrogen reduction or have reported increases in nutrient pollution, while other locations have improved. Mr. Harrison

asked if the DNR 5-Year Oyster Review Report would look at whether there is a difference between the water quality benefits provided by public oyster grounds and those provided by sanctuaries. Mr. Blazer stated that water quality benefits are not discussed in detail in the DNR 5-Year Oyster Review Report. Delegate O'Donnell pointed out that there has been an effort to develop Best Management Practices (BMP's) for nutrient reduction by shellfish. The data for nutrient reduction is pertinent for the future when it comes time to determine the ability of oyster populations to reduce nutrients. Mr. Eglseder noted that section 3 (II) of the legislation states that the Committee should "review the best possible science and recommend changes to the framework and strategies for rebuilding and managing the oyster population in the Chesapeake Bay under the Chesapeake Bay Oyster Management Plan," He encouraged the Commissioners to review any other scientific, cultural, and economic information which is relevant to oysters in the Chesapeake Bay and he noted that the group has the ability to ask for very specific information.

Plans for the Tred Avon River - Restoration Discussion (Dave Blazer, DNR)

The Tred Avon River Restoration Project is being undertaken as a cooperative effort by DNR, USACE, NOAA and ORP and these agencies and organizations have been tracking progress on the project. Mr. Blazer noted that DNR population monitoring data from the 2015 Fall Survey will be included in the DNR 5-Year Oyster Review. In addition, information from the USACE Environmental Assessment Report will be provided at the next OAC meeting in a few weeks. Also, Stephanie Westby from NOAA and members of the restoration workgroup will be asked to attend the next OAC meeting to present data and answer questions regarding the project.

Mr. Blazer asked if there was any other information that the OAC would be interested in receiving.

- Mr. Harrison asked if there was any information regarding spat fall on different substrates (shell versus stone). Ms. Sowers also noted that the Cook Point monitoring report: (<http://www.life.umd.edu/biology/paynterlab/labpub/2014%20USACE%20Report%20Final%2020150902.pdf>) provides information on oyster's productivity on different substrate.
- Mr. Clark asked for information on cultural and social impacts related to oyster populations and sanctuaries.
- Mr. Schott asked to see data on land use patterns and stated that changing patterns of land use are important for understanding the where oysters are likely to survive.
- Mr. Boesch noted that the section of the DNR 5-Year Oyster Review Report on the Tred Avon would be needed by the Commission so that they can make recommendations. Mr. Blazer stated that some summaries and analyses will be provided before the meeting, but not the raw numbers.

Mr. Blazer explained that the Commission would need to recommend whether the Tred Avon River Restoration Project would be continued as planned with additional work by the USACE, or whether it would be ended and a new sanctuary area chosen where substrate would be placed. Mr. Blackwell asked if in doing less work to improve the oyster bottom area in the Ted Avon oyster sanctuary this would mean that the Tred Avon oyster sanctuary would not meet the tributary restoration requirement set by the Chesapeake Bay Agreement, and would a new third tributary need to be determined? Mr. Blackwell also asked if the sanctuary restoration areas were required to be a certain size. Ms. Sowers stated that according to the criteria developed by

the oyster metrics workgroup, the sanctuary does not need to be over a certain size, but has to make a difference in the oyster population and have system wide impacts that would result in the survival of the restored oyster population. Many different size ranges were investigated by the restoration workgroup. Members of the restoration workgroup will be available to provide additional information to the Commission at the next OAC meeting.

Mr. Brown noted that 147 acres are proposed for just one oyster sanctuary in one Maryland tributary while in the entire state of Virginia 155 acres are proposed for oyster sanctuaries. Mr. Brown suggested that the number of sanctuaries planned for restoration in Maryland should not exceed the number of acres that Virginia is proposing to set aside for sanctuaries. Mr. Brown also indicated that he is concerned about the designation of oyster sanctuaries in prized public harvest areas. Mr. Brown provided an example of an unfair situation in St. Mary's county where the local watermen's association negotiated an agreement under which a percentage of the public harvest area would be set aside for sanctuary and oyster restoration in return for other areas that are currently closed to harvest being opened to public harvest. In this case the final sanctuary charts showed that the entire area was taken for sanctuary and the watermen lost their public harvest areas and did not gain any area in return. In addition, Mr. Brown stated he would like the OAC to also focus on the cleanup of shallow areas where oyster restoration has taken place and where boats are running aground due to the shallow water.

Mr. Parks asked why when DNR was determining the locations for the 5 tributaries to be restored they did not take into account the existing locations which are already designated as sanctuary. Mr. Blazer noted that the DNR 5-Year Oyster Review Report provides data from the 51 existing sanctuaries. The report will explain how the sanctuaries function and the future prognosis for restoration of oyster populations on these sanctuaries.

Mr. Fithian asked if the findings in the report compared data to the findings from studies completed before the 5 year study period commenced, and also asked if the sanctuaries were improved by the addition of seed oysters or shell. Mr. Robertson explained that sanctuary monitoring is completed during the annual fall spat survey conducted by the State of Maryland on Maryland Oyster grounds. However the three tributaries (Little Choptank, Harris Creek, and Tred Avon) that were selected for restoration are the subject of additional survey and monitoring to assess changes and to determine whether these sanctuaries and tributaries are meeting the metrics for success established by the Chesapeake Bay Program. These three sanctuaries have received a much more proactive restoration effort than the other sanctuaries have ever received. Metrics are used to define the success of sanctuary areas after restoration work has been completed. Success is considered to be low at 15 oysters per square meter and high at 50 oysters per square meter.

In Virginia, oyster restoration is less expensive because the work typically involves just putting down shell on the bottom for oyster spat to set on. The Virginia portion of the Bay has higher salt content which leads to greater oyster reproduction success (natural spat set). But Virginia also has much larger areas slated for restoration.

Ms. Swanson suggested that she could work with Margaret Ransone from Bevin Seafood to identify one (or several) watermen from Virginia who would be willing to provide a presentation to the OAC about their program.

Mr. Schmidt asked why Harris Creek was used as a sanctuary for intensive restoration instead of a tributary which was already classified as a sanctuary. Mr. Schmidt noted that because so much of the fishing areas have been set aside as sanctuary areas, the fishing areas are now condensed and overfished. He asked why new areas were identified in order to meet the tributary restoration requirements instead of using historic sanctuary areas.

Mr. Goldsborough explained that before 2010 9% of the oyster grounds were designated as oyster sanctuary. The 9% of the oyster ground that had been designated as oyster sanctuaries before 2010 were marginal areas where oyster restoration would be unlikely to succeed. In 2010 the oyster ground area that was designated as oyster sanctuary was expanded to 24% of the existing oyster grounds. These additional areas were added to the sanctuary area in order to provide areas that could be restored enough so that the ecosystem services of oysters including the filtering of nutrients, the development of space for other species, and the creation of seed sources for other part of the Bay. Because this was the purpose of the expanded sanctuary area, some of the best oyster grounds were designated as oyster sanctuaries. Under the Executive Order the primary objective was to target tributaries, not just individual bars to recreate self sustaining networks of bars.

Mr. Parks noted that oysters will live in the Big Choptank River but they will not reproduce in 8ppt salinity; so oysters in this area must be planted or be reestablished from an area where oysters do reproduce.

Public Comment

Mr. Legum introduced himself as a past member of the Commission and suggested that it would be sensible to accept any federal money that is offered for the restoration of oyster bottom.

Next Meeting

The next OAC meeting will be held on July 25, 2016 at 6pm at the MD DNR Tawes State Office Building.

The July 25th meeting will focus on the Tred Avon River. The Committee will develop recommendations on whether or not to request that the USACE continue restoration work. An additional meeting will be held on August 1st if necessary in order to finalize the Committee recommendations.