

Meeting Summary
Oyster Advisory Commission (OAC) Meeting

Maryland Department of Natural Resources (DNR), Tawes State Office Building
Annapolis, MD
(6:00 PM – 9:00 PM)
August 1, 2016

LIST OF ATTENDEES

Commissioners Present:

Kelley Cox (Co-Chair)	Phillips Wharf Environmental Center (PWEC)
Scott Eglseder (Co-Chair)	Eglseder Wealth Management Group, Inc.
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
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)
Ben Parks	Maryland Watermen, Dorchester County
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

Commissioners Unable to Attend:

J.D. Blackwell	38° North Oysters
Steve Hershey	State Senator
Deborah Rey	State Delegate
Peyton Robertson	National Oceanic and Atmospheric Administration (NOAA) Chesapeake Bay Office
Ann Swanson	Chesapeake Bay Commission
Aubrey Vincent	Lindy Seafood

Other Meeting Attendees Present:

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

Office of the Governor: Jeannie H. Riccio

Chesapeake Bay Foundation: Mr. Tom Zopler, Mr. Doug Myers, Ms. Hilary Gibson

Chesapeake Bay Commission: Ms. Bevin Buchheister

Chesapeake Bay Savers: Ms. Marisa Sames

Coastal Conservation Association (CCA): Mr. Larry Jennings

Congressman Andy Harris' Office: Ms. Denise Lovelady

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

Senator Hershey's Office: Ms. Erica Howard

Maryland Environmental Service (MES): Ms. Kate Meade, Ms. Maggie Cavey

Maryland Waterman Association: Ms. Victoria Brown

National Wildlife Federation: Ms. Jen Mihills

Past Commissioner: Mr. Doug Legum

Delmarva Fisheries Association, Inc.: Capt. Robert Newberry

MidShore Riverkeepers Conservancy: Mr. Matt Pluta

Bay Journal: Mr. Tim Wheeler

The Washington Post: Mr. Bill Turque

Maginnes Productions: Mr. David Maginnes

The Capitol: Ms. Christina Jedra

Citizen: Mr. Charles Denton, Mr. Lani Hummel, Ms. Laurunda Serafin

Handouts:

- Meeting Agenda
- July 25, 2016 Draft Meeting Summary
- Don Boesch Letter of Opinion
- Presentation - Briefing on the 5 Year Report
- Oyster Harvesters by Town of Residence
- Oyster Harvesters by County of Residence
- Oyster Harvest (BU) in the Three Restoration Tributaries
- Maryland Oyster Population Status Report 2015 Fall Survey

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 write up the OAC Recommendation and Conditions and send it to the OAC members via e-mail. **(Action Item Completed)**
- DNR will prepare an agenda for the next OAC meeting on Aug 22 that will focus on developing recommendations for the selection of the remaining 2 tributaries for large scale restoration in order to fulfill Maryland's 2014 Chesapeake Bay Agreement commitment to restore oyster populations in 5 tributaries in the Maryland portion of the Chesapeake Bay. **(Action Item Completed)**
- NOAA will look at whether they can provide the OAC with information from the Oyster Restoration Ecosystem Services (ORES) evaluation so that the OAC can review data on how restoration work has impacted activities like fishing and crabbing.

MEETING SUMMARY:

Welcome and Introductions (Mark Belton, DNR Secretary)

Secretary Belton opened the meeting and the meeting attendees introduced themselves.

Secretary Belton reviewed the 2014 Chesapeake Bay Agreement that was signed by New York, West Virginia, Virginia, Pennsylvania, Delaware, Washington D.C., and Maryland. The first Agreement goal includes a commitment to restore oyster populations in 10 tributaries in the Chesapeake Bay; Maryland and Virginia committed to identifying and restoring 5 tributaries in each State to historic oyster population levels by 2025. So far three tributaries have been selected for restoration in Maryland (Harris Creek, Little Choptank, and the Tred Avon). Restoration in Harris Creek has been completed, it is near completion in the Little Choptank, and it has been initiated in the Tred Avon River.

The topic for this meeting is to continue with the first task assigned to the OAC; discuss the 8 acre effort in the Tred Avon. The second task, for future meetings, is to recommend the 4th and 5th tributary to be selected for the Maryland restoration program, and the third task is to provide recommendations regarding the current oyster sanctuary and fishery programs.

Mr. Eglseder noted that the Tred Avon project work that was planned by the USACE on 8 areas was delayed in order to provide the OAC with the opportunity to review the best science available related to the project and to make recommendations based on the data.

Meeting Summary Approval (Kelley Cox, Co-chair)

The summary from the July 25th OAC meeting was approved by the Commissioners with one correction. Mr. Harrison requested a correction to item 9 on page 6 which had misrepresented a

comment made by Mr. Harrison regarding clam shell in Harris Creek. The correction will be made prior to posting the summary on the website.

Presentations:

Briefing on the 5 year Report - Ms. Baxter reviewed the 5 Year Report which had been provided electronically on Sunday, July 31st, 2016 to the Commissioners (and also made available to the public).

Review of Requested Materials - Mr. Judy provided a brief overview of the handout materials that had been requested by the OAC at previous meetings:

- Statistics on where oyster harvesters in Maryland live (by town and county)
- Statistics on the oyster harvest in the three tributaries (Little Choptank, Tred Avon, Harris Creek) where restoration projects are currently taking place
- The full 3 Year Check in Report for Harris Creek (distributed electronically)
- Maryland Oyster Population Status Report 2015 Fall Survey

Questions Regarding the Presentations:

- Mr. Harrison asked Ms. Baxter how the total area of productive oyster bottom (as presented in the 5 Year Report) was determined.
 - Ms. Baxter explained that total productive oyster bottom acreage was based on an analysis of bay wide information that was completed during the development of the Environmental Impact Statement (EIS) for oyster restoration in the Chesapeake Bay that was released in 2009.
- Mr. Harrison noted how much more acreage is considered sanctuary verses what is considered to be Public Shellfish Fishery Areas.
 - Ms. Baxter explained that areas between productive oyster bars are included in the sanctuary areas although they are made up of sand and mud. This means that the sanctuaries cover oyster bottom as well as the areas around and between oyster bottom.
- Mr. Kilinski asked about the 2009 ‘Best Bar’ Analysis study; who are the authors are and what the study includes.
 - The authors were Mr. Phil Jones, after he retired from DNR as the assistant fishery director at DNR. and Dr. Brian J. Rothschild who was the Dean of the School for Marine Science and Technology at the University of Massachusetts. Mr. Judy explained that in 2009 they completed a study which identified the most productive oyster bars in Maryland or ‘Best Bars’ as part of the 2009 EIS.
 - Mr. Parks noted that Dr. Rothschild is a past member of the OAC.
- Mr. Brown asked Mr. Judy if the decline in harvests after the 1999 peak was due to Dermo and MSX.

- Mr. Judy explained that this was accurate: the 4 year drought of 1999-2002 caused an increase in disease which lead to a severe die off of oysters.

Review of the Charge from the July 25th Meeting:

After the July 25th meeting, Mr. Eglseider had requested that Secretary Belton address the three questions which had been raised by the Commission regarding the Tred Avon sanctuary.

1. Has Tred Avon River sanctuary reached permanent sanctuary status and is commercial harvest in the sanctuary now and forever prohibited?
2. Will commercial public harvest ever be allowed within the sanctuary boundaries in areas that fall within the sanctuary but that have not received federal restoration funding?
3. If the state reimbursed the federal government for the restoration work already performed, could the sanctuary status be revoked and the public fishery in the area reopen?

Secretary Belton stated that he had spoken with attorneys from the federal Government Office of Legal Counsel and also with the state Attorney General's Office who consulted with the USACE in regards to Mr. Eglseider's questions. Secretary Belton stated that the documentation which directs Federal work in sanctuaries is from two sources; (1) the Federal statute that governs the USACE's work and (2) the 2012 Chesapeake Bay Oyster Recovery Native Oyster Restoration Master Plan. The substrate component of the Tred Avon oyster restoration is a USACE federally cost-shared project. Federal funding that was already spent on the project was spent under the premise that it was being used for a permanent oyster sanctuary. The authorization of the work that was performed by the federal government in the Ted Avon was based on the premise that the authorized funding would be contributing to large tributary restoration, so harvesting would not be allowed within the sanctuary boundaries even in areas that have not received federally funded work. This means that the entire area that is designated as a sanctuary in the Tred Avon River is considered to be a permanent sanctuary. In reference to reimbursing the Federal government, Secretary Belton explained that reimbursement would be difficult and would require a legislative change in order for that to happen. There is nothing currently in place in federal statute to allow for reimbursement.

In response to a number of questions Secretary Belton explained:

- Sanctuaries in Maryland are State bottom. The entire Bay bottom in Maryland is under the authority of the State.
- The Tred Avon sanctuary has set boundaries and all the areas within the set boundaries (restored with federal funding or not) is considered sanctuary.
- Aquaculture lease bottom is available within the Tred Avon River which allows for commercial harvest. Although public harvest within sanctuary boundaries is not permitted, there are a limited number of leased bottom areas available in the river. Three leases currently exist.
- A public group, such as a group of watermen, can acquire an aquaculture lease and plant it themselves as it would be the same as an individual leasing some bottom and planting.

Discussion on recommendations for the Tred Avon Oyster Restoration Project (OAC members)

Coordination with the Fishing Industry

- Mr. Brown and Mr. Parks indicated that in the past, negotiations by local watermen groups with the state (regarding the loss of Public Shellfish Fishery Areas and the designation of oyster sanctuary areas) have not resulted favorably for the watermen.
- Mr. Brown asked why in Virginia the public was able to work within 100 feet of a sanctuary area but not in Maryland.
 - Ms. Sowers explained that from the federal perspective how a sanctuary is designated is up to the state. Virginia felt that they would be able to operate and enforce public oyster harvest within 100 feet of a sanctuary but Maryland chose not to operate in this way.
- Mr. Goldsborough explained that it is difficult to compare the program for Virginia oyster restoration and the progress that Virginia has made to that of Maryland as the two portions of the Bay differ in terms of salinity. Mr. Goldsborough stated that to allow harvest in a sanctuary would undermine restoration efforts. He quoted the late Dr. William Hargis Jr., who estimated that it took 7-8 thousand years to build the Bay's oyster bars and only a couple hundred years to harvest them to their current state.
- Mr. Fithian noted that historically the fishing industry has not always been considered in decisions that have been made. Mr. Fithian asked if work is continued on the Tred Avon, would the fishing industry receive something in return such as shell as the chosen substrate rather than stone whenever possible.
- Mr. Mullins stated that the seafood industry is frustrated that they are often not included in the decision making process but rather told the outcome. Mr. Mullins explained that he was not opposed to the continued work on the 8 acres of the Tred Avon but he feels more information and answers are needed.
- Mr. Goldsborough encouraged the Commissioners to look at the work already completed in Harris Creek. Although the oysters are not mature yet, there is positive information available. Mr. Goldsborough noted that Mr. Judy provided the full NOAA report data which show that the completed restoration areas have met the criteria that indicate the project has been a success so far. This positive information makes an argument for the continuation on the 8 acres of the Tred Avon.
- Delegate Mautz stated that he could not vote to move forward with the restoration work on the 8 acres in the Tred Avon. He stated he needed additional time to review the DNR 5-Year Oyster Review Report and the five conditions in the Tred Avon Recommendation.

Use of Stone as Reef Substrate Material

- Mr. Fithian stated that it is unfortunate that existing buried shell bottom is covered up with stone substrate which can interfere with crabbing and other fishing. He indicated that he would feel more comfortable with agreeing on a recommendation that USACE proceed with the Tred Avon 8 acre restoration project if only shell substrate was used for restoration projects in the future.
- Secretary Belton stated that although natural oyster shell is the preferable substrate, supplies of shell are limited. The state has applied for a permit to dredge buried oyster shell from the Man-O-War shoal area. The permit must be approved by USACE and MDE.
- Mr. Goldsborough agreed that shell is the preferred substrate for projects but he noted that a lot of research has been performed to assess the effectiveness of various alternative substrate material options and granite has been shown to be effective. Mr. Goldsborough stated that evidence presented in the 3-Year Status Report for the Harris Creek project supports the finding that stone is an effective substrate option. It is important to look at substrate options from an economic and an ecological standpoint.
- Mr. Schmidt stated that a majority of waterman would like to limit the placement of stone substrate for the purpose of oyster restoration. Mr. Schmidt suggested that stone only be used as a foundation for the placement of oyster shell when a restoration project is built on soft mud bottom. Mr. Schmidt suggested that federal funding be spent on seeding existing oyster bars rather than on creating larger oyster bars.
- Ms. Sowers explained that the USACE reef restoration sites which have been constructed with a stone base have 1-3 inches of spat on shell planted on top of the stone. There are some sites in Harris Creek that were constructed using 6 inches of rock base overlain by 6 inches of mixed shell. Spat were then planted on top of this reef structure. Due to the method of placement, the stone is not always covered up with shell completely and is exposed to spat set.
- Mr. Schmidt asked if exposed stone or spat on shell resulted in one site performing better in terms of productivity than other sites.
 - Ms. Sowers stated that the preliminary information suggests stone reefs are performing well. The productivity that has been observed on reefs that have included stone on the surface of the reef may be associated with the variation in surface area (surface heterogeneity) that is provided by the use of stone (and not necessarily by the stone itself), however, more studies are needed in order to establish whether there is a measurable benefit to using stone.
- Ms. Sowers pointed out that in areas where communities of oysters successfully build up oyster reef habitat the oyster shell itself on the natural reef may also create places where trotlines could snag.

- Mr. Schmidt asked if additional funding would be available for replanting oysters if disease were to wipe out oysters on restored reefs.
 - Mr. Judy explained that replanting is included in the budget for the project.
- Mr. Boesch agreed that oysters are meant to live vertically, and as they build upwards into reefs they may cause more snagging issues. He discussed the need for oysters in terms of both ecologic and economic value. Mr. Boesch noted that the Commission's main focus should be on identifying efforts that will produce more oysters.

Potential Benefits to Commercial Fisheries Associated with Sanctuaries

- Mr. Schott noted that one of the objectives of sanctuary establishment is to protect areas that will provide ecosystem services that benefit watermen. He observed that both crabbing and fishing are permitted in restored sanctuaries although stone and restored habitat may result in snagged trotlines and other fishing gear. He asked if there is data available on the success of fishing within current sanctuaries.
 - Ms. Baxter explained that harvest data is collected in the crab and finfish industry. The data reports are submitted monthly and give the number of crab and finfish caught in each NOAA code harvest reporting area. Ms. Baxter explained that just a few NOAA code harvest reporting areas fall completely within an area that has been designated as a sanctuary. In the future, harvest data of finfish and crabs may be examined in these sanctuary areas. NOAA is currently in the process of conducting a new type of study (The Oyster Restoration Ecosystem Services (ORES) Evaluation) which will assess different fishery uses within restoration areas.
- Mr. Schott requested that information about the ORES Evaluation (and any data available from the study) be made available to the OAC so that the Commission can evaluate data on how restoration work has impacted activities like fishing and crabbing.

Maintaining Oyster Bottom and Natural Spat Set for Oyster Restoration

- Mr. Fithian and Mr. Harrison noted that oyster harvest records from 2003 and 2004, in comparison to more recent years, show that power dredging and working the bottom to clean oyster shell of sediment is an effective way to uncover shell and improve oyster spat establishment on shell. Mr. Fithian stated that if the bottom is maintained in this way it would allow for the oysters bars to return naturally.
- Mr. Boesch noted that stone and shell substrate is used in restoration projects in order to create a solid place where spat can grow above the sediment and in the water column. The goal is for oysters to reproduce and place shell naturally and create a self-sustaining oyster bar.
- Mr. Schott explained that to develop disease resistance in natural populations, disease must occur. Populations impacted by disease will develop disease resistance over time as the oysters that have some disease resistance survive and reproduce and pass on disease resistance to their progeny. If oysters remain undisturbed and if enough generations

reproduce successfully and pass on the genes for disease resistance, populations of oysters may develop disease resistance.

The Potential for Oyster Shell Recovery and Reuse in the Tred Avon River

- Mr. Schmidt asked whether it would be possible to recover shell that had previously been planted in the Tred Avon (and is now silted over) and whether this shell could be used for oyster reef restoration rather stone or other shell.
- Ms. Sowers stated that it is not clear how much shell that was historically placed in the Tred Avon River would be available if dredging was undertaken. Recovery of buried shell for use in oyster restoration in the Tred Avon River was discussed when the restoration project was being planned. But prior investigations by DNR had poor results in recovering previously planted shell and therefore this was not pursued.
- Mr. Eglseder asked if NOAA was able to look at surface characteristics and determine the amount of shell previously planted.
- Mr. Boesch pointed out that old buried shell may not always be suitable for recovery and reuse in restoration projects because the old shell breaks down over time. A population of living oysters creating new shell on top of old shell is needed in order to maintain a healthy layer of shell for live oysters to grow on.
- Ms. Sowers stated that the USACE can access DNR records which have a complete history of shell plantings since 1960 and potentially some of those sites could be investigated to see if any shell could be recovered.
- Mr. Schmidt stated that more living oysters are needed to create more spat and he asked how the Harris Creek oyster restoration would impact the area in terms of spat set. Mr. Judy explained that it is difficult to say with certainty where larvae that have settled in an area came from originally, and there is no hard data that shows that more broodstock in one place leads to more spat set in another specific place. He affirmed the importance of broodstock generally, but said no guarantees can be given about direct relationships between sites.
- Mr. Clark pointed out that if monitoring efforts focused on genetic markers it would be possible to identify where larvae originated from and it would be much easier to make restoration decisions. He recommended that genetic markers be used in future monitoring efforts and that the state and federal agencies utilize independent monitoring rather than risk obtaining data from monitoring that is performed by agencies that are influenced by politics. Mr. Clark also recommended forming a Fishery Committee that is run through the Maryland Department of Commerce rather than through DNR as the fishing industry is an industry.

Commission Discussion Concerning Whether the OAC Recommendation should include Conditions

- Secretary Belton stated that the Commissioners had brought up great points and had a productive discussion. He emphasized that a recommendation regarding the restoration of the remaining 8 acres in the Tred Avon is needed by August 5th due to budget decisions (the federal fiscal year ends on September 30th). Secretary Belton explained that he had supported missing the OAC's deadline of August 5th in order to allow more time to make the correct decision, but he wanted the Commissioners to understand that the federal funding will be at risk if a decision is not reached by the deadline.
- Mr. Clark asked for clarification regarding what would happen if the OAC recommended that the work did not continue on the 8 acre restoration project in the Tred Avon.
 - Secretary Belton explained that the work on the 8 acres would stop, but he was unsure about the other work in the Tred Avon.
 - Ms. Sowers explained that the USACE answers to the state government. If all work is requested to stop then all work in the Tred Avon would cease. Ms. Sowers reminded the Commissioners of the future resources that would be lost and the waste of the resources that have already been expended.
- Mr. Fithian asked if, when considering the two additional tributaries, the OAC could look at areas that would have a limited effect on the waterman and industry. He suggested the Severn River as oyster restoration projects.
 - Secretary Belton stated that what the OAC recommends for the other two tributaries is open for discussion but the science will also have to be evaluated in the decision process.
- Mr. Goldsborough asked if the recommendation made by the OAC would be the final decision.
 - Secretary Belton explained that the Commission's recommendation will be considered when the final decision is made by DNR.
- Ms. Cox asked the Commissioners if they felt they had enough information or thought more information would be needed to make a recommendation. Two Commissioners indicated that more information was needed.
- Mr. Parks stated that the watermen are skeptical about allowing continued restoration work because of what has happened in the past. He understands that there can be no guarantees, but also believes that the waterman would feel more comfortable moving forward with the Tred Avon project if they knew they were going to receive a benefit in return.
- Mr. Schmidt asked if the commission could recommend that the work on the 8 acres in the Tred Avon could move forward with conditions provided by the Commissioners.
 - Secretary Belton stated that conditions could be included in the Commissioners recommendations for the Tred Avon work.

- Senator Mathias suggested that if the OAC's conditions were not met that the OAC could request a stop of work from the Governor. Secretary Belton agreed that this was possible.
- Mr. Brown suggested a condition regarding the use of stone and he noted that eliminating the use of stone in future restoration work would help with the trotline snag issue as well as the issue with boats running aground in shallow areas.
- Mr. Brown suggested a condition prohibiting the use of stone unless other alternatives were evaluated. Oyster shell should be used first when possible and then mixed shell. Mr. Goldsborough agreed that shell should be used first wherever possible.
- Mr. Clark suggested a condition that DNR create firm timelines for the remaining two OAC tasks.
- Mr. Schmidt suggested a condition related to the recovery of shell previously placed in the Tred Avon.
 - Ms. Sowers stated that NOAA may be able to identify areas by comparing where shell was previously placed with data from hydrographic surveys.
- Mr. Brown suggested a condition that DNR apply for shell dredging permits in addition to the permit already in process for Man O War. The additional sites would be Worton Point, Plum Point, and Shad Battery Shoals.
- Secretary Belton suggested a recommendation that waterman be consulted prior to beginning new work to ensure all information and opinions have been considered.
- Mr. Harrison asked for a condition that requires the USACE to use spat grown by watermen instead of spat grown at the Horn Point facility for sanctuary restoration.
 - Ms. Sowers explained that when USACE does oyster reef restoration in Maryland or any other state, they must have a local sponsor that pays a share of the cost of the project; this is a requirement in the federal procurement regulations. The local sponsor in Maryland is DNR. DNR can fulfill the cost share for the project by paying cash or by paying with in-kind services of equal value. USACE could use spat from other sources. However, currently DNR provides the spat from the DNR run facility at Horn Point facility as in-kind services to USACE as part of their cost share obligation with USACE. If USACE bought spat from another source, DNR would have to come up with some other way to pay their part of the cost share.
 - Secretary Belton explained that it was possible but difficult as DNR follows state procurement regulations.
- Mr. Parks explained that he and some of the other Commissioners need to report back to their watermen groups with a resolution on the Tred Avon restoration question that also addresses their concerns. Secretary Belton stated that he was unable to make any guarantees. Mr. Parks said that he understood but asked if it would be possible to open

some existing sanctuary areas on a rotational basis to reassure the watermen that they will receive a benefit in exchange. Secretary Belton stated that the conditions the Commissioners had discussed so far were within reason to include in their recommendation.

- Mr. Brown requested that the condition prohibiting stone include language indicating that future projects looking to use stone be reviewed and approved by the OAC.
 - Secretary Belton agreed that it was reasonable to request projects come before the OAC for review.
- Mr. Boesch agreed that stone should be used as a last resort but reminded the Commissioners that the primary goal is to restore oysters. Mr. Boesch stated that the use of stone for building oyster reefs should not be written off all together because stone in some cases is the best option for building up effective reef structure on bottom that is soft. He suggested that the OAC recommendation should be a preference for shell.
- Mr. Clark agreed that stone can be a productive substrate option. He noted that if the stone used is smaller this might avoid conflict with watermen.

Ms. Cox presented the Commissioners recommendations along with the conditions discussed and asked Commissions whether there was consensus for the in favor of the recommendation as follows:

That the USACE be asked to complete the 8 acre oyster restoration project in the Tred Avon River (using shell), with the following conditions:

1. *DNR will apply for permits to dredge oyster shell from three upper Bay sites, in addition to the current application for Man-O-War Shoals. The three sites for consideration are: Worton Point, Plum Point, and Shad Battery Shoals.*
2. *Oyster shell will be the priority material for future reef construction, followed by mixed shell/clam shell, followed by stone. If stone is proposed for any new reef building, the proposal must come before the OAC for their advice before a decision is made.*
3. *USACE and NOAA, with DNR, will work with local watermen to see if any past shell plantings in the Tred Avon can be recovered for future restoration work in the river.*
4. *DNR, NOAA and USACE will consult with local watermen and stakeholders regarding future oyster restoration projects in their areas.*
5. *The OAC will set a timeline for the other two Tasks posed by DNR. (Recommendation of two additional tributaries and Re-examination of oyster management areas).*

Six (6) Commissioners were not present at the meeting. Sixteen (16) of the Commissioner who were present at the meeting agreed to the recommendation and conditions, and one Commissioner, Delegate Mautz, didn't support the action stating he needed additional time to review the DNR 5-Year Oyster Review Report and the five conditions in the Tred Avon Recommendation.

Public Comment

Captain Robert Newberry stated that he felt the OAC Commissioners were wrong to make a recommendation concerning the 8 acre restoration project in the Tred Avon River before they had adequate time to review the DNR 5-Year Oyster Review Report including Appendix A and B. He noted that the construction in Harris Creek caused damage to the oyster harvesters by creating shallow water that is a hazard to boats and an uneven rocky bottom that is a hazard to fishing gear. The effectiveness of the restoration effort in Harris Creek has not been researched enough to assess whether the restored oyster habitat will not be destroyed by disease in future years. He indicated that he was unhappy that the federal funding had been spent and the areas are therefore now closed to oyster harvest. Captain Newberry explained that the Honga River oyster population has done well because the oyster harvesters have used power dredging techniques to clean the sediment off of the existing shell on the bottom. This is the old method that has worked well and this method of growing oysters should be continued and money should not be wasted on building oyster reefs that cannot be harvested.

Next Meeting (Co-chairs, Kelley Cox and Scott Eglseder)

The next OAC meeting will focus on the second of the three tasks that were requested by DNR: to provide Commission recommendations for the 4th and 5th tributary to be selected for oyster population restoration by 2025 as agreed to by Maryland under the 2014 Chesapeake Bay Agreement. The next meeting will be held on August 22nd, 2016 at 6pm at the MD DNR Tawes State Office Building.

This section of the Meeting Summary is to highlight future topics or other subjects to keep before the Commission:

Topics for Discussion for Future Commission Meetings:

1. Identification of where restoration efforts in oyster sanctuaries would be likely or unlikely to be successful. (DNR has provided Fall Survey data, but additional discussion may be needed)
2. The problem of boats running aground in shallow water created during oyster reef restoration. (DNR has agreed to 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)
3. Potential future sources of shell for restoration projects.
4. Recommendations that were made by the OAC in past years.
5. Land use patterns along the Chesapeake Bay shore and how land use affects oyster population and the commercial fishing industry.
6. Economic and cultural issues related to oyster harvests and sanctuaries.
7. Preference of oyster spat for various substrates.
8. The Virginia sanctuary program. (Presentation by Virginia watermen about the Virginia program)
9. Recommendations for future practices (i.e. rotational harvesting).
10. Establishment of shuck houses in Maryland.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Chesapeake Bay Office
410 Severn Avenue, Suite 207A
Annapolis, MD 21403

August 1, 2016

TO: Scott Eglseder and Kelley Cox, Co-Chairs, Oyster Advisory Commission

FROM: Peyton Robertson

RE: Commission Recommendation on oyster restoration in the Tred Avon River Sanctuary

I regret that, due to a previous commitment, I am unable to join the meeting of the Maryland Oyster Advisory Commission on Monday evening. I have reviewed the materials provided by Chris Judy last week. In light of my absence, I request that you consider these comments as NOAA's position on the matter of the Tred Avon River. Please share this memo with the Commission as appropriate.

Oyster Restoration efforts in the Tred Avon River should proceed in accordance with the tributary plan drafted by the Maryland Interagency Oyster Workgroup.

Chesapeake Bay Watershed Agreement - Maryland's Leadership Role and Opportunity

Maryland has demonstrated strong leadership in oyster restoration, garnering worldwide recognition for achieving the largest scale restoration efforts to date in the United States. As a partner in the Chesapeake Bay Program, Maryland is a signatory to the Chesapeake Bay Watershed Agreement, a regional compact designed to protect and restore the Nation's largest estuary. The Agreement includes a commitment to achieve the following outcome:

"Continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations. Restore native oyster habitat and populations in 10 tributaries by 2025 and ensure their protection."

Maryland is successfully working with partners, including Virginia, the U.S. Army Corps of Engineers and NOAA, and others to implement and achieve this regional compact.

Harris Creek 3 year check-in Report

NOAA released a report last week outlining monitoring results from the first 102 acres planted in Harris Creek, a neighboring tributary of the Tred Avon River in the Choptank Complex. Given the similarities of these two tributaries with respect to salinity and other factors, the results from Harris Creek have relevance in determining the worthiness of proceeding to move forward with oyster restoration in the Tred Avon. Harris Creek restoration (for the first 102 acre cohort), has initially met the success metrics scientists developed for appraising oyster restoration (fifteen oysters per square meter) for one hundred percent of the reefs sampled (with fifty percent of those reefs achieving of fifty oysters per square meter). These results are



encouraging and should provide a basis for moving forward in the Tred Avon – evidence to date shows it can work.

Maryland DNR Oyster Management Review: 2010-2015

In general, Maryland's review of the state's five year oyster management plan indicates that the management objectives (established in regulation) are either being met or that it is too early to determine their effectiveness due to the long-term nature of factors such as oyster disease and structural aspects of oyster reef restoration, among others. The report calls out the important distinction made between ecological restoration objectives and oyster fishery objectives: "The management plan adopted in 2010 sought to resolve the dual goals of ecological and economic restoration by creating distinct management areas each with its own objectives." Further, the Review concludes that "Continued observation through time will substantially increase our understanding of the ecological services of restored oyster reefs (emphasis added) and the response of oyster populations to environmental stressors (including disease pressure) in the absence of harvest." NOAA has research underway in the Tred Avon River to further evaluate the ecosystem services resulting from ecological restoration. This research is based on before and after sampling of fish populations and other features to evaluate ecosystem services. Not continuing work in the Tred Avon River will compromise this research.

2015 Fall Survey Report

Maryland's *Oyster Population Status Report, 2015 Fall Survey*, provides an overview of the status of the oyster population in Maryland waters, including indices for spatfall, disease, mortality, and biomass. The 2015 fall survey indicates "Despite a generally low spatset, the results were otherwise encouraging, with sustained multi-year trends of low disease pressure, below-average mortality, and elevated biomass." The following excerpts are relevant:

- In two of the three sanctuary/restoration areas, Harris Creek and the Tred Avon River, there was no evidence of MSX.
- Overall, those sanctuaries that received strong spatfalls in 2010 and 2012 and those receiving supplemental oyster seed plantings appeared to be in good condition.

These points suggest there is no new threat or evidence to indicate that we should not proceed with restoration as planned.

In conclusion, NOAA believes restoration efforts in the Tred Avon should continue, based on the best available science, the continuity of successful state, federal and non-governmental organization partnerships, Maryland's five year review, and commitments of the State of Maryland and Chesapeake Bay Program to achieve ecological restoration of the native oyster, *Crassostrea virginica*, in the already identified and planned tributaries (Harris Creek, Tred Avon and Little Choptank Rivers) in Maryland's portion of the Chesapeake Bay.