

Meeting Summary
Oyster Advisory Commission
Maryland Department of Natural Resources
Annapolis, MD
4:00 PM – 7:00 PM
17 June 2014

LIST OF ATTENDEES

Commissioners Present

Anthony Chatwin (Chair)	National Fish and Wildlife Foundation (NFWF)
Kelton Clark	Morgan State University
Kelley Cox	Phillips Wharf Environmental Center
William Goldsborough	Chesapeake Bay Foundation
Douglas Legum	Douglas Legum Development
Anthony O'Donnell	Maryland House of Delegates, Environmental Matters Committee
Claire O'Neill	U.S. Army Corps of Engineers – Baltimore District
Peyton Robertson	NOAA Chesapeake Bay Office
Eric Schott	University of Maryland Center for Environmental Science

Commissioners Unable to Attend

Donald Boesch	University of Maryland Center for Environmental Science
Mark Bryer	The Nature Conservancy
Richard Colburn	Maryland Senator, Dorchester County
Kenneth Lewis	Coastal Conservation Association
Douglas Lipton	NOAA
Donald Meritt	University of Maryland Center for Environmental Science, Horn Point Lab (UMCES HPL)
Ben Parks	Maryland Watermen's Association, Dorchester County
Shane Robinson	Maryland House of Delegates, Environmental Matters Committee
Evan Thalenberg	Chesapeake Bay Savers
Donald Webster	University of Maryland Extension
William Windley	Maryland Saltwater Sportfishermen's Association
Robert Witt	Commercial Waterman
Leonard Zuza	Southern Maryland Oyster Cultivation Society

Other Meeting Attendees

Maryland Department of Natural Resources: Scott Knoche, Mike Naylor, Rich Norling, Steve Schneider, Eric Weissberger

Maryland Department of the Environment: Kathy Brohawn

U.S. Army Corps of Engineers: Kim Gross

Oyster Recovery Partnership: Stephan Abel, Kara Muzia, Ward Slacum

Phillips Wharf Environmental Center: Carol McCollough

Chesapeake Bay Seafood Industries Association: Bill Sieling

University of Maryland Horn Point Laboratory: Louis Plough

Tilghman Island Oyster Farm: Richard Brown

Members of the Public: Philia Morrison

MEETING SUMMARY

Opening Remarks and Public Comment (Dr. Anthony Chatwin, Oyster Advisory Commission Chairman)

Dr. Chatwin opened the meeting at 4:15 and opened the floor to public comment. No members of the public spoke.

Approval of Minutes from 19 February 2014 Meeting (Dr. Anthony Chatwin)

Although there were no comments on the minutes, they could not be officially approved as a quorum of commissioners was not present. Dr. Chatwin informed the commission that no decisions could be made during the meeting due the absence of a quorum.

Oyster Restoration Update (Mike Naylor, Maryland DNR)

Mr. Naylor reviewed his presentation from the previous meeting, where he discussed restoration goals for Maryland's oyster sanctuaries.

Mr. Naylor stated that funds from NOAA, the U.S. Army Corps of Engineers (USACE), and the state allow for the completion of the Harris Creek oyster restoration project. However, we won't know for a while if the restored oyster population will be self-sustaining. Oyster restoration in the Little Choptank River is just beginning.

Fossil oyster shell from Florida is being used for restoration in both Harris Creek and the Little Choptank River. To date, ten trainloads of fossil shell, each trainload containing 5000 tons of material, have been used to construct oyster reefs. The trains arrive on a 20 day cycle, which will be accelerated to a 12 day cycle. Due to concerns about clay particles on the surface of the fossil shells, turbidity and pH are being measured upon the deployment of the material. Work must cease if the turbidity exceeds 150 NTU; to date measurements have not exceeded 70 NTU.

Mr. Naylor then reviewed the process by which restoration plans are developed. Maryland Geological Survey uses side-scan sonar to identify hard bottom areas that will support substrate and/or spat on shell. NOAA then refines these areas using multi-beam sonar. DNR, Versar, or Dr. Ken Paynter then surveys the oyster population. DNR's recent population survey showed rapid increases in population, as well as clumps of oysters with multiple age classes. The

improved population likely resulted from recent good spats and the absence of fishing. The increase in oyster density led to a re-evaluation of areas for substrate placement.

Mr. Naylor noted that watermen opposed the Little Choptank River project, and blocked operations for a day. The watermen thought DNR did not possess the necessary permits to perform the work, but DNR indeed possessed the appropriate permits. Mr. Naylor stated that he had been asked to provide a timeline for oyster restoration in the next tributary, the Tred Avon River. He also stated that he had received three Public Information Act Requests, as have USACE and Maryland Department of the Environment (MDE). DNR has already replied to 2 of the 3 requests.

Mr. Naylor stated that the fossil shell used in restoration had been tested against regular oyster shell for the potential to collect spat. The fossil shell received a good spat set, and the Horn Point hatchery is now exploring the feasibility of using this material.

Ms. O'Neill asked if there were multiple population surveys done in the Little Choptank River. Mr. Naylor replied that Dr. Ken Paynter and Versar surveyed the river in 2011, and DNR surveyed the river in 2014. The change in oyster density represents success that can be achieved by just closing an area to fishing without any active restoration.

Dr. Eric Schott asked if it was possible to leave some areas unrestored as controls, and whether future surveys were planned. He also asked if a certain percentage of funds could be set aside for monitoring. Mr. Naylor replied that a monitoring plan is in place and that Harris Creek is up for monitoring this year. However, restoration partners are debating what areas should be monitored annually vs. every three years. Although the state has capital funds that can be used for restoration, this money cannot be used for monitoring. Dr. Schott advised getting input from project opponents on what parameters they'd like to see monitored. Mr. Naylor replied that DNR had met with watermen to discuss their concerns. Dr. Kelton Clark asked about the watermen's specific complaints. Mr. Naylor said the watermen were concerned that the fossil shell from Florida may be toxic, have pathogens, and may have sharp edges that would cut trot lines. They were also concerned with the material burying crabs and oysters. The watermen suggested doing a smaller restoration project and seeing how it performs before doing larger projects.

Dr. Clark then asked what type of public outreach had been done for the Little Choptank River restoration project. Mr. Naylor replied that DNR held a public open house in conjunction with restoration partners, met with the Tidal Fish Advisory Commission, county oyster committees, had a public hearing as required by USACE and MDE, sent letters to shoreline property owners, and placed a notice in the local newspaper. Dr. Clark asked how DNR chose those mechanisms of outreach. Mr. Naylor replied that some types of interaction were required, such as the public hearings. Others, such as the open house, were designed to get the best input from stakeholders. Dr. Clark suggested asking the public about their desired mode of interaction.

Delegate Tony O'Donnell noted that the fall oyster survey showed promising figures in both fished areas and sanctuaries. He asked if Mr. Naylor were signaling a change in DNR policy. Mr. Naylor replied that DNR supports a public fishery, and that while a good spat set may provide a

few years of good fishing, it is followed by a drop to baseline conditions. We must wait to see what happens with the recent spat sets. Delegate O'Donnell asked if his watermen constituents were unreasonable. Mr. Naylor said that some of the watermen's complaints make no sense, such as the fossil shell being a source of disease. He noted that private conversations with watermen suggest that they fear areas with long-term restoration projects will never return to the public fishery.

Mr. Bill Goldsborough noted that the recent spat set occurred in all areas, and asked if that shed any light on whether or not power dredging helps with spat set. Mr. Naylor replied that no additional spat set was seen in power dredging areas compared with other areas. He noted that there are lots of areas where both oysters and habitat are completely gone, particularly north of the Bay Bridge.

Mr. Goldsborough then asked if the water quality monitoring protocol used in conjunction with the fossil shell placement was a standard method. Mr. Naylor replied that is specified in COMAR.

Mr. Peyton Robertson noted that new Chesapeake Bay agreement was signed yesterday (16 June 2014), and Maryland's oyster restoration work was recognized around the bay. Mr. Robertson noted that our outreach job is not over, and that we need to make it clear that this kind of restoration activity should accrue benefits to areas outside sanctuaries. He also noted that aquaculture is a companion opportunity.

Mr. Robertson informed the commission that two poachers were caught in the Harris Creek oyster sanctuary, and that no state attorney appeared at the trial. The defendants were let go. Mr. Robertson stated that federal funding agencies cannot allow this to happen as the public loses their investment. Mr. Naylor replied that all oysters taken by the poachers were returned to the sanctuary, and that DNR is working to close the loophole that allowed the defendants to get off. Delegate O'Donnell asked if it was a state attorney or attorney general that didn't show up, and noted that elected officials are expected to be present. Dr. Clark said that we need to protect the resources that we put in, otherwise it gives the impression of a lack of interest on the part of the state.

Mr. Doug Legum asked if there is a reason that oyster populations return to pre-seeding levels in a public fishery area. Mr. Naylor replied that the decline was due to a lack of a reliable spat set. Mr. Legum asked if overfishing, disease, and pollution were problems. Mr. Naylor replied that a combination of factors is responsible for the decline. He noted that some watermen feel that some bars are overfished by the end of the season, but that they disagree on a solution to the problem.

Delegate O'Donnell noted that spat sets occur on dredged and undredged areas, and asked what method was used to rehabilitate oyster bars on the Upper Patuxent River. Mr. Naylor replied that shells and oysters were aggregated there. Delegate O'Donnell noted that the state used power dredging to rehabilitate oyster bars. Mr. Naylor replied that although the state had spent millions of dollars to rehabilitate the bars, returns were minimal in terms of number of oysters harvested.

Delegate O'Donnell then asked if the fishery management plan was adjusted to account for overfishing. Mr. Naylor replied that the fishery management plan does not address overfishing in terms of closing the season and/or specific areas.

Ms. Kelley Cox asked if you could reduce sediment issues by breaking up clumps of oysters that might trap sediment. Mr. Naylor replied that clumps would not be broken up in a sanctuary as clumps allow the oyster to grow vertically out of the sediment. He noted that the clumps may make it difficult to trot line, but that most areas will remain unchanged and therefore not affect trot lining. Dr. Schott asked if trot-lining opportunities could be created elsewhere. Mr. Naylor replied that DNR must balance the needs of the various groups using the creek. Dr. Clark asked if material type or presence of oysters affect trot lining. Mr. Naylor replied that both material and oysters affect trot lining.

Substrate Subcommittee Update (Claire O'Neill, USACE)

Dr. Chatwin asked Ms. O'Neill if the subcommittee operated by consensus. Ms. O'Neill stated that the six subcommittee members who attended the first meeting decided that majority opinion rules, and that minority opinions would be noted. In practice, however, no minority opinions were voiced.

Ms. O'Neill informed the commission of the recommendations the substrate committee had developed. The first recommendation was that fresh oyster shell should be reserved for hatchery use until a 3 year reserve of fresh shell was accumulated. Delegate O'Donnell noted that there is a large reserve of fresh shell in aquaculture. Ms. O'Neill replied that the recommendation applies only to shell under state control. Delegate O'Donnell asked if shell possessed by people receiving MARBIDCO funds is considered to be under state control. Ms. O'Neill said she would look into the issue.

Dr. Chatwin asked how much shell constituted a 3 year reserve. Mr. Naylor replied that the hatchery needs 200,000 bushels a year, and the aquaculture industry needs approximately 50,000 bushels a year for remote setting. This means a 3 year reserve would be approximately 750,000 bushels. Delegate O'Donnell said that we need to be careful that any reserve policy does not negatively affect aquaculture. Dr. Chatwin asked if there were any opinions about the 3 year reserve. Dr. Schott said that it is not really clear how big a 3 year reserve is. Dr. Chatwin said any recommendation must be extremely clear in order to avoid misinterpretation of intent.

Ms. O'Neill suggested that the full commission give their comments to the subcommittee, but wondered how the full commission would vote if there were disagreement among the members. Mr. Robertson said that we should get a sense of whether or not the recommendation is supported and work out the details later. He stated that in order to keep the hatchery open we need an insurance policy, and therefore supports the recommendation of a 3 year shell reserve.

Mr. Goldsborough noted that the production of spat on shell is not just for restoration. Spat on shell is purchased by county oyster committees and people involved in aquaculture. He stated that we need to think in terms of maximum oyster production per shell.

Delegate O'Donnell disagreed with the recommendation, saying it was detrimental to aquaculture. The Aquaculture Coordinating Council's job is to foster aquaculture, and the Oyster Advisory Commission is prioritizing a 3 year reserve over using the shell for aquaculture. Delegate O'Donnell also stated that DNR fought the purchase of shell by watermen using bushel taxes. He suggested tabling the recommendation until further discussion could occur.

Dr. Chatwin suggested that the commission make decisions on recommendations by consensus. He stated that at the next meeting Robert's Rules would be used to vote on language of the recommendations, and that it was OK if consensus could not be reached on all recommendations. He then asked for comments on the proposed process. Ms. O'Neill suggested having the full commission send suggestions to the subcommittees so that everyone's opinion could be incorporated into the recommendations.

Ms. O'Neill then reviewed the rest of the substrate subcommittee's recommendations. The second recommendation was for DNR to develop specifications for the materials to be used as reef substrate and a protocol for the assessment of these materials. The third recommendation was for DNR to annually assess the cost and effectiveness of various substrates. The fourth recommendation was to use any structurally and environmentally suitable material as a base layer, as long as it is covered with spat on shell.

Dr. Clark asked what criteria would be used for determining environmental suitability. He was concerned that putting spat on shell on top of substrate could stop innovation, such as the use of in situ setting.

The fifth recommendation was to use spat on shell except in areas with good natural spat sets. Mr. Goldsborough suggested using other materials for setting spat in the hatchery. Delegate O'Donnell asked the subcommittee to add text to their recommendations stating that substrates should not cause user conflicts. Ms. O'Neill replied that the extended version of the text addresses user conflicts.

The sixth recommendation was for the state to identify buried shell deposits and quantify the amount of shell that could be retrieved. The seventh recommendation was to examine cost-effective ways to recover buried shell. The eighth recommendation was for the state to examine the feasibility of using materials from outside of Maryland. The ninth recommendation was to support research into the development of more efficient equipment for the cultivation, renovation, or placement of buried shell for use in oyster restoration.

Land Use Subcommittee Update (Peyton Robertson, NOAA)

Mr. Robertson reviewed the recommendations made by the land use subcommittee. The first recommendation was for DNR to consider land use in current and future prioritization of oyster sanctuaries. Dr. Clark pointed out that land use was under local control, whereas sanctuaries are managed at the state level. Mr. Legum wondered if there were a way to force local planning authorities to cooperate with the state. Delegate O'Donnell noted that MDE, the Department of Planning, and the Critical Area Commission (CAC) all have roles in planning, and asked if we are recommending another CAC level regulation. Mr. Robertson replied that oyster restoration

sites were chosen based on the location of Yates bars and water quality, and that land use wasn't considered. Land use may affect oyster habitat, and therefore should be considered when choosing restoration sites. Considering land use in site selection will help protect the public's investment in oyster restoration. Delegate O'Donnell noted that it took a long time to get the CAC involved in public policy decisions, and that it may take more regulatory controls to implement the land use subcommittee's recommendations.

The second recommendation was to develop a blueprint modeled on the Greenprint. This tool would inform local governments of the resources in their areas.

The third recommendation was to implement oyster restoration and protection in areas where these efforts would have the greatest ecological return on investment. Dr. Chatwin asked how return on investment was defined. Mr. Robertson replied that it was not defined. Dr. Schott suggested using the established restoration goals and metrics to define return on investment. Delegate O'Donnell asked if the subcommittee had considered the impacts of the recommendations on agriculture. Mr. Robertson replied that the subcommittee had not considered this issue.

The fourth recommendation was to provide guidance to local planners near oyster sanctuaries and restoration projects so that the planners are aware of the ecosystem services provided by oyster reefs. The fifth recommendation was to address failing septic systems that may contaminate waters in which shellfish live. The sixth recommendation was to invite Marcia Berman to speak to the commission about her "Planning Tools for Aquaculture Expansion and Management within the Chesapeake Bay" project.

Delegate O'Donnell noted that the sixth recommendation falls under the jurisdiction of the Aquaculture Coordinating Council. Dr. Clark asked where local government can participate directly in the oyster planning process.

Dr. Chatwin asked how the land use subcommittee was making decisions. Mr. Robertson replied that the subcommittee was making decisions by consensus. Dr. Chatwin then asked if it was ok to send the draft recommendations to the whole commission for comment. Mr. Robertson gave permission to do so.

Enforcement Subcommittee (Mr. Bill Goldsborough, Chesapeake Bay Foundation)

Mr. Goldsborough informed the commission that the enforcement subcommittee had continued discussions with Mr. Frank Dawson of DNR, Fisheries Service employees, Natural Resources Police (NRP), and Ms. Michelle Barnes, assistant attorney general for environmental crimes. The meeting with Mr. Dawson focused on the absence of a state attorney at the trial of the Harris Creek oyster poachers. There was disagreement on who was supposed to attend the trial. Certain counties prefer that the attorney general attend the trial. A dedicated attorney general to ride the circuit for natural resources court days would ensure that the state is represented in court, but funding for such a position is not presently available. DNR should compel state attorneys to pursue these natural resource cases.

The enforcement subcommittee recommended that convicted poachers lose their ability to participate in aquaculture as well as their hunting licenses. Mr. Goldsborough noted that Mr. Don Webster supports this recommendation. Delegate O'Donnell said removing poachers' ability to participate in aquaculture would affect very few people, as those involved in aquaculture are unlikely to poach.

Mr. Goldsborough stated that bench warrants were supposed to be issued for defendants who failed to appear in court, but that didn't seem to be the case. Furthermore, NRP and judges don't have violation records of defendants. The subcommittee recommended bringing violation records of the previous 5 years to trial; DNR is beginning to do so.

The meeting with Ms. Barnes focused on systemic problems. Ms. Barnes noted there was no formal system for NRP to refer cases to her office. She said there was enough work for a dedicated attorney general, but that DNR did not think such a position was necessary. She noted that problems with the recent case involving transport of undersized oysters to Virginia could have been avoided by involving an attorney from the start. She also noted that judges sometimes bar states attorneys from natural resources trials because the attorneys are not proficient in environmental law.

Delegate O'Donnell stated that the court docket states which attorney is responsible for a particular case. He noted that the problems in the court system appear to be management issues, and that it appeared that the attorney general is too busy to deal with natural resources cases.

Ms. O'Neill asked if the enforcement subcommittee was going to develop specific recommendations. Mr. Goldsborough replied that the four months until the next meeting was sufficient time to develop recommendations.

New Business

Mr. Naylor noted that Dr. Ken Lewis wants more transparency regarding the county oyster committees. DNR will be more transparent by posting information about the committee's membership and funding on its website.

Ms. O'Neill asked if the commission is notified when changes to the website occur. Mr. Naylor replied that small changes occur daily, but that DNR can notify the commission of any major changes.

Delegate O'Donnell asked what funds the county committees control. Mr. Naylor replied that the county committees provide input on the use of bushel taxes, interstate transfer taxes, oyster surcharges, license fees, and \$100,000 of funds from the Maryland Department of Transportation. Delegate O'Donnell asked why transparency was needed if watermen view this as their money. Mr. Naylor replied that the Open Meeting Act requires transparency. Ms. Cox stated that it should be clear to the watermen where the funds are coming from and where they are going.

Public Comment

Dr. Chatwin opened the floor to public comment earlier than the scheduled time of 6:45. Dr. Clark suggested that people arriving later submit public comment in writing.

Mr. Bill Sieling (Chesapeake Bay Seafood Industries Association)

Mr. Bill Sieling asked about the managed reserves. Mr. Naylor stated that the managed reserve program is still in place, but managed reserves in sanctuaries were harvested a final time and then phased out. Use of the reserves is discussed at county oyster committee meetings.

Watermen have chosen to place oysters outside of reserves except for Evans Reserve. There is a cost to operating reserves, including the deployment of buoys and the publication of public notices.

Mr. Sieling then addressed a question to Ms. O'Neill, asking how big a shell reserve is needed. Ms. O'Neill said that she did not specify a volume. Mr. Sieling asked if the entire shell reserve is to come from Maryland shucking houses. Ms. O'Neill replied that the acquisition of shell for a reserve was limited to shell under state control. Mr. Sieling asked what would happen if Maryland did not produce enough shell for a 3 year stockpile, noting that Maryland is buying shell from Virginia. Mr. Naylor stated that people involved in aquaculture are outbidding the state for fresh shell.

Mr. Sieling then asked why Maryland was not putting fresh shell on oyster bars. Ms. O'Neill replied that this approach was not cost-effective based on calculations by Dr. Mutt Meritt.

Ms. Carol McCollough (Phillips Wharf Environmental Center)

Ms. McCollough, the Marylanders Grow Oysters (MGO) coordinator for Tilghman Island, informed the commission of her group's oyster restoration efforts. Dr. Ken Paynter's group conducted a dive survey on the group's 0.2 acre restoration site in Harris Creek. Ten samples were collected and yielded a mean density of 21 oysters m^{-2} with a range of 8-43 oysters m^{-2} and 4 year classes. Areas outside the restoration site had 1-2 orders of magnitude fewer oysters. Ms. McCollough asked the commission to consider citizen-based restoration as part of the governor's oyster restoration plan as it is effective and gets people involved. She suggested focusing citizen-based restoration in small tributaries unlikely to be part of large-scale restoration efforts. These small tributaries are easier to patrol. As with large-scale restoration, some areas planned for citizen-based restoration may require bottom preparation.

Dr. Chatwin asked how citizen-based restoration was defined. Ms. McCollough replied that it was defined by a partnership between the government and private citizens, with the state providing spat and logistical support, and private citizens providing grow-out sites. Dr. Chatwin then asked what limitations existed for citizen-based restoration. Ms. McCollough replied that planting location restrictions and poaching were limitations that had to be considered.

Delegate O'Donnell asked what is to be done when citizen restoration groups shut down, noting that it is important to engage the public and address their interests. He stated that we must be aware of any conflicts between oyster gardeners and other commercial interests. Ms. McCollough replied that oyster gardeners do not want to limit commercial fishing or recreational boating. Ms. Cox expressed concern that a group had dropped its restoration program. The citizens are then no longer invested in oyster restoration. She expressed hope that another group

would engage the citizens that had been lost. Ms. McCollough noted that the Phillips Wharf Environmental Center inherited and expanded some abandoned MGO programs.

Dr. Clark asked if there was any record of citizen restoration group activity. Ms. McCollough replied that Mr. Chris Judy maintains records for the MGO program. Dr. Clark then asked about other organizations engaged in oyster gardening. Mr. Naylor replied that the Chesapeake Bay Foundation and some other groups engage in oyster gardening and maintain their own records.

Ms. McCollough informed the commission that they planted 74,300 oysters this past year and 120,000 oysters the year prior.

Dr. Chatwin asked if a forum existed to connect citizen restoration groups. Ms. Cox replied that Mr. Judy was the central contact for the MGO groups.

Ms. Cox stated she was not sure how the Southern Maryland Oyster Cultivation Society (SMOCS) ended. Ms. McCollough replied that SMOCS had split into several smaller tributary groups. Delegate O'Donnell noted that SMOCS operated as a 501(c)(3) non-profit organization, and that when they disbanded they lost their non-profit status. Any group taking over SMOCS' operations must re-apply for non-profit status. Delegate O'Donnell then asked about the permits necessary for operating an oyster gardening program. Dr. Eric Weissberger replied that most oyster gardening programs operate under permits granted to DNR by federal and state regulatory agencies, but that some citizen restoration groups found the permit requirements to be too restrictive.

Ms. Kathy Brohawn (Maryland Department of the Environment)

Ms. Brohawn stated that if we want aquaculture businesses to grow the state can't have a monopoly on shell. She also stated that land use decisions that could lead to nutrient and sediment reductions occur at the local level. Ms. Brohawn noted that MDE performs shoreline surveys to identify and repair failing septic systems in order to protect shellfish, and asked that anyone aware of a failing shoreline septic system inform MDE of the location.

Dr. Schott stated that we don't know the location of failing septic systems, and therefore can't make decisions with that factor in mind. Dr. Chatwin asked about the process for identifying failing septic systems. Ms. Brohawn replied that MDE looks at every shoreline house adjacent to shellfish waters every 7 years. The water is dyed to look for leaks in the system. If a leak is found, MDE works with the local health department to repair it.

Delegate O'Donnell noted that two pieces of public policy affecting septic systems had gone into effect in the past 6-8 years, and asked if we have too many regulations on septic systems. Ms. Brohawn replied that septic system issues were best addressed by municipalities. Dr. Clark noted that one of the land use subcommittee recommendations specifically concerned septic systems.

Closing (Dr. Anthony Chatwin, Oyster Advisory Commission Chairman)

Dr. Chatwin adjourned the meeting at 6:55, noting that it had been a very productive session.