

Draft Meeting Summary
Oyster Advisory Commission
Maryland Department of Agriculture
Annapolis, MD
4:00 PM – 7:00 PM
19 February 2014

LIST OF ATTENDEES

Commissioners Present

Anthony Chatwin (Chair)	National Fish and Wildlife Foundation (NFWF)
Mark Bryer	The Nature Conservancy
Kelton Clark	Morgan State University
Kelley Cox	Phillips Wharf Environmental Center
William Goldsborough	Chesapeake Bay Foundation
Douglas Legum	Douglas Legum Development
Kenneth Lewis	Coastal Conservation Association
Donald Meritt	University of Maryland Center for Environmental Science, Horn Point Lab (UMCES HPL)
Claire O'Neill	U.S. Army Corps of Engineers – Baltimore District
Peyton Robertson	NOAA Chesapeake Bay Office
Donald Webster	University of Maryland Extension
Leonard Zuza	Southern Maryland Oyster Cultivation Society

Commissioners Unable to Attend

Donald Boesch	University of Maryland Center for Environmental Science
Richard Colburn	Maryland Senator, Dorchester County
Douglas Lipton	NOAA
Anthony O'Donnell	Maryland House of Delegates, Environmental Matters Committee
Ben Parks	Maryland Watermen's Association, Dorchester County
Shane Robinson	Maryland House of Delegates, Environmental Matters Committee
Eric Schott	University of Maryland Center for Environmental Science
Evan Thalenberg	Chesapeake Bay Savers
William Windley	Maryland Saltwater Sportfishermen's Association
Robert Witt	Commercial Waterman

Other Meeting Attendees

Maryland Department of Natural Resources: Lynn Fegley, Dave Goshorn, Mike Naylor, Steve Schneider, Eric Weissberger

Oyster Recovery Partnership: Kara Muzia

Coastal Conservation Association: Larry Jennings

Phillips Wharf Environmental Center: Carol McCollough

Chesapeake Bay Seafood Industries Association: Bill Sieling

University of Maryland Extension: Matt Parker

Members of the Public: Jeff Halka

MEETING SUMMARY

Opening Remarks and Approval of Minutes from 23 October 2013 Meeting (Dr. Anthony Chatwin, Oyster Advisory Commission Chairman)

Dr. Chatwin opened the meeting at 4:10. A motion was made to approve the minutes from the previous meeting. The minutes were approved unanimously.

Public Comment

Dr. Chatwin opened the floor to comments from the public. No one from the public spoke.

Harris Creek Restoration Update (Mr. Mike Naylor, MD DNR)

Mr. Naylor began by presenting Governor O'Malley's 10 point oyster restoration plan, showing that the state has made substantial progress toward implementing the plan. Many of the accomplishments can be seen in Harris Creek. A new oyster sanctuary was created there, oyster populations have been mapped, reefs have been built, oysters have been planted and monitored, and the Maritime Law Enforcement Information Network (MLEIN) has been put into service. Mr. Naylor then asked how much restoration work should be done. Should restoration be to the level of the Natural Oyster Bars (the legal oyster bars of Maryland) or the Yates Bars (the bars delimited in the early 20th century)? Should baseline conditions be set based on coarse-scale side scan sonar or the finer-scale multi-beam sonar? Mr. Naylor then reviewed the restoration goals established by the Oyster Metrics Team, including restoration of 50-100% of restorable bottom and a minimum of 8% of historic bottom, 30% of reef area having a minimum density of 50 oysters m⁻² and a biomass of 50 g dry weight m⁻², two or more age classes, and stable or increasing reef height, area, and shell budget.

Dr. Chatwin asked if DNR had collected baseline data. Mr. Naylor replied that DNR had baseline data, but that funding was not available to survey all parameters on all reefs every year.

Dr. Kelton Clark asked if the goal of two or more age classes was from natural set or from hatchery plantings. Mr. Naylor replied that either one would count toward the goal.

Mr. Mark Bryer asked how bad the recent Harris Creek poaching incident was. Mr. Naylor replied that the poachers did not go that far into the sanctuary. Mr. Bryer then asked if annual population monitoring was occurring. Mr. Naylor replied that although there was some population monitoring, a full census was not done.

Given that the restoration goal is 50-100% of restorable bottom and funding is limited, Mr. Naylor asked if it is better to restore one tributary to 100%, or two tributaries to 50%. With Harris Creek, the first tributary to undergo large-scale restoration, should we restore to 100% of the goal or not put all our eggs in one basket? He stated that there is no guarantee that Harris Creek is the best place to invest all available resources.

Dr. Don "Mutt" Meritt stated that although dense oyster populations have higher fertilization rates, that does not necessarily result in a higher spat set.

Mr. Bryer asked what we have learned so far, and how that informs future work.

Mr. Len Zuza asked who decides which tributaries get restored, and what is the relationship between the decision makers and the Oyster Advisory Commission. Mr. Bill Goldsborough replied that the OAC is supposed to advise the state, and that the state is the entity that works with the restoration partners. Mr. Peyton Robertson stated that the state had regularly briefed the commission on decisions regarding restoration planning.

Mr. Robertson returned to the topic of what we are learning from current restoration efforts. He mentioned Dr. Ken Paynter's findings that accurate bottom identification improves survivorship of planted oysters by 100%. Much more needs to be learned about disease. Mr. Robertson stated that NOAA would like to maximize the chances of success for the first tributary, and that we should stick with the initial goal of restoring 377 acres in Harris Creek. Dr. Meritt concurred with Mr. Robertson, stating that the three tributaries being restored (Harris Creek, Little Choptank River, and Tred Avon River) are all very different, and that the Tred Avon River did not receive as much recruitment as the other two tributaries.

Mr. Goldsborough asked if there was a projection of a "multiplier effect" when the Harris Creek restoration plan was developed, such that if you restored 90% of the area the other 10% would take care of itself. Mr. Naylor replied that when the plan was developed data weren't available to determine such an effect. He then asked how funds should be allocated for the placement of material: a thicker layer covering less area or a thinner layer covering more area.

Ms. Claire O'Neill stated that the original Harris Creek restoration goal of 377 acres was based on side-scan sonar, and that multi-beam sonar showed only 326 acres of restorable bottom.

Mr. Bryer asked if 50% of the restoration could fail and we could still meet the goal. Mr. Naylor replied that was the case, as the goal was to restore 50-100% of the restorable bottom. Mr. Bryer then asked if the goal was set at the high end because of the uncertainty of success. Ms. O'Neill replied that was indeed the reason the goal was set high.

Mr. Donald Webster asked if leases were counted toward the restoration goal. Mr. Naylor replied that leases were not counted toward the restoration goal, and that the number of leases in Harris Creek was very small.

Dr. Chatwin said that it seems like DNR is seeking guidance on how much area to restore. Ms. O'Neill suggested restoring 100% of the restorable area in the first tributary, and perhaps a lesser amount in the following tributaries.

Dr. Ken Lewis asked how much money it would cost to make up the difference between the area currently restored or scheduled for restoration and restoration of all restorable bottom in Harris Creek. Mr. Naylor replied that this would cost about \$500,000.

Mr. Bryer mentioned that he talked with Dr. Mark Luckenbach about the possibility of doing an experiment to look at the restoration of different amounts of restorable bottom.

Ms. O'Neill stated that the Army Corps is planning to construct reefs on whatever restorable bottom remains in Harris Creek so that the original goal of 377 acres is met.

Mr. Zuza asked how much money has been spent on oyster restoration in Harris Creek to date. Mr. Naylor replied that approximately \$30 million had been spent Harris Creek restoration. Mr. Zuza said that given what's been invested so far, the cost to achieve 100% of the original goal was relatively small.

Dr. Chatwin said that the consensus seems to be to stick to the original goal of restoring 377 acres in Harris Creek. He asked about the possibility of making an initial restoration effort, moving to another tributary, and then returning to the original tributary. Mr. Robertson compared the effort to a housing development, where you must complete the model home and then build other parts of the development. Mr. Naylor expressed concern about putting all our eggs in one basket.

Mr. Bryer said it would be helpful to have a list of questions that the Harris Creek project could inform. For example, how high or low should the restoration bar be set, and where can we save money in future projects? Dr. Chatwin noted that there is much overlap between charges to the commission and these questions.

Mr. Zuza asked if monitoring data were available to explain any difference between planned restoration work and actual outcome. He mentioned that Dr. Walter Boynton is interested studying the effects of oysters on water quality. Mr. Robertson replied that some monitoring is in place, and that more funding for monitoring is being sought. Mr. Naylor asked if available funds were better spent on more restoration work or on monitoring.

The Shell Game (Dr. Donald "Mutt" Meritt, University of Maryland Center for Environmental Science)

Given the scarcity of oyster shell for oyster restoration, Dr. Meritt compared the outcomes of three possible uses for shell: placing shell on the bottom to catch a natural spat set, placing shell on the bottom to catch a natural spat set and then moving the spat to a different area for grow-out, and setting spat on the shell in the hatchery and then planting the spat on shell. Dr. Meritt noted that very few Maryland oyster bars receive substantial spat set. Given a certain amount of shell, using that shell in the hatchery produces relatively more adult oysters than the other two scenarios.

Mr. Bryer asked why shell loss in the hatchery was assumed to be 0. Dr. Meritt replied that hatchery shell loss was moved to a different place in the calculations. Dr. Meritt noted the great variability in hatchery spat survival, which has ranged from 0-60%, and that this variability may be due to bottom type. He said that average survivorship of hatchery oysters is likely higher than that of wild oysters, and that he is trying to get information on wild oyster survivorship and productivity from watermen.

Dr. Meritt noted that three things are necessary for natural recruitment to occur: good water quality, suitable bottom, and the presence of competent oyster larvae in the water column.

Mr. Robertson asked how production could be maximized for both restoration and seafood production. Dr. Meritt replied that the purpose of his analysis was to look at the best use of shell, and did not address aquaculture.

Charter Progress (Dr. Anthony Chatwin, Oyster Advisory Commission Chairman)

Dr. Chatwin stated that the commission is now in the second year of a two-year charter, and that there are two meetings left under the current charter. The commission is charged with making recommendations to DNR. Dr. Chatwin said he would like to formulate recommendations at the next two meetings. He also noted that the charter can be changed or extended.

Substrate Subcommittee Update (Ms. Claire O'Neill, Substrate Subcommittee Chair)

Ms. O'Neill asked if there was any expected format for recommendations to DNR. Dr. Chatwin replied that the recommendations should be succinct, either bullet points or a single paragraph. The recommendations could be followed by explanatory information.

Ms. O'Neill stated that the subcommittee had compiled a list of substrates in a spreadsheet. The subcommittee then discussed which substrates were suitable for particular purposes. Dr. Meritt prepared some information discussing general guidelines for substrate use. Ms. O'Neill stated that the subcommittee must start narrowing the list of substrates. Dr. Chatwin asked if the commission should recommend a particular substrate or a rationale for substrate selection. Ms. O'Neill noted that there was not much distinction among some of the substrates except for cost.

Mr. Robertson noted that the commission is to produce recommendations for the execution of DNR's mission. He suggested phrasing a recommendation that notes oyster shell, the preferred substrate, is in short supply, necessitating the use of alternative materials.

Ms. O'Neill inquired if granite should only be used in the bottom layer of created reefs, with spat on shell planted on top.

Dr. Clark asked what information would be most useful to DNR. Mr. Naylor replied that information on cost and effectiveness would be welcome. Ms. Lynn Fegley welcomed recommendations on the best use of a limited resource.

Dr. Meritt noted that ranking substrates was difficult due to lack of data. He noted that there are multiple ways to stabilize the bottom and that materials may behave differently at different sites.

Mr. Zuza asked if there were any significant differences in procuring, transporting, and handling the various substrates. Dr. Clark replied that those costs are similar according to people he has talked to. Mr. Zuza then asked if different materials must be processed differently. Dr. Clark replied that different materials must be processed differently.

Dr. Chatwin pointed out that non-monetary costs must be considered, and decisions can't be made solely on cost. For example, concrete may not be suitable for harvest of certain species, thus displacing fishermen.

Mr. Goldsborough asked if the subcommittee is looking at different ways of deploying substrate, such as different thicknesses. Ms. O'Neill replied that the subcommittee was only considering material type. Mr. Goldsborough said that different materials may require planting at different thicknesses, thus affecting cost. Ms. O'Neill replied that data were lacking to support different planting thicknesses for different substrates.

Mr. Bryer asked what the three top questions were that the substrate committee was trying to answer. Ms. O'Neill replied that the three most important questions were

1. What is the best use of oyster shell?
2. What is the most cost-effective substrate?
3. What criteria must be considered for a substrate to be considered suitable?

Dr. Chatwin asked Dr. Meritt if anyone could verify the numbers he showed in his presentation about use of fresh oyster shell. Dr. Meritt said he would be happy to have someone go over his numbers and asked for suggestions for possible reviewers. Dr. Chatwin said to contact Dr. Eric Weissberger with any recommendations on reviewers.

Land Use Subcommittee Update (Mr. Peyton Robertson, NOAA)

Mr. Robertson stated that the land use subcommittee had not met since the last OAC meeting. The subcommittee had made connections between land use and oysters, and it is unclear how the subcommittee should proceed. Mr. Robertson stated that a possible recommendation to DNR could be the consideration of land use in the prioritization of sanctuary restoration. Collaboration between the Department of Planning and DNR could help in prioritizing tributaries for restoration. Dr. Chatwin agreed that such a recommendation aligns with the charges in the charter.

Mr. Goldsborough suggested that subcommittee meet and formulate draft recommendations.

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

Mr. Goldsborough stated that the enforcement subcommittee held several meetings since the last OAC meeting. Subcommittee chairman Evan Thalenberg spoke with the Natural Resources Police (NRP), the Attorney General, and DNR to track violations. The subcommittee found holes in the system. Evan met with Deputy Secretary Frank Dawson, who was very interested in the subcommittee findings. Although the subcommittee is not at a point to make recommendations, DNR is already acting on some of the subcommittee's findings. For example, neither judges nor officers had access to the violation history of a defendant. As a result of this, NRP officers will

now take a 5 year record of a defendant's violations to court. The subcommittee also advised that it would be valuable to have a dedicated attorney general to ride the circuit for natural resource cases. DNR is looking into this suggestion. There are other issues that the subcommittee is focusing on, such as failure to appear in court, which happens often.

The subcommittee also recommended penalties for distributors dealing in illegally-harvested oysters, suggesting that they be charged with receipt of stolen goods.

The subcommittee recommended the reintroduction of the NRP cadet program, which has already happened. A hail in/hail out system is also being considered.

Mr. Goldsborough noted that many warnings were in unassigned categories, and we need to find out why this is the case.

Mr. Goldsborough stated that the subcommittee was charged with two tasks: to evaluate current enforcement of oyster laws and evaluate the potential of increasing NRP patrols. He noted that although MLEIN is now operational, it is just a tool and not a solution to the problem. Making arrests still involves officers on the water. The NRP strategic plan provides guidance on the number of officers needed to replace retirees. The governor put \$13 million in the budget for NRP.

Mr. Goldsborough concluded by stating that the subcommittee would come back with draft recommendations to the DNR.

Funding Subcommittee Update (Dr. Anthony Chatwin, Oyster Advisory Commission Chairman)

Dr. Chatwin began by informing the commission of the resignation of Dr. Bill Richkus, the former chairman of the funding subcommittee. He introduced Mr. Matt Parker, who has been nominated to take Dr. Richkus' place on the commission. Mr. Parker then introduced himself to the commission, saying that he is the aquaculture business specialist with University of Maryland Extension. He stated that he helps people interested in aquaculture prepare economically feasible business plans.

Mr. Zuza stated that the funding subcommittee has not had one meeting or conference call. He asked if there was enough time to develop recommendations.

Dr. Clark noted that he also served on the subcommittee and that he found e-mail sufficient to accomplish the necessary work.

Dr. Chatwin said that items cannot be removed from the charter, and that the subcommittee should attempt to form some recommendations.

Ms. O'Neill asked if anyone wanted to chair the subcommittee.

Mr. Robertson suggested developing the funding recommendations in the main OAC body, rather than the subcommittee. One recommendation might be to maintain public funding for oyster restoration.

Dr. Chatwin noted that almost a year remains under the current charter, which is sufficient time to develop recommendations. He suggested the commission develop recommendations at the next two meetings.

New Business

Mr. Douglas Legum stated that he wanted to vote to turn down the bill to permit power dredging for oysters above the Chesapeake Bay Bridge. Ms. Lynn Fegley then briefed the commission on the status of the bill. Ms. Fegley stated that SB466 was sponsored by Senator Dyson, and that the cross-filed HB155 was sponsored by Delegate Jacobs. The senate bill has been heard in committee, and the house bill is scheduled to be heard on Feb. 28. DNR opposed the bill. Senator Joan Carter Conway, chairwoman of the Education, Health, and Environmental Affairs Committee, requested that the department meet with the watermen to discuss the issue further.

Mr. Naylor noted that the same bill was submitted last session, and did not get out of committee.

Mr. Goldsborough attended the senate hearing and noted that 15-16 witnesses appeared in support of the bill, and 5 people appeared to oppose the bill including himself, Dr. Meritt, and a representative of the Coastal Conservation Association.

Mr. Bryer stated that there is a problem with the legislature making fisheries management decisions. It does not allow for flexibility over time.

Dr. Meritt stated that a member of the Education, Health, and Environmental Affairs Committee asked what harm there would be in harvesting the upper bay oysters given how low the population was already. Dr. Meritt pointed out that the environmental community needs to speak up as the oysters belong to them as well.

Dr. Chatwin said that any recommendation on the bill must come with a rationale for the decision. The bill relates directly to the fisheries management plan section of the charter. One way to phrase the recommendation would be to state that the OAC is not in favor of opening the upper bay to power dredging until biological reference points are developed.

Mr. Legum moved to recommend that the OAC oppose SB466/HB155 based on science that shows additional dredging would harm oysters. Mr. Robertson seconded the motion, adding that the communication should come in the form of a letter from the commission chairman, and include background on the OAC and the policy basis for the recommendation.

Mr. Webster stated that if the bill passes, it is unlikely that the governor will sign it.

Dr. Chatwin noted that making a recommendation on a bill is new territory for the OAC, and that the commission will not play a role in every oyster-related bill. He stressed that any recommendation must be framed in terms of the commission's charter. Dr. Lewis suggested

sending letters directly to the two legislative committees. Dr. Chatwin replied that the OAC's role is to advise DNR, not the legislature, so the letter should be sent to the DNR secretary, who can then circulate it further.

Dr. Clark asked if a quorum was present in order to make a recommendation against the bill. Dr. Chatwin confirmed with Dr. Weissberger that a quorum was indeed present. Dr. Weissberger informed Dr. Chatwin that one of the bill's sponsors sits on the OAC, but was not present at the meeting. Dr. Chatwin replied that the presence of a quorum allowed the commission to act.

Dr. Meritt stated that time was short given the schedule of hearings. He noted that the science does not support the opening of the upper bay to power dredging. The bill is being offered under the guise that power dredging will improve habitat, but there is no evidence to support this assertion.

Mr. Goldsborough noted that the senate bill had been heard, but the house bill had not yet been heard. The chairwoman of the senate committee instructed DNR to meet with watermen to work out a compromise on the power dredging issue. He stated that a letter from the OAC would be useful to DNR in its negotiations with the watermen. Mr. Robertson noted that it would be useful to have a record on where the OAC stands on the power dredging issue.

Ms. Fegley noted that DNR met with watermen over the summer to work out a plan where they would be allowed to dredge certain areas of the upper bay in exchange for using their county funds to seed other areas in the upper bay, with a 2:1 ratio of harvest vs. planting areas. This proposal was not received favorably by the watermen.

Dr. Lewis stated that once the OAC sends out a letter it is a public document and may be shared with legislators.

Dr. Chatwin formulated a draft of a letter to DNR which would state that the OAC does not support SB466/HB155 opening areas north of the Chesapeake Bay Bridge to power dredging until a fisheries management plan, including biological reference points, is developed for that area.

Dr. Meritt stated that the letter should include text that would oppose dredging for habitat improvement until there is scientific evidence showing this is effective. Mr. Goldsborough noted that some of that science was discussed at tonight's meeting. Dr. Chatwin reminded Dr. Meritt that the content of the letter must reflect the OAC charter.

A vote was taken regarding writing a letter to Secretary Gill opposing the opening of the upper bay to power dredging. The vote was unanimous.

Public Comment

Dr. Chatwin opened the floor to public comment. No members of the public commented.

New Business

Mr. Zuza addressed the commission with two new business items. First, he stated that he has pled with DNR to issue demonstration leases, implementing legislation that was passed five years ago. Mr. Zuza stated that he went to Senator Miller about the issue, who then went to Secretary Gill. Secretary Gill sent Senator Miller a letter stating that DNR has had to add more staff to process lease applications, and that he hoped to have the demonstration lease program in place by August 2014.

Second, Mr. Zuza stated his hope that any new regulations be based on science and best management practices.

Closing

Dr. Chatwin adjourned the meeting at 7:02 PM.