

DRAFT Meeting Summary
Oyster Advisory Commission (OAC) Meeting
Chesapeake Bay Foundation, Philip Merrill Center
Annapolis, MD
(4:00 PM – 7:00 PM)
October 17, 2012

LIST OF ATTENDEES

Commissioners Present:

Tony Chatwin (Chair)	National Fish and Wildlife Foundation (NFWF)
Bill Goldsborough	Chesapeake Bay Foundation (CBF)
Mark Bryer	The Nature Conservancy
Don Webster	University of Maryland Extension
Doug Lipton, Ph.D.	University of Maryland (UMD), Sea Grant Coordinator
Douglas Legum	General Partner, Real Estate Development
Bill Windley	Maryland Saltwater Sportfishermen's Association
Ken Lewis	Coastal Conservation Association (CCA)
Peyton Robertson	Director, NOAA Chesapeake Bay Office
Eric Schott, Ph.D.	University of Maryland Center for Environmental Science (UMCES)
Kelton Clark, Ph.D.	Morgan State University (MSU)
Len Zuza	Southern Maryland Oyster Cultivation Society (SMOCS)
Claire O'Neill	U.S. Army Corps of Engineers – Baltimore District (CENAB)
Evan Thalenberg	Chesapeake Bay Savers
Kelly Cox	President, Phillips Wharf Environmental Center (PWEC)
Robbie Witt	Commercial Waterman
Delegate Shane Robinson	Maryland Delegate, Environmental Matters Committee

Commissioners Unable to Attend:

Don Boesch, Ph.D.	President, University of Maryland Center for Environmental Science (UMCES)
Ben Parks	Maryland Watermen's Association, Dorchester County
Delegate Tony O'Donnell	Maryland Delegate, House Minority Leader, Environmental Matters Committee
Senator Richard Colburn	Maryland Senator, Dorchester County
Bill Richkus, PhD	Versar, Inc.
Don Meritt, Ph.D.	University of Maryland Center for Environmental Science, Horn Point Lab (UMCES HPL)

Other Meeting Attendees Present:

Maryland Department of Natural Resources (MD DNR): Mr. Mike Naylor, Mr. Steve Schneider, Dr. Eric Weissberger, Ms. Rebecca Thur, Mr. Frank Marhengi,
Oyster Recovery Partnership (ORP): Mr. Steve Allen
Coastal Conservation Association (CCA): Mr. Chris Moe
Mason Springs Conservancy (MSC): Mr. Ken Hastings
Philips Wharf Environmental Center (PWEC): Ms. Carol McCollough
Calvert County Watermen's Association (CCWA): Ms. Rachel Dean
National Oceanic and Atmospheric Administration (NOAA): Dr. Peter Bergstrom, Ms. Stephanie Westby
Maryland Environmental Service (MES): Mr. Josh Chapman
Maryland Department of Health and Mental Hygiene (MDHMH): Ms. Erin Butler
Johnny Oysterseed Co.: Mr. Jon Farrington
Venice Beach Community Association: Ms. Nancy Bowman Williams
CIFF Business Enterprises: Mr. Michael Collins
Chesapeake Beach Oyster Cultivation Society (CBOCS): Mr. John Bacon
Public: Ms. Terry Witt, Mr. Brian Russell

Action Items:

- MD DNR will forward the enforcement report co-authored by Mr. Naylor to the OAC.
- MD DNR will establish timeframes for the OAC to develop recommendations on issues presented in the charter.

MEETING SUMMARY:**Opening Remarks/Review Objectives/Approve May and September 2011 Meeting Summaries (Tony Chatwin, Oyster Advisory Committee (OAC) Chairman)**

A motion was made to approve the minutes of the previous meeting. The minutes were approved.

Public Comments

Dr. Chatwin opened the floor for comments from the public. There were no public comments. Mr. Webster provided information that he had been asked to pass along from the absent commissioners: Capt. Parks offered regrets but was engaged in survey work with the Paynter Labs; Senator Colburn had a conflicting meeting with the Senate Budget and Taxation Committee; and Delegate O'Donnell was meeting with the House Spending Affordability group.

Update on Substrate Contract/Shallow Water USACE Permit (Mike Naylor, MD DNR)

The Maryland Department of Natural Resources (MD DNR) met with the U.S. Army Corps of Engineers (USACE) in September 2012 to discuss obtaining a permit for oyster restoration in shallow water. MD DNR identified specific areas of Harris Creek that would be targeted for shallow-water oyster restoration. USACE was receptive to MD DNR's permit request, and MD

DNR is currently working on providing follow-up information for the USACE permit. MD DNR has completed a first draft of the contract for the purchase and placement of substrate for oyster habitat restoration in Harris Creek. The contract is currently undergoing review and revision and MD DNR hopes to have the contract finalized by the end of the month. Once the contract is in place, MD DNR will be able to provide a more accurate estimate of the total cost of the restoration project.

Mr. Goldsborough asked if MD DNR plans to use shell as substrate in shallow-water oyster restoration. Mr. Naylor stated that artificial substrate would be used in shallow-water areas due to the lack of availability of shell. Mr. Bryer asked what variables determined the type of substrate to be used in restoration. Mr. Naylor responded that cost and availability were the main drivers of substrate choice and that shell is always considered preferable to artificial substrate. Mr. Bryer asked if the long-term stability of the substrate was a factor in MD DNR's purchase. Mr. Naylor responded that this was not considered; if colonized, the bar will be able to structurally support itself; if not, the substrate will eventually be lost to sedimentation.

Mr. Bryer noted that the \$7.5 million budget for substrate would not be enough to restore all of the acreage in Harris Creek that has been proposed for restoration. Mr. Naylor responded that MD DNR is looking into new sources of substrate for the Harris Creek restoration. The substrate procured under this contract would be used for bottom restoration in the deeper areas of Harris Creek while the USACE shallow-water permit is pending. Ms. O'Neill added that they were able to purchase less substrate than anticipated due to higher than expected costs for granite and shell substrate.

Management of the Public Oyster Fishery in the Patuxent River (Rachel Dean, CCWA)

Ms. Dean introduced herself as the Acting Secretary of the Calvert County Watermen's Association (CCWA), adding that she and her husband are active watermen working on the Patuxent River. Ms. Dean stated that a need has been recognized among watermen for the establishment of a self-sustaining public oyster fishery not reliant on "put-and-take" restoration. CCWA met with MD DNR to develop a strategy to use industry funding for this purpose. MD DNR offered CCWA the opportunity to participate in a State shell reclamation program, but CCWA declined the offer due to uncertainty about the volume of shell to be removed and the volume of shell to be received by CCWA. CCWA then submitted a proposal to reclaim shell through shell cleaning in the Patuxent River, which has not been approved by MD DNR.

Ms. Dean noted that CCWA's proposal to provide shell cleaning in the Patuxent River would not remove shell from silted-over oyster bars, but rather bring shell to the surface. The work would be a small-scale operation completed by Calvert County watermen, and the work would be completed just prior to spatfall. Ms. Dean noted that MD DNR has asked CCWA to establish evidence of significant spatfall in the Patuxent River, and validation of the effectiveness of shell cleaning. Ms. Dean noted that while measurements of spatfall in the Patuxent have been low, watermen on the River are regularly able to harvest oysters off of unseeded bars, suggesting that isolated areas of good spatfall exist throughout the River. Ms. Dean added that CCWA is interested in determining if a correlation exists between working oyster bars and good spatfall, noting that the area of the Patuxent where patent tonging is used generally have higher spatfall.

Ms. Dean, in conclusion, noted that CCWA would like guidance on how to establish a small-scale shell cleaning operation with MD DNR support, and called for more transparent fisheries management in Maryland.

Dr. Lewis asked how the CCWA proposal differed from winter bar cleaning programs. Ms. Dean responded that the CCWA proposal would clean bars closer to the oyster recruitment season and would focus on bars in the lower Patuxent. Ms. O'Neill asked Ms. Dean what CCWA's specific goals were. Ms. Dean responded that CCWA was not looking for additional industry funding, but rather for recognition of the benefits of bar cleaning for the public fishery. Industry MDOT funds would be the primary source of funding. Ms. Dean recognized that previous studies have questioned the usefulness of bar cleaning; however, a need exists for exposed oyster shell available during spatfall. CCWA would like guidance on ways to use industry money to increase the sustainability of the oyster population, rather than using the money for purchasing spat for future harvest. Dr. Chatwin reminded the commissioners that the OAC was not charged with reviewing individual proposals at this time; however, presentations of proposals such as this one are intended to create an understanding of broader issues facing the oyster fishery.

Mr. Zusa asked for clarification on CCWA's proposed work. Ms. Dean responded that the proposal would pay Calvert County watermen to complete bar cleaning in the Patuxent River. Ms. Dean added that MD DNR has told CCWA that one issue with the proposal is that hiring only Calvert County watermen is considered improper. Mr. Naylor confirmed this, noting that MD DNR's Attorney General reviewed the proposal and has established that MD DNR cannot legally limit hiring for a program to a single county. Ms. Dean added that other options suggested by MD DNR, such as using harvest records to determine qualification for the program, were agreeable to CCWA.

Mr. Naylor stated that MD DNR is under a mandate to ensure that the funding is spent in the most efficient way possible. The benefits of "bagless dredging," which consists of taking a harvesting dredge, removing the catch bag or opening it up and dragging it across lightly silted bars to stir the shell up to the surface, have not been proven. Some studies have suggested that it damages oyster habitat. In addition, large administrative costs to MD DNR are associated with CCWA's proposal. Given the high cost and uncertainty over the effectiveness of the proposal, MD DNR is not convinced that the work as proposed would be an efficient use of funding, and approval may encourage other counties to implement similarly inefficient restoration programs. Mr. Naylor noted that if evidence of the benefits of bagless dredging were to surface, MD DNR could reconsider their position.

Ms. Bryer asked how the proposal works towards CCWA's stated goal of producing a sustainable oyster fishery. Ms. Dean responded that the proposal would increase natural recruitment by building up shell deposits in the Patuxent. Mr. Bryer asked if bars would need regular cleaning to create a sustainable population. Ms. Dean responded that this would depend on the spatfall on cleaned bars.

Mr. Webster asked if watermen would complete bar cleaning on a volunteer basis. Ms. Dean responded that while she completes bar cleaning on her own bottom lease, watermen would be unlikely to do bar cleaning in areas where they are not guaranteed harvest.

Citizen Involvement in Oyster Restoration (Len Zuza, SMOCS, Kelly Cox, PWEC, Jon Farrington, Johnny Oyster Seed)

Mr. Zuza noted that the OAC's recommendations have been the foundation for many of the changes in oyster fishery management policy in the past several years. The OAC's recommendations have included increasing community involvement in oyster restoration. Notably, the Marylanders Grow Oysters (MGO) project has been successful in strengthening community involvement in oyster restoration, however, other proposed community involvement programs, such as the creation of demonstration leases for community oyster restoration groups, appear to have fallen by the wayside, and there is a risk that public interest in oyster restoration will not be sustained over the long-term.

Mr. Zuza addressed some criticisms of community-based oyster restoration. Mr. Zuza noted that an early draft of the OAC recommendations noted that community groups, while enthusiastic, are not consistently successful. Mr. Zuza suggested that rather than dismissing community group support for this reason, training programs could be developed to improve community oyster restoration. Another criticism suggests that small-scale oyster restoration activities are not cost-efficient. Mr. Zuza noted that aside from ecological benefits, community oyster restoration groups can generate political capital, and independent fundraising by community groups for their restoration efforts would mean that minimal tax revenues would need to be expended for community-based restoration. Additionally, it has been suggested that community groups are essentially hobbyists without serious concern for oyster restoration. Mr. Zuza noted that the Southern Maryland Oyster Cultivation Society (SMOCS) and other community oyster restoration groups have engaged the scientific community to monitor the oyster beds they have worked to restore. Mr. Zuza noted that this outreach, along with the large scale of some community restoration projects, citing a recent project over several acres in the St. Mary's River, demonstrates the seriousness with which community groups treat oyster restoration. Ms. Cox added that the Philips Wharf Environmental Center (PWEC) monitors restored reefs for growth, mortality, and disease presence.

Mr. Zuza noted that SMOCS has planted millions of spat-on-shell oysters, and raised \$175,000 for oyster restoration, adding that the organization hopes to be an example for future community groups, and encourages collaboration between community oyster restoration groups to increase their effectiveness. Ms. Cox noted that PWEC was able to make up a shortfall of seed for a recent project by receiving extra seed from SMOCS, who had a surplus after one of their restoration projects was not able to go forward. Mr. Zuza added that SMOCS also provides educational programs for students and the interested public, a program which is politically popular. Mr. Zuza also noted that some community oyster restoration groups work with local businesses to encourage the use of local seafood.

Currently, SMOCS is restoring a 2.3 acre bar in Solomons Harbor. The bar has been restored to a density of 180 oysters per square meter, with a goal of reaching a target density of 400 oysters

per square meter. This density is based on the number of organisms needed to filter the water in the Solomons Harbor once every week. Mr. Zuza suggested that similar programs could be implemented by community groups across the State. Mr. Zuza added that while MGO has succeeded in raising public interest in oyster restoration, the program cannot sustain public interest over the long-term; therefore, new oyster restoration opportunities need to be introduced periodically to re-invigorate public interest. Mr. Zuza stressed that community-based oyster restoration work can also help to facilitate communication between concerned citizens, watermen, scientists, and lawmakers. Ms. Cox added that PWEC holds programs to train watermen in oyster restoration. Ms. Cox added that the medium-to-small size tributaries commonly worked by community groups are often home to politically valuable stakeholders; community efforts in these areas may therefore serve to generate significant political capital for State oyster restoration efforts.

Mr. Zuza gave a list of specific recommendations for the OAC. First, Mr. Zuza asked that the OAC regularly bring community oyster restoration issues up for discussion. Mr. Zuza added that specific issues concerning community groups should include clarification on rules for restoration in sanctuaries, improvement of coordination between MD DNR and MGO participants on oyster restoration efforts, and opportunities for interested citizens to interact with the scientific community to deepen public understanding of oyster management issues. Secondly, Mr. Zuza asked that the OAC recommend that MD DNR finalize demonstration lease regulations. Mr. Zuza noted that implementation of the demonstration lease program is overdue, and SMOCS has had to abandon some restoration efforts due to this delay. Finally, Mr. Zuza suggested that the OAC establish a subcommittee to further discuss issues with MGO and other community-based oyster restoration efforts.

Mr. Farrington gave a short presentation on his hatchery's collaboration with SMOCS and other community-based oyster restoration groups. Mr. Farrington's company, Johnny Oyster Seed Co., provided 2250 bushels of spat-on-shell oysters for a two-acre SMOCS restoration project in Mill Creek. Mr. Farrington noted that although Johnny Oyster Seed's profit margin from the sale was not substantial, the company was eager to work with SMOCS because of the associated publicity benefits. SMOCS also benefits from the arrangement; their partnership with Johnny Oyster Seed has allowed them to undertake larger-scale projects and raise the organization's credibility in the eyes of potential donors.

Mr. Farrington suggested that the State of Maryland encourage this kind of collaboration between private companies and community groups by providing tax incentives, providing materials for community-based oyster restoration (e.g. substrate, seed) at a reduced cost, or by providing community groups with access to government resources, such as bathymetric surveys. Dr. Chatwin thanked Mr. Farrington, Mr. Zuza, and Ms. Cox for their presentations; although time did not allow for a question-and-answer session, issues raised during the presentation may be addressed during the discussion of the OAC charter.

New Oyster Advisory Commission Charter (Tony Chatwin – OAC Chair)

Dr. Weissberger explained that MD DNR staff met after the last OAC meeting to revise the OAC charter. In follow-up to issues discussed at the last OAC meeting, revisions were made to

eliminate overlap between the OAC charter and the work of the Aquaculture Coordinating Council (ACC), and the language was revised to more specifically outline issues to be addressed by the OAC. Dr. Weissberger noted that the charter's first draft and the recent revisions were developed by himself, Mr. Tom O'Connell, Mr. Naylor, and Ms. Lynn Fegley. Dr. Chatwin asked what the timeframe was for the OAC to address the issues laid out in the charter. Mr. Naylor responded that individual issues in the charter would require varying amounts of time to address; MD DNR will discuss timeframes and report back to the OAC.

Mr. Zuza expressed concern that removing discussion of aquaculture from the OAC's charter would minimize discussion of the role of community groups, which are closely related. Dr. Chatwin responded that aquaculture could be discussed by the OAC as it pertains to the charter, however, overlap with the ACC should be avoided. Dr. Chatwin further noted that Del. O'Donnell, Mr. Webster, and Mr. Parks sit on both the ACC and the OAC, and can act as liaisons to the ACC, enabling communication between the two groups to avoid overlapping discussions. Dr. Clark noted that by focusing on more specific issues, the OAC charter could preclude discussion of some critical issues. Dr. Chatwin responded that the charter was not intended to preclude discussion of any issue, but focus the OAC's work on the highest priority issues.

Mr. Webster noted that the Ecological and Economic Restoration subcommittees established earlier in the OAC's existence helped expedite the work of the OAC. He provided commissioners with the report of the Economic Restoration workgroup that covered both aquaculture and the public fishery. Mr. Webster noted that many of the OAC's recommendations on aquaculture had been implemented and were the reason that part of the industry had made progress. Mr. Webster suggested that Economic Restoration workgroup be re-established and tasked with making recommendations regarding the public fishery. He volunteered his service if it were to be formed. Dr. Chatwin noted that an economic restoration subcommittee's work would be helpful to address the development of a Fisheries Management Plan (FMP) as described in the charter, and noted that updates would be requested of the subcommittee in the future.

Dr. Chatwin added that more information on biological reference points would be needed before significant progress could be made towards meeting the FMP development goal. Dr. Clark suggested that a technical advisory subcommittee discuss individual technical issues with MD DNR, and communicate these issues to the OAC. Mr. Naylor added that MD DNR was more interested in overall oyster fisheries management strategies than recommendations on individual issues. Mr. Robertson clarified that biological reference points are benchmarks for success in the public fishery, aquaculture fishery, and for ecological restoration; the OAC would not be expected to set these reference points, but investigate models for determining the reference points (i.e., systems implemented by other states) and advise MD DNR on how to proceed. Dr. Schott noted that the OAC could also review biological reference points set by MD DNR, noting that MD DNR would benefit from the consensus of scientists and stakeholders of varying expertise. Mr. Naylor clarified that while the OAC would have some role in developing biological reference points, MD DNR envisions that the OAC's greatest role would be to advise on the implementation of these reference points.

Mr. Bryer noted that other issues with public fishery needed to be addressed as well, suggesting that the OAC research other successful strategies in public oyster fisheries, and make recommendations to frame public fishery management issues in a way that encourages sustainable harvest. Mr. Robertson suggested that the OAC work to define “sustainable” harvest levels for the public fishery by a process similar to the one utilized by the Oyster Metrics Team used to develop goals for ecological restoration.

Dr. Chatwin asked if any specific language needed to be added or removed from the charter in the FMP development section. Dr. Schott suggested that language specifically charging the OAC with assisting MD DNR with the implementation of biological reference points be added. Mr. Goldsborough responded that this language could limit the OAC’s input into development of biological reference points. Dr. Chatwin suggested that the language be added, noting that the OAC could still discuss issues relevant to oyster restoration not specifically listed in the charter.

Dr. Chatwin asked for comments on the funding identification portion of the OAC charter. Mr. Legum suggested that the OAC investigate the possibility of obtaining funds from Federal agriculture programs for oyster aquaculture. Ms. O’Neill noted that the charter appeared to focus on identifying funding for oyster restoration, rather than aquaculture. Dr. Lipton added that this may also duplicate work by the ACC. Mr. Thalenberg added that aquaculture would be a significant part of oyster restoration, and was therefore within the OAC’s purview. Mr. Goldsborough noted that the economic restoration subcommittee must coordinate with the ACC to ensure work is not duplicated.

Mr. Webster noted that restoration costing \$200,000 per acre did not make economic sense, and that we should be focusing our efforts in those areas where reestablishing populations would cost far less. Mr. Legum responded that oyster restoration cannot be completed using funding from oyster surcharges alone due to past neglect of the oyster population; rebuilding the oyster population will require investment in oyster habitat infrastructure. Mr. Bryer noted that economic restoration, ecological restoration, and aquaculture each had different associated funding sources available; identification of funding should therefore be a component of each investigation. Mr. Robertson noted that economic benefits were also realized from ecological restoration and aquaculture; these should be investigated and quantified to help secure funding for each. Mr. Zuza noted that the ACC may be able to independently investigate the ecosystem services provided by aquaculture to secure this funding. Dr. Chatwin noted that the ecological benefits of industry revitalization were part of the OAC’s charter.

Dr. Chatwin asked if there were any questions or comments on the next section of the OAC charter, which included discussion of land use issues as they relate to oyster restoration. Mr. Thalenberg noted that discussion of sedimentation in the Conowingo Reservoir should be included in OAC discussion, noting the significant threat to oyster populations associated with the increased sediment load that would enter the Bay should the Conowingo Reservoir lose its ability to trap sediment. Mr. Bryer noted that a presentation on sedimentation in the Bay would be informative.

Mr. Bryer asked for clarification on the OAC’s role in advising on land use issues, noting that the potential impacts of sedimentation were varied and great in number. Mr. Naylor noted that

MD DNR would like the OAC to emphasize the connections between land use issues and oyster restoration. Dr. Chatwin noted that the target of the OAC's outreach on land use is not made clear in the charter. Dr. Lipton agreed, and suggested that the OAC investigate ecological gaps in the total maximum daily load (TMDL) program, noting that the program ignores the potential impact of shoreline erosion and sedimentation in the Conowingo Reservoir on oyster populations. Dr. Lewis added that Mr. Naylor co-authored a 2010 scientific paper on inefficiencies in natural resources enforcement and penalties, and suggested that the OAC follow-up on the recommendations of the report. Dr. Chatwin suggested that this report be circulated to the OAC.

Mr. Zuza asked if the OAC should formally request that MD DNR establish regulations for demonstration leases and set specific guidelines for NGO participation in oyster restoration. Dr. Chatwin noted that the OAC would address these issues in future discussions as they apply to the charter.

Public Comment

Mr. Chris Moe introduced himself as a member of the Coastal Conservation Association (CCA). He expressed concern that members of the CCA have been working on a reef restoration project in the Patuxent River; however, some reef sites have been lost due to MD DNR's failure to establish demonstration lease regulations. He suggested that MD DNR be more mindful of time-sensitive regulatory issues.

Ms. Dean asked if there was any update on aquaculture regulations in sanctuaries. Mr. Webster responded that this information will be included in the spring regional series of workshops provided to growers interested in aquaculture.

Dr. Chatwin asked if there were any additional public comments. No other public comments were volunteered. Dr. Chatwin asked MD DNR if they would like to address Mr. Moe's comment on MD DNR's failure to establish demonstration leases in Maryland. Mr. Naylor responded that the U.S. Food and Drug Administration (FDA) has challenged Maryland's proposed demonstration lease program; since many of these leases would be in areas of poor water quality, the FDA has mandated that the leases would have to be patrolled frequently by the Maryland Natural Resources Police (NRP). NRP resources are already strained, Maryland does not have the funding to allocate to NRP to hire additional forces for the additional patrolling required by FDA. The FDA will not negotiate on this point. Mr. Zuza pointed out that MD DNR has not attempted to increase NRP enforcement nor has MD DNR offered education programs to community groups for oyster restoration. He asked that a representative from the FDA present their position to the OAC at the next meeting. Mr. Zuza added that Maryland law requires MD DNR to establish demonstration leases, and that MD DNR's failure to do so constitutes a bureaucratic veto of the will of the State legislature. Dr. Chatwin asked if MD DNR had any mechanism to work with SMOCS and other community groups on oyster restoration projects in areas identified for demonstration leases. Mr. Naylor responded that MD DNR cannot establish demonstration leases without increased NRP patrols, and that MD DNR continues to support the establishment of demonstration leases, however, FDA is firm in its regulation. Mr. Naylor agreed that a presentation by the FDA to the OAC might be beneficial.

and could be arranged. Dr. Clark suggested that this issue be discussed further in subcommittees. Dr. Schott noted that oysters should not be relied upon to improve water quality without concurrently addressing land use issues that provide the source of the water pollution.

Next Meeting

Dr. Chatwin noted that this would be the final meeting of the OAC in 2012; the OAC will reconvene in 2013.

Meeting adjourned at 7:00