Oyster BMP Policy Issues – Special Management Board Session

Session Planning and Details

Session Lead: Peyton Robertson, NOAA/Sustainable Fisheries GIT Chair

Logistics

- Wednesday, June 15th from 9am-12pm
- Format: Webinar
- Participants:
  - MB Members or designated proxies
  - Subject matter experts supporting MB members
  - Expert Panel liaisons
  - Interested observers

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*Session Participants (**bold**) as of 6/9/2016*

Interested MB Member and Advisory Committees	Affiliation	Named Proxy	Advisors
Matt Fleming	MD DNR	**David Goshorn**	
Ann Swanson	CBC	**Ann Jennings**	
Peyton Robertson	NOAA/Fisheries GIT Chair		Stephanie Westby
Heather Cisar	USACE	**Dave Schulte (USACE)**	Susan Conner, Angie Sowers
Russ Baxter	VA		
Habitat GIT	Habitat GIT Rep	**Rebecca Golden (MDDNR)**	
WQ GIT	Water Quality GIT Rep	**Lee Currey (MDE)**	
Mike Slattery	USFWS		
Paula Jasinski (Chesapeake Environmental Communications)	CAC Vice-Chair		
Lisa Wainger (UMCES)	STAC Chair	**Mark Luckenbach (VIMS) or Kurt Stephenson (VT)**	
Nick DiPasquale	EPA/CBP (MB Chair)		

Additional Participants	Affiliation	Notes
Julie Reichert/Ward Slacum/Stephan Abel	ORP	Expert Panel Coordinator

Jeff Cornwell	UMCES/Expert Panel	Expert Panel Chair
Julie Rose	NOAA/Expert Panel Member	Expert Panel Member
Chris Moore	CBF/Expert Panel Member	Expert Panel Member
Rich Batiuk	EPA/CBP	
Carin Bisland	EPA/CBP	
Greg Barranco	EPA/CBP	

Policy Issue Summary

The Oyster BMP Expert Panel leadership has prioritized the policy issues based on their time-sensitivity for the Panel's work. Resolution of these issues is important to guide the Expert Panel as they look at different combinations of oyster practices and crediting protocols. The discussion will proceed in the order below, focusing on Issues #1-5, with discussion on #6 if time permits.

The last four issues do not directly affect the Panel's recommendations, and so will not be addressed specifically on this call. The original list of policy issues can be found here.

Resolution Need for Panel	Policy Issue	Brief Description/Question
Yes, resolution needed to help inform 1st set of recommendations (July 2016)	**1.** Establishing a baseline	How would the baseline be established? One recommendation is to only receive credit for new/expanding projects. Another recommendation is to establish the baseline as January 1, 2011. For oysters, perhaps look at the # of oysters present now as a result of practices since 2009 (TMDL baseline). Difficult to backtrack what oyster credits would have been from the past 7 years. Baseline usually geared toward BMP's that start from 0. This BMP already has oysters in the water. Surviving oysters are contributing to WQ benefit. **Potential resolution options:** a) Refer to TMDL baseline (2009). Ex: calculate assimilation based on current oyster survival and size from practices started 2009 and after. b) Baseline not needed. Just base the credit on live oysters from each practice; Ex: start calculating based on current oyster standing stock to determine nutrient assimilation.
Yes, resolution needed to help inform 1st set of recommendations (July 2016)	**2.** Crediting and accounting for pollutant load reductions	How would oyster BMPs counted toward load allocation? Under which pollution source sector? New category? Load allocation – nonpoint Waste load allocation – point **Policy questions:** • Nonpoint or point source?

			○ May fall into nonpoint category. Technology is available to address point sources. • Existing source sector? ○ Agriculture? - similar challenges of controlling runoff from diffuse sources. ○ Same source sector as wetlands (habitat restoration?) • New source sector/unique category? ○ As a tidal BMP, the source does not matter since nutrients are already there and mixed. Different from land-based BMPs. • No source sector. Add credit onto overall total. ○ Generally incentivizes more oysters in the Bay.
Yes, resolution needed to help inform 2nd set of recommendations (December 2016)	**3.**	Permanent pollutant removal from the Bay vs. removal from the water column	**i. Sequestration:** Would it be acceptable from a BMP perspective that the nutrients sequestered in the tissue/shells of oysters that remain in the water be included in the pollutant reduction effectiveness estimate? The oysters are actively removing nutrients from the water column, but the oysters themselves remain in the water (not removed from the Bay). Mostly related to oyster restoration as an in-water BMP: can we apply N/P sequestration for oyster practices? **Potential resolution options:** a) Sequestration from a biological in-water BMP is acceptable to include in the reduction effectiveness estimate. • What are the conditions under which it would count? • What are the concerns about sequestration? b) Sequestration from a biological in-water BMP is not acceptable to include in the reduction effectiveness estimate. **ii. Deposition:** Would it be acceptable from a BMP perspective to include in the reduction effectiveness estimate the removal of suspended sediment from the water column? The oysters are actively removing suspended sediment from of the water column and depositing it on the bottom, but the sediment itself remains in the water (not removed from the Bay). **Policy question:** Is removal from the water column good enough to include in the reduction effectiveness credit?

			Potential resolution options: a) Sediment deposition from a biological in-water BMP is acceptable to include in the reduction effectiveness estimate. • What are the conditions under which it would count? • What are the concerns about counting sediment deposition? b) Sediment deposition from an in-water BMP is not acceptable to include in the reduction effectiveness estimate.
Yes, resolution needed to help inform 2nd set of recommendations (December 2016)	**4.**	Crediting protocol based on water clarity instead of suspended sediment reduction	Can the sediment reduction effectiveness estimate be based on improved water clarity even though the BMP Review Protocol explicitly states nitrogen, phosphorus, and sediment? If so, then how should this protocol be applied in combination with the nitrogen and phosphorus protocols; would double-counting occur concerning nutrient reduction given that water clarity improvement also involves organic particles being removed from the water column by oysters? Is there enough understanding for water clarity issue? **Potential resolution options:** a) Yes, sediment reduction can be expressed as water clarity improvement in a separate crediting protocol. b) Yes, sediment reduction can be expressed as water clarity improvement, but it can't be applied in conjunction with the nitrogen and phosphorus crediting protocols. c) No, sediment reduction cannot be expressed as water clarity.
Yes, resolution needed to help inform 2nd set of recommendations (December 2016)	**5.**	Oyster Shell	Concern that returning shell to the water (shell recycling, restoration, aquaculture) will be dis-incentivized due to crediting nutrient assimilation in oyster shell. Issues: Moving shell across jurisdictions; unknown shell dissolution once returned to the water. Potential resolution options: a) Do not move forward with crediting shell for now (aquaculture). Focus on tissue removal for aquaculture. b) Continue developing recommendations for shell crediting (aquaculture) in order to determine the pollution removal estimates. The application of this particular shell crediting can be discussed at a future time.

Panel is providing general verification guidelines; resolution timeframe does not affect the Panel's reduction effectiveness progress, but discussion could be informative for the Panel to help with developing general guidelines	**6.**	Oyster BMP verification and crediting by source sector or new category	How will practices be verified? Panel provides verification guidelines on what will be measured. Verification is up to jurisdictions and is needed for all BMP's. May be helpful to discuss an example of verification for an oyster scenario to get an idea of the necessary effort for accounting.
Can wait; Does not affect the Panel's reduction effectiveness recommendation progress	**7.**	Scale of permanent removal to make a real water quality difference	Concern that too many oysters needed to make a significant difference (reality check). Is there a policy concern? User conflict? Non-panel issue. BMPs are additive, many practices implemented. Up to the jurisdictions to decide which BMP's to implement.
Can wait; Does not affect the Panel's reduction effectiveness recommendation progress	**8.**	High-intensity, large scale aquaculture	Concern that incentivizing high-intensity aquaculture could compromise other oyster efforts by potentially spreading disease. The drivers for aquaculture are primarily economic. Non panel issue. Aquaculture already exists and is growing so not specifically related to the Panel.
Can wait; Does not affect the Panel's reduction effectiveness recommendation progress	**9.**	Oysters as BMP's for water quality trading	Are oyster BMP's appropriate for WQ trading? Non-panel issue. Panel recommends load reduction crediting. WQ trading and BMP implementation is an issue for the jurisdictions.
Can wait; Does not affect the Panel's reduction effectiveness recommendation progress	**10.**	Small nutrient reductions in the face of greatly expanded user conflicts	See issue #7-8 Non-panel issue. User conflicts are already happening. These conflicts are a jurisdictional issue and a jurisdictional choice of which BMPs to implement.