

Chesapeake Bay Environmental Finance Symposium Final Report
Reviewer Comments and EFC Response
Environmental Finance Center, University of Maryland
August 2016

Note: Where it appears throughout this document, "we" refers to the Environmental Finance Center.

Charge to project reviewers:

- (1) First, we are asking that you or your representative who may have attended the symposium, review and provide feedback on this draft report. The report is intended to capture the discussions that took place at the symposium and the recommendations that evolved from those discussions. We are not looking for new ideas to be injected at this point. Your focus should be on making sure the report accurately reflects the discussions that took place at the Symposium.
- (2) Secondly, we are asking you to pay particular attention to the Recommendations being offered in the report with an eye toward how the Executive Council might act on those recommendations.

Commenter	Date Rec'd	Comment	How and Where Comment Was or Was Not Addressed
General			
		suggest that where appropriate, and if you feel the workshop audience would agree, that in the few places you emphasize a Bay-wide solution or process that you shift that to say the recommendation is minimally a need for state level solution, with Bay-wide solution being even better with a sentence as to what benefits the Bay-wide solution offers over just state level. Overwhelmingly the recommendations are concepts that do not have to be Bay-wide, I just don't want the few instances where you do	Throughout the report, we made changes to emphasize that in the absence of a Baywide solution, impact can still be achieved if strategies are pursued state-by-state (though coordination will result in better outcomes)
Bob Rose, US EPA Office of Water	7/20/2016	emphasize Bay-wide to cause skepticism about the probability to do so.	Thanks!
Bob Rose, US EPA Office of Water	7/20/2016	Agree completely with the later specific recommendations.	Emphasized that the first core recommendation is the most important. Ranking / prioritizing strategies and action items would be a good task for a new Finance Advisory Board.
		The recommendations section covered lots of great ideas. Is there a hierarchy? Are any far more powerful than others? If the workshop thought so, that might be nice to see.	
Bob Rose, US EPA Office of Water	7/20/2016	The report briefly mentions maintenance, but it does not seem to recognize the full scope, importance, or complexity involved to ensure practice are maintained, especially when jurisdictions will fund projects in other states.	Agree -- attempted to acknowledge this more clearly (in the beginning of Core Recommendation 2).
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	The "next steps" on page 28 seem to vastly overstate the level of participation in the Symposium and the amount of energy that will be directed to implement the recommendations in this report.	Rephrased to avoid being misleading.
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016		

Ann Swanson, on behalf of Chesapeake Bay Commission	<p>Nearly half of the report is dedicated to recommending the establishment of a watershed-wide nutrient trading program. While trading was widely discussed, with two breakout sessions devoted to the topic, it was not central to the conclusions of the symposium. Rather, it was one [albeit important] tool in the mix. Currently, the report makes it seem as though the Financing Advisory Board and Bay-wide trading are the top recommendations. This does not reflect our experience as symposium participants. // We do not believe that the draft report accurately reflects the diverse opinions shared at the symposium. With the exception of a few “theme-specific” recommendations, we are concerned that the report conveys conclusions that had not yet been reached. We believe instead of offering recommendations the report should present the array of opinions offered at the symposium.</p>	<p>The report does not at any point recommend a watershed wide water quality trading program. It does, however, recommend a watershed-wide credit financing program. That suggestion is made in significantly less than half the report. To that end, we more clearly articulated in the Executive Summary and the Background sections that the Symposium did not generate concrete, consensus-based conclusions. Finally, we believe that the recommendations accurately reflect the dialogue that occurred at the Symposium. We included minutes from the Symposium conversation in the Appendix for reference. Again, it was not our intention to recommend a Bay- wide trading program. However, draft 2 attempts to make more clear that throughout report, local water quality is paramount, but that the Baywide strategies could go a long way in meeting Baywide restoration goals. In discussion on performance standards, we inserted language that other community goals -- besides cost savings and nutrient & sediment pollution reduction -- are absolutely important and should continue to be pursued, and that priority should be on financing water quality restoration practices that advance multiple community priorities, when possible.</p>
Ann Swanson, on behalf of Chesapeake Bay Commission	<p>The report touts the importance of a Bay-wide nutrient trading program, enabling “any community in any state to meet its Chesapeake Bay related pollution reduction obligations by financing the most efficient restoration practice anywhere across the basin.” This statement, and a similar one in Recommendation 1b (page 11) that suggests that costs and benefits can be judged in dollars alone, relative to the Bay alone, grossly overstates the tenor of the discussion and disregards stakeholder interest in restoring and protecting local water quality. It also seems to ignore that state trading programs exist that ensure local water quality will be protected. The Commonwealth of Virginia’s highly regarded nutrient trading program, for example, is premised on protecting local water quality and building consensus through stakeholder engagement. Since 2005, Virginia’s program has, with limited exception, required acquisition of nutrient credits within the same tributary (§62.1-44.19:1). As each state grapples with how to expand its trading program, these existing trading programs must be carefully considered. Adhering to tributary-based nutrient trading does not negate cost efficiencies as documented in the Chesapeake Bay Commission’s expanded study of “Nutrient Credit Trading for the Chesapeake Bay” dated May 2012.</p>	<p>We agree that state trading programs are essential. They don't exist, however, in several states. We had included some reference to existing state programs, but we attempted to highlight these more clearly and make the case that these existing, functioning systems could be models for other Bay jurisdictions. We also strengthened our argument for integrating existing state-level programs rather than creating one new Baywide system from scratch.</p>
Ann Swanson, on behalf of Chesapeake Bay Commission	<p>Throughout the symposium, in both the plenary and breakout sessions, the participants spoke of the importance of public sector funding. When combined with improved policy, the participants agreed that it could be a powerful motivator in invigorating and stabilizing private sector involvement. Public sector funding was not considered to be “of the private sector,” as the report claims (page 6), but instead an important driver in the private sector’s work. This consensus should be stated up front in the report and in the Executive Summary. The report does not recognize the importance of public sector funding until page 18, more than halfway through the document.</p>	<p>We agree -- and had acknowledged the importance of public sector funding in driving restoration. In the second draft, we strengthened those references. However, the goal of this project was to highlight how the PRIVATE sector can be engaged in financing Bay restoration.</p>

Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	Recommendations require significant efforts and/or political will and therefore will not result in timely changes to the way we finance the tremendous amount of work that needs to be done in a relatively short period of time. (AND) The key recommendations, i.e. establishing credit trading and development of “universal standards,” are predicated on developing watershed wide systems. While these ideas may seem reasonable in theory, the time, cost, and likelihood of developing watershed-wide systems is most likely prohibitive, rendering them unrealistic.	Made a stronger case for incremental actions that can achieve impact, including making reforms to existing programs rather than launching entirely new systems. Re: watershed-wide comment: throughout report, we changed the emphasis from a single, Baywide solution to strategies that can be implemented in each Bay jurisdiction.
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	Discussion should be geared toward identifying the top 3 recommendations that are actionable in a reasonable amount of time and justification should be provided for the inclusion or omission of each recommendation. The discussion about rigid, inflexible regulation fails to consider the legal codes, both local and state, under which local governments operate and the legal structures under which Bay states operate and govern. While these issues were not specifically addressed during the Symposium as LGAC recommended, they should be acknowledged in the Report.	Emphasized that the first core recommendation is the most important, and throughout all recommendations, tried to emphasize incremental actions that can be taken NOW to begin implementing ideas. Ranking / prioritizing strategies would be an excellent first task for a Finance Advisory Board.
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016		Tweaked language to acknowledge the (legitimate!) reasons government processes tend to be inflexible, and to focus on where there are realistic opportunities for reform. Added an acknowledgement at the outset of report that much additional dialogue is needed -- this is one of the reasons we recommend a Finance Advisory Board to spearhead the continued process. We attempted to do a better job of acknowledging at the beginning that Symposium was not intended to arrive at consensus-based conclusions, and therefore the recommendations in the report were informed by both Symposium discussions and EFC's own understanding and additional research.
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	In our view, much more work and analysis must be done before this report's broad scale recommendations are advanced. In addition, the draft report appears to reflect more of the Environmental Finance Center recommendations rather than that of the Symposium discussions and this should be noted in the next version of the report.	

Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	<p>Characterization of the Private and Public Sectors: In our opinion, the draft report overstates the private sector's role and potential to help meet the Chesapeake Bay water quality goals, without providing evidence-based examples, research and analysis. For example: a. A key point stated at the conference and on page 18 is that because the state and local governments are ultimately responsible for the restoring the bay, "the private sector is essential to the restoration financing process, [but] it is the public sector that will lead the restoration implementation and financing efforts..." This statement should be captured in the Executive Summary to set the appropriate tone for the recommendations. b. We challenge a key assumption made on page 6 that states, "the private sector has provided the majority of the revenue in the form of taxes and fees". In fact, most of the substantial funding initiatives to date have come from sources such as Federal Clean Water sewage treatment construction grants and revolving loans, local governments, and state actions such as the Virginia Water Quality Improvement Act and the Maryland Chesapeake Bay Restoration Fund and local and state stormwater fees. We contend that it is the <i>general public</i> (including rate payers and farmers) that has provided the majority of revenue. We do not equate the general public to the private sector and recommend that sentence be culled from the report. Unfortunately, no one from DEP was able to attend the symposium. However, from brief conversations we have had with colleagues in the program who did attend, we get a general impression that the report provides conclusions and recommendations that did not receive wide consensus or discussion at the symposium. From this we have to conclude a clearer separation from the conclusions and recommendations of the Finance Center and those of the attendees of the symposium needs to be made. Either that, or the report needs to be re-drafted to include a more robust discussion of the discussion, diverse opinions, and themes; without final conclusions, recommendations and a listing of next steps. From this discussion, the Bay Program Partnership can then develop its own set of next steps and recommendations. Any implementation of recommendations needs to take into consideration the var. , diverse demographics of the states within the Chesapeake Bay watershed. Recommendations to standardize regulations, performance standards and permitting processes need to consider these diverse demographics. There are very clear reasons why certain processes and procedures are in place within one state. It does not appear that any consideration of existing proactive approaches already in place within each state in the Bay watershed and at the local level were presented or factored into the discussions or recommendations. An exercise to try and standardize these protocols and procedures without a comprehensive analysis of these proactive approaches is probably a futile exercise, no matter how admirable the goal. As a result, convening workgroups or task forces to develop Bay-wide guidance in this area is probably not the best use of limited resources.</p>	<p>Re a): Attempted to more clearly acknowledge the critical role of the public sector in leading restoration. Re: b): We removed that sentence. In final draft, we will provide more nuance in this section.</p> <p>Noted in Executive Summary and Background sections that the Symposium did not generate concrete, consensus-based conclusions and that the recommendations contained in the report were informed by Symposium discussions as well as EFC's own understanding of the issues at hand. Developing recommendations and next steps was what the EFC was charged with doing in our workplan with CBP.</p> <p>The second draft attempts to better note the progress that states are making in regard to removing permitting inefficiencies, and to recommend that states lead efforts to reform systems based on an understanding of local needs and conditions.</p>
Veronica Kasi, on behalf of PA DEP	7/29/2016		
Veronica Kasi, on behalf of PA DEP	7/29/2016		

<p>Charlie Stek, Chair of the Citizens Advisory Committee to the Chesapeake Executive Council and Joe Maroon, Symposium Executive Steering Committee member</p>	<p>8/24/2016</p>	<p>Thank you for the opportunity to comment again on the current revised draft report of the Environmental Finance Center on potential opportunities to leverage or incentivize private investment in Bay restoration and protection efforts. We appreciate that EFC considered our previous comments and addressed some of them in the revised report. We also appreciate that the body of the revised draft more clearly states that the report is not a consensus of recommendations from the Environmental Finance Symposium and suggest that the title page be amended to reflect that fact as well. We also agree that "continued debate is necessary" before action is taken on the report's recommendations and look forward to the continued discussions on the feasibility of implementing of these recommendations. Sorry I missed the deadline, but wanted to share just a few comments on the attached. Let me preface them by saying – good job! and CBF looks forward to helping move forward some of these great ideas!</p>
<p>Beth McGee, Chesapeake Bay Foundation</p>	<p>8/25/2016</p>	

Enabling Conditions

		<p>It would help the reader to know (maybe in the background) that roughly 80% of public WWTP load reductions are now being met, roughly 80% (???) of the remaining problem is private sector NPS loads and a small but very expensive public MS4 load. One sentence is good enough just so the reader can visualize basically farms and cities (or whatever you want them to visualize; just not WWTP) in which one is private and the other is public. [Re market consistency] YES! - Contrary to popular belief, it is the consistent application of well-defined regulations not the reduction of regulatory obligations that provides the optimum framework for effectively engaging the private sector." Overall this section ran on just a bit. I say this because the above quote is I think key and suggest finding a way to move this (and say two other most important points) to the top of this section, then use the remaining paragraphs to give examples or supporting argument.</p>	<p>Amended background discussion to emphasize that Bay pollution largely stems from nonpoint sources and thus pollution reduction activities must be equally dispersed.</p>
<p>Bob Rose, US EPA Office of Water</p>	<p>7/20/2016</p>		
<p>Bob Rose, US EPA Office of Water</p>	<p>7/20/2016</p>	<p>[Re universal standards] To the extent I don't see interstate anything (markets, regs, trading) actually ever happening, I wonder if we do ourselves a disfavor making such references. It is more pragmatic I think to emphasis the need for <u>simple and consistent</u> in-state processes. Constructively, perhaps at least emphasize a need for simple and consistent in-state, then elude to the longer term goal of cross state. [Re broad-scale demand] I agree. In large point this is a repeat of the quote I cited under Market Consistency, which is otherwise fine.</p>	<p>Trimmed section so that key points are emphasized. Throughout report, we changed the emphasis from a single, Baywide solution to strategies that can be implemented in each Bay jurisdiction, while still trying to make the case that better outcomes will result from enhanced coordination, basin-wide. As above, streamlined the writing so key points are more clear.</p>
<p>Bob Rose, US EPA Office of Water</p>	<p>7/20/2016</p>		
<p>Bob Rose, US EPA Office of Water</p>	<p>7/20/2016</p>		

Right at the beginning of your report, you made an important statement about this serving as a launching point for an ongoing discussion that will hopefully turn into positive action. I read the rest of the document with that in mind. I believe that stakeholders, both private and public, should use this report to help us bridge the gap that exists between our two sectors. I also agree there is no single solution to address the financing problem. One thing holds true, however, it can't be done successfully without all parties working together. To that end, you mention four "enabling conditions" necessary to set the stage for successful interaction with the market and private sector. I agree with you about the need for each one and also feel that DNR is making great strides to meet these conditions. For example, under Secretaries Belton and Grumbles leadership, DNR and MDE are working much more closely to re-examine how projects are designed, financed, and implemented. Improved efficiency and effectiveness are at the heart of discussions between our two agencies. These are good signs for Maryland and help point out we are on the right path moving forward. We are also collaborating more than ever with Maryland's Commerce Department to show the many linkages between protecting the environment and economic development. Commerce has expressed strong interest as recently as two weeks ago to becoming much more involved in Bay related activities. This level of collaboration between state agencies is a very positive thing. We see this strong relationship between state agencies as a huge win for Maryland Counties, the State, and of course, the Bay. Although we have more to do, we are truly starting to see some long held silos start to come down, communication with the private sector is expanding, and changes are ahead for our procurement practices as Governor Hogan looks to improve the process. All of these things are mentioned in your report as needing to happen and it gives me hope that we are on the right track moving forward. I hope other

Joanne Throwe, MD Dept of
Natural Resources

8/19/2016

Core Recommendation 1: Economic Development

Our state legislators wrestle with competing needs for public funding and energy, and understandably, prioritize funding for economic development initiatives. Making the case to elected officials that Bay restoration is an economic development initiative is key to garnering their support. Efforts to "Advance a Basin-Wide Restoration Economic Development Effort" (recommendation 5, page 19-20) would benefit from specific, credible documentation of the jobs created and revenue generated by Bay restoration activities in each jurisdiction. At the symposium, there was interest voiced in continued and ongoing examination of economic benefits of achieving a clean Chesapeake Bay. Furthermore, in our experience, collaboration between economic and natural resource secretariats already occur, thus, expanding the membership of the Principal's Staff Committee, as recommended on page 20, is not likely to add additional benefit.

Ann Swanson, on behalf of
Chesapeake Bay Commission

7/27/2016

We find this comment to be perplexing. Clearly the most important decisions that are made in regard to Bay restoration occur through the Bay Program apparatus. Suggesting that economic development decisions do not belong within that apparatus is to suggest that those decisions lack importance. Therefore, we left the recommendation unchanged.

Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	<p>recommendations actionable by the Executive Council (EC), there is one that stands out to us as a possibility. On Page 19, Recommendation 5 of the Core Recommendations calls on Bay leaders to embrace a basin-wide restoration economic development effort. While the idea of advancing a basin-wide restoration economic development effort may have great merit, we did not hear this idea discussed in any of the sessions we attended and believe it needs further development. With additional research and more specific next steps, there are elements of this recommendation that the EC could consider and potentially embrace. If so, we urge the EC to consider having a broader focus than water quality. Before the Executive Council acts on this recommendation we recommend further study and discussion by the Principal Staff Committee, Management Board, and appropriate Goal Implementation Teams with a view toward advancing a basin-wide restoration economic development effort and identifying appropriate ways to better engage state and local departments of economic development and commerce in watershed restoration activities.</p> <p>The last recommendation [now 18], where restoration goals are linked to goals for economic development is probably something we can focus on within the short term. This may be something that could be expanded upon and explored further, but further detail as to what the attendees of the Symposium were thinking about would be needed. We already communicated with our state agencies involved in community and economic development, so I am not so sure expanding the membership of the Principal Staff Committee, the Management board, or any other committee is helpful. The membership of these groups is already cumbersome. It should be the responsibility of the existing membership to represent their state, and that means all agencies within their state, including those agencies with the lead responsibility for economic development.</p>	<p>We agree that this recommendation deserves more development. Therefore, Draft 2 stresses its importance.</p> <p>Acknowledged that some coordination does already happen but emphasized that more is needed.</p>
Veronica Kasi, on behalf of PA DEP	7/29/2016		

Core Recommendation 2: Credit System

Bob Rose, US EPA Office of Water	7/20/2016	<p>Create a watershed---wide, credit---based financing... Consider delating the other 28 pages and just keep this one section! OK, not really, but is great to see. The two proposed credit systems seem more appropriate for agricultural areas with very large properties than for urban areas like DC. Water quality credit is per pound of nitrogen, phosphorous, or sediment removed. The efficiency measure for the water quality credit is dollars spent per pound removed. The stormwater bank credit is per acre treated for stormwater emissions (I think they meant to say runoff or retention). No discussion of the ways these two credit systems might overlap or compete with each other. They recommend that certification and financing for the water quality credit should be universal across Bay states, but it seems the stormwater bank credit would be specific to each jurisdiction.</p>	<p>Thanks! Fixed typos. Re credit systems being appropriate for agricultural areas: In the stormwater banking recommendation, we attempted to highlight how this could work in urban communities. Baywide system would generate credits from agricultural areas.</p>
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016		
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	<p>The recommendations for both credit systems have the public sector leading implementation, which conflicts with other sections of the report that say the private sector can implement more quickly and with more innovative solutions?</p>	<p>In the stormwater banking recommendation, we explained the relationship between the two credit systems. Tried to be more clear about how a credit system is a market-based system and would have various types of buyers and sellers.</p>
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016		

Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	<p>Page 11 describes a concept where jurisdictions would fund the most efficient practices in the Bay watershed. A state would be able to meet its MS4 permit requirements by funding projects in other states. While this approach might have the best outcome for removal of nitrogen, phosphorous, and sediment from the Bay, it would not be likely to achieve the best outcome for the other water quality objectives of each state. The proposal did not explain who would make the decisions about what is a “best outcome.” There clearly are numerous state-level political and administrative challenges to implementing this kind of Bay-wide program, but the report does not mention that EPA would also have to modify each state’s permit to allow this system.</p> <p>The recommendations for both credit systems call for centralized funds that will be managed by new organizations that will need to be created. This approach seems to bring back the layers of process they are trying to avoid with the way the public sector does things now. It seems that an open market would be more flexible. We agree that nutrient trading offers the potential to significantly reduce the costs of achieving the TMDL but, as cautioned by participants at the symposium, trading must be viewed both from its cost-saving benefits and environmental implications. The report must offer a complete picture of this complex policy issue. Furthermore, because the issues were discussed in “breakout sessions” and not by the full group, we find it difficult to draw up concrete, consensus- based recommendations.</p> <p>Basin-wide credit trading system. The section on nutrient trading does not fully reflect the discussions that occurred at the Symposium. Many of the participants in the symposium expressed cautions and concerns about basin-wide trading, including impacts on local water quality and the uncertainty of reductions from nonpoint sources, like agricultural practices. We do not feel these concerns are adequately captured or addressed in the draft report. Additionally, given that there are already market based approaches and credit trading programs in place across the region, it would be a very difficult task (with potentially negative impacts) to impose a new basin-wide trading system without first incorporating best practices from the existing ones. We believe these programs and best practices should be analyzed in much greater detail before the Partnership embraces a Bay-wide trading scheme. The draft report recommends the creation of a basin-wide administrative credit registry system on page 13, but does not address how the administrative system will be paid for, how much it would cost, and if it the system will be self-sustaining. We recommend the report address these questions in the next draft if the credit registry is to be pursued.</p>	<p>Throughout report, we changed text to emphasize that local governments will and should continue to make investment decisions based on local priorities -- and that meeting local water restoration goals is primary. Also added reference to the fact that many water quality BMPs can achieve multiple community objectives (removing nutrient pollution but also mitigating flooding, improving aesthetics, spurring redevelopment in areas with underutilized lands, etc). Refined text to make clear that credit systems do not rely on centralized funds or new organizations, but rather can be implemented with existing funds and agencies.</p> <p>We refined this section -- and we also more clearly acknowledged that the Symposium did not generate concrete, consensus-based conclusions.</p>
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016		At the outset, we more clearly stated that these recommendations are not necessarily embraced by all Symposium participants. Directly acknowledged the fact that there are existing state programs and recommended that state programs should be integrated.
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016		Estimating cost of implementing recommendations was outside the scope of this project, but we did add reference to the fact that existing state registries could be used and should be integrated with one another.
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	<p>Recommendation 1b of shifting to performance financing offers an appealingly simple formula (\$/lb) on the top of page 12 as the way to focus financing on the resulting pounds of pollution reduced. The simple formula, however, does not take into consideration that sometimes the most cost efficient practices are also the least certain in terms of effectiveness of pounds of nutrient reduced. We recommend the next draft address how performance financing reconciles inconsistencies in efficiency and effectiveness or drop the reference to the “simple formula”.</p>	Agreed. Language changed to "basic formula."

Veronica Kasi, on behalf of PA DEP	7/29/2016	<p>There appears to have been a large focus at the symposium on a watershed-wide Trading Program. There has already been a considerable amount of discussion around inter-state and inter-basin trading in other arenas within the Chesapeake Bay Program partnership. EPA has identified this as one of the topics for one of the Technical Memoranda to be developed, but the timeline for creation of such a document keeps getting delayed. Further discussion around the potential for this may be possible, but not without full consideration of the very comprehensive existing Water Quality Trading Programs and their focus to also protect local water quality.</p> <p>... strategies to achieve water quality goals; for example, metrics for MS4 permit implementation range from acres of impervious surface treated, to gallons of water retained on site, to pounds of nutrients reduced. Shared standards for the design, installation, and monitoring of stormwater BMPs, for example, would make it easier and less costly for private firms to provide these services region-wide. At a minimum, states should strive to make their own internal standards straightforward and consistent.” I don’t understand the connection between the varying permit requirements and standardizing stormwater BMPs? And frankly, aren’t there standards for construction of stormwater BMPs? After all, many of them are based on engineering? I could be wrong. But my basic comment is the link between permit limits and BMP standards here doesn’t make sense to me...the point of the paragraph</p>	Please see previous response. The report does not recommend a watershed-wide trading program. Our focus is on a synchronized credit-based financing system.
Beth McGee, Chesapeake Bay Foundation	8/25/2016	<p>needs to be clarified</p> <p>p. 14 - Recommendation 2: Create a credit-based financing system and market infrastructure, basin-wide. I don’t recall hearing this idea explicitly discussed in any sessions that I was in and frankly I think it very unlikely to be implemented. I do like the sub-recommendation 2b for performance based financing. And hope that this nugget doesn’t get lost by what I believe is a non-starter idea of a basin-wide crediting system. As one of the groups that could help move these ideas forward, I can tell you, that would be a challenge on many, many, fronts and not something we would</p>	
Beth McGee, Chesapeake Bay Foundation	8/25/2016	embrace in the near term. I would recommend making 2 b the top recommendation.	We attempt to emphasize throughout the report that if a Bay-wide program proves elusive, credit-based systems could still be effective if implemented within each state (as in many cases it already is) and coordinated across jurisdictional boundaries to the degree possible.

Core Recommendation 3: Performance Standards

Ann Swanson, on behalf of Chesapeake Bay Commission	7/27/2016	<p>we view the recommendation to establish basin-wide legal, financial and biological standards for implementation and performance to be unwieldy and likely to divert limited staff resources with limited opportunity for positive change. We recommend that prior to establishing performance standards and directing the jurisdictions to follow them, the Bay Program seek input from each jurisdiction on their interest in and willingness to establish uniform standards and the programmatic changes necessary to implement such, including the feasibility of such standards given the diverse local TMDLs and other local water quality protections required throughout the</p>	Recommended that each state determine the feasibility and desirability of implementing standards. Also made a stronger case that standards will be most effective (at achieving restoration goals and giving private firms the clear expectations they need in order to engage) when they are integrated as broadly as possible.
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Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	<p>With respect to performance based outcomes, we question whether an approach based solely on meeting water quality goals (lbs of nutrients and sediments reduced) is advisable given that it fails to capitalize on the public benefits associated with more holistic watershed protection and restoration activities. This also seems contrary to Recommendation 5 [now 1] which calls for a basin-wide restoration economic development effort.</p>	<p>Attempted to be more clear that nutrient and sediment reductions are not the ONLY goal -- and that local and state governments must continue to pursue myriad objectives -- but that the impetus for the Symposium and the report was to identify ways that the private sector can help achieve Chesapeake Bay water pollution reduction goals.</p> <p>These are all excellent points. Establishing standards would be very difficult. That of course does not diminish the importance of ensuring that the standards are in fact developed. To be clear, our recommendations were based on how best to engage the private sector and the market. Standards are an essential part of establishing that engagement. The alternative is to continue with the existing system, which would require no implementation standards. Given the task we were charged with, we kept the recommendation unchanged.</p>
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	<p>In the section on establishing basin-wide implementation and performance standards on page 14, we question the feasibility of creating basin-wide biological performance standards and consistent stormwater regulations. For example, Virginia's are based on phosphorus reductions which is different than other states. Additionally, further explanation is needed for the recommendation to establish a land management endowment to support financial standards and assurances. How does the endowment provide financial assurance, what does it look like, and who provides the assurance? I was very pleased to see Maryland's Trust Fund mentioned as a case study when discussing performance-based financing. Maryland will continue to make strides towards leading by example and "thinking outside the box" when it comes to improving the Chesapeake Bay. We can get there much sooner by knowing the right ways to engage the private sector, fully utilize local leadership, and keep moving towards building new partnerships.</p>	
Joanne Throwe, MD Dept of Natural Resources	8/19/2016		
Core Recommendation 4: Reduce Unnecessary Transaction Costs			
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	<p>Pages 13 and 16 talk about adopting standard procurement practices across all Bay states, expediting permitting, and removing barriers. These are highly improbable goals. The report needs to provide more concrete recommendations to support their feasibility. The report does not suggest this, but the only idea that comes to my mind would be to adopt federal procurement and permitting standards, but that would probably add even more barriers.</p> <p>Procurement and permitting are addressed further in Recommendation 5: Reduce Unnecessary Transaction Costs. The suggested approach calls for establishment of a Task Force and development of a "Guidebook" for procurement issues and the identification of specific programmatic options for removing unnecessary permitting delays. As stated above, we have concerns about any recommendations to establish task forces. Barriers are fairly well known and a Guidebook may not be of as much value as specific recommendations for legislation. Perhaps it would be more advisable to recommend securing the services of a group such as the Chesapeake Legal Alliance to undertake the necessary steps to identify legislative actions that could improve the efficiency of local procurement processes.</p> <p>Consistency in permitting is also mentioned. Consistency is not a one size fits all, and some of the recommendations appear too simplistic.</p>	<p>Edited this section to be more clear about what we are recommending, which is consistency and predictability within local procurement and permitting processes. Jurisdictions don't all need to have identical processes; private firms just need to clearly understand what is expected of them.</p>
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016		<p>We incorporated this feedback, almost verbatim. Incorporated recommendation to engage Chesapeake Legal Alliance.</p>
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016		<p>We reworked this section to be more precise and specific.</p>

Ann Swanson, on behalf of Chesapeake Bay Commission	7/27/2016	<p>“unnecessary permitting delays.” The examples of a fast track initiative from Tallahassee, Florida are already incorporated into many Bay-region regulatory programs; therefore, the reader would benefit from a more thorough vetting of this matter. Fast-track permits, such as Clean Water Act general permits and state programmatic general permits, are available to provide regulatory efficiency while also ensuring program compliance. General permits shrink review timelines by reducing or eliminating public engagement so, therefore, are designed to authorize only limited resource concerns and clearly-defined project scopes. Suggestions in the report to fast-track “permitting guarantees” or “any project with state of the art water quality technology,” warrant considerably more detail and further input from the public sector. We believe the state jurisdictions are best equipped to identify any “unnecessary” permitting delays and appropriately engage their citizens, the private sector, local governments, and other stakeholders to identify possible resolution of inefficiencies. Perhaps the report could suggest that this action be taken by each state. While streamlining the permitting process, as the report recommends, may be reasonable and helpful, in our experience it is often a lack of staffing and budget challenges that delay permitting. Moreover, on Page 17 Next Steps, 2nd Bullet, the recommendation is to fast track permitting for “any project with state of the art water quality technology”. The mere presence of state of the art technology in a practice does not necessarily mean it will deliver water quality pollution reduction effectively and efficiently. Furthermore, states and local governments will likely only want to approve practices that they can get credit for in the Bay computer model and that align with the BMP verification protocols and principles. Fast-tracking permitting if feasible in a locality should be limited to the practices already recognized with a credible and verifiable BMP efficiency for inclusion in the Bay Model.</p>	<p>Edited this section to emphasize that each state is in the best position to identify barriers and therefore should lead the effort to reduce them. Also cited within the report a portion of this feedback re: fast-track permit options.</p> <p>These are excellent points. Perhaps the permit standards should include a provision for adequate staffing. We recognize that the process for establishing these standards may be difficult, but that does not diminish the importance of the standards.</p>
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016		

Core Recommendation 5: Facilitate the Flow of Capital Through Innovative Institutional Structures

Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	<p>Recommendation 4 is to facilitate the flow of capital through innovative institutional structures. Do the SRF and CWRP not already serve this function now? The recommendation is predicated on the establishment of water quality credits, which has already been recommended, but may not be realistic as recommended. Also, there is no discussion of how this would work in local government, who undoubtedly must shoulder a majority of the financial burden of meeting water quality commitments.</p>	<p>Mentioned SRF and CWRP programs and explained why these are often different than what we are recommending here. Added a footnote explaining that these structures are not dependent on a credit system being up and running.</p>
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Theme-Specific Recommendations: General

Ann Swanson, on behalf of Chesapeake Bay Commission	<p>that provide exciting new approaches to financing Chesapeake Bay restoration. We urge the Center to further expand on the 1) pay-for-success or social impact bond investment models; 2) establishing nutrient stormwater banking programs; and 3) advancing public-private partnerships where appropriate. Providing specific case examples, lessons learned, available toolkits, and guidance on initiating these approaches would be very well received. Learning from the experiences of Bay state and local jurisdictions would be ideal. 2. Additionally, providing an exploration of opportunities to assist small localities with access to water quality loans, as mentioned at the Chesapeake Bay Commission meeting in May, would be very helpful. With the benefit of additional detail, we believe these items present potential options for consideration by the Principals' Staff Committee. In fact, if acted upon, they provide real fodder for future symposiums that could better focus the attention and input of the private sector.</p> <p>7/27/2016</p> <p>What may also be doable is to focus on pilot projects that demonstrate implementation of the theme-specific recommendations. Further definition and explanation as to what these options are would be needed for an audience of state policy makers who may not have the necessary finance background to fully implement one or more of these concepts. Each state could then explore which concepts might work best within their state, provided the additional support and resources were provided to assist in the development and implementation of a pilot project. Keep in mind, not every state will want to do this; so do not mandate that all states try this. The development of examples, case studies or toolkits that the states could use to implement one of these options should also be considered.</p>	<p>Draft 2 fleshed out these recommendations with case studies and reference to additional available resources. We completely support "additional guidance on initiating these approaches" plus "an exploration of opportunities to assist small localities with access to water quality loans," but that was outside the scope of this project.</p> <p>We agree that it would be great to have further explanation of these strategies as well as guidance on how to implement them, but that was outside the scope of this report.</p>
Veronica Kasi, on behalf of PA DEP	7/29/2016	

Theme Recommendation 2: Stormwater Banking

Hamid Karimi, Dept of Energy & Environment, District of Columbia	<p>The description of how the stormwater bank system should tie to stormwater utility fee discounts is confusing. It appears the discount will be promoted as a reward or bonus for installing practices that participate in the bank system. One section says the fee discount is not much of an incentive on its own, which contradicts with other sections that make it sound like a reward. Page 23 indicates that practices installed for stormwater banking will be permanent, and page 24 says they will provide a permanent benefit. Permanent BMPs are not practical in urban areas where properties change ownership frequently. Also, permanent installations would not enable site owners to take advantage of the innovative solutions other sections of the report indicate will be developed over time. Page 23 proposed off-site stormwater fee credits. Essentially, this seems like a combined SRC/RSR program where the government and/or a nonprofit partner install BMPs and sell credits to properties who receive discounts on their stormwater fees. This might create some confusion given that in the District we have both a stormwater fee discount program and a credit trading program. They go into fairly large amount of detail in essence it seems like they're trying to suggest the SRC program but only came up with SW fee discounts as a reason a property would purchase the credits (rather than compliance with other</p> <p>7/25/2016</p>	<p>We had already been working to improve on the first draft of this section and believe that Draft 2 deals with the issues Hamid raises.</p>
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Task Forces / Financing Advisory Board

Ann Swanson, on behalf of Chesapeake Bay Commission	7/27/2016	While we did hear passing mention of this concept, we did not witness robust conversation or consensus on this approach. Thus, we cannot concur with the creation of a "Financing Advisory Board," staffed by the Budget and Finance Work Group. For one, we do not understand the role of a "board" in the Program. The Bay Program has just created the Budget and Finance Work Group. We recommend that the Group work to accomplish its near-term tasks before expanding in scope or composition. Additionally, the funding needed to maintain a "Financing Advisory Board," as well as the two additional work groups recommended in the report, may divert critical and limited resources needed by the jurisdictions and the GITs, particularly during the mid-	Made more clear that recommendations contained in report were not unanimously agreed upon by all Symposium participants. Clarified wording re: recommendation to establish a Finance Advisory Board to make the case for its purpose, but added that it is not the only option for continuing the dialogue.
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	point assessment and phase 3 WIP development ongoing into 2017 and 2018. We are concerned with recommendations to establish new task forces, such as the Project Permitting and Procurement Task Force, task force to establish basin-wide performance standards, and a Finance Advisory Board. Given the severe staff limitations of all involved in the Bay Program Partnership, the costs and benefits of adding to the CBP bureaucracy should be very carefully considered before acting on these recommendations. Should the idea of a Finance Advisory Board be further considered, local government representation is essential.	Removed suggestions to establish task forces, except for our central recommendation to establish a Finance Advisory Board. As above, acknowledged there may be other options but we feel this is an effective way to continue conversation and move toward implementation.
Charlie Stek, on behalf of the Citizens Advisory Committee to the Chesapeake Executive Council	7/27/2016	nutrient trading appear in the draft report as the two major recommendations of the Symposium. However, we do not recall the creation of a Finance Advisory entity being even mentioned during the conference in the sessions we attended. Second, it is not clear why the draft is calling for a new "Board" and why the existing Budget and Finance Workgroup cannot perform the tasks of the proposed Financing Advisory Board. Furthermore, the creation of a Financing Advisory Board is premature given we still do not know the aggregated cost of watershed restoration, nor the roles and coordination of each level of government, NGOs, and the private sector. We question how the Bay jurisdictions and public would view adding to the bureaucracy (and thus also the cost) of the Bay Program. We believe it would be prudent for the report to recommend undertaking the "necessary exercise" identified on page 5 of "estimating what the costs may be in the long term" before considering the creation a Financing Advisory Board.	We believe that the recommendation for establishing a Finance Advisory Board is firmly within the spirit of the Symposium conversation. Therefore, we stand by this recommendation.
Veronica Kasi, on behalf of PA DEP	7/29/2016	The creation of a Finance Advisory Board is unnecessary. Also, there are recommendations for the creation of a couple other task forces and workgroups. There are already enough committees, workgroups, task forces, implementation teams, etc. within the Chesapeake Bay Program Partnership. There is no need to create more groups to further divert existing limited resources to support those	See statement above.

Joanne Throwe, MD Department of Natural Resources	8/19/2016	<p>You mention a Chesapeake Bay Finance Advisory Board as a way to create a long term dialogue on financing issues. As a current member of EPA's Environmental Finance Advisory Board (EFAB), I see EFC's suggestion as something that should be strongly considered for the Bay. The impact of a group of experts coming together similar to EFAB to develop innovative financing recommendations would be a way to ensure that future action continues beyond this report. I can't speak to the suggestion of a financing board working with the National Mitigation Banking Association because I am unfamiliar with this group, but perhaps work groups coming together under this proposed Board to work on particular issues will help foster better collaboration and innovation</p>	<p>this recommendation was developed by EFC in response to the nature of the conversations that were captured in the minutes from each of the 12 breakout groups. We recognize that it was not explicitly discussed. Given the clear disconnect between the public and private sector on these issues (as is evident by the comments received related to this report) some type of formal engagement is essential.</p>
Beth McGee, Chesapeake Bay Foundation	8/25/2016	<p>p.12: "...the EFC recommends that the Chesapeake Bay Program create a Finance Advisory Board." As you know, CBF completely supports this idea, but it might be stronger (and smack less of being self-serving) if it reflects the outcome of the meeting, as opposed to what "EFC recommends"? e.g., "One of the recommendations from the Symposium was that the Chesapeake Bay Program create..." -- Just a thought.</p>	
Copyediting, Formatting, Etc.			
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	<p>Various input re: improving consistency of bulleted lists, reducing use of gerunds, reducing use of "we," etc. The report makes several unsupported assertions. For example, the last paragraph on page 19 [Economic Development] says that pilot projects are rarely embraced by leadership and decision makers. Then, the beginning of page 21 recommends a pilot</p>	<p>We made it clear before distributing the first draft that it was in fact a draft. That said, draft 2 cleaned up formatting and copy-editing issues.</p>
Hamid Karimi, Dept of Energy & Environment, District of Columbia	7/25/2016	<p>program. To declare that "the nature of public budgeting and spending is a major hindrance" is an affront to local governments whose major responsibility is prudent use of taxpayer dollars. Further, state legislation usually is required to make any changes at the local level.</p>	<p>We fixed this inconsistency.</p>
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	<p>we question the validity of some of the statements: (1) a) Comments do not give credit for the expenditure of public dollars from localities that 1) hire private experts to review and design projects, and 2) hire private contractors to build those same projects. It's not all private sector that pays for projects; local jurisdictions spend a lot of money on green infrastructure. (2) b) "The vast majority of investments in water quality are in the form of subsidies as opposed to regulation." If you consider the amount of funds invested in WWTP upgrades, which were done to comply with</p>	<p>We edited this sentence to better state what we mean and not cause unintended offense! we agree completely that it is the public sector that is investing the majority of the money for restoration activities. This is stated explicitly in the report. In addition, throughout the report, we tried to do a better job acknowledging the critical role of public funding for water quality restoration, while still keeping the focus on the report's goal of highlighting opportunities for engaging private funding.</p>
Brianne Nadeua, on behalf of Local Government Advisory Committee	7/27/2016	<p>regulation, this statement doesn't hold up.</p>	