

Chairman Brian Benham

Chesapeake Bay Program's Scientific and Technical Advisory Committee

SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEE

645 Contees Wharf Road, P.O. Box 28, Edgewater, MD 21037

Dear Chairman Benham,

Thank you for convening the March 2017 workshop and STAC report entitled, "Quantifying Ecosystem Services and Co-Benefits of Nutrient and Sediment Pollutant Reducing BMPs". The specific recommendations were received and reviewed by Management Board. Contained herein, you will find the responses to your recommendations and actions Management Board approved at their December 2017 meeting. Internal discussions have already begun to enact many of these recommendations.

We recognize this is was a very complex topic and appreciate the workshop participants' efforts to facilitate a shared understanding of ecosystem services or bonus benefits to implementing best management practices designed to improve water quality while providing meaningful value and services and serving multiple objectives in a community. We also recognize there is a valuation continuum that exists in trying to quantify these benefits that ranges from qualitative to quantitative to monetized benefits. With better understanding of these bonus benefits and their value, we too hope that local decision makers can leverage resources and meet needs in their communities. The prioritization exercise in the workshop helped to identify which best management practices are a priority, where we have information ready to go and where we have data gaps that would benefit from additional exploration both with experts and our stakeholders. All of this is extremely helpful as we seek to adapt our technical support and tools to serve our users now but also build a valuation framework that is flexible and responsive to new information and change in the future.

The Management Board agreed with the STAC recommendation to build upon the recent evaluation by Tetra Tech on effects of BMP implementation on each of the CBP's management strategies and to make the information more accessible and user-friendly, possibly by incorporating results directly into the CBP Partnership's Chesapeake Assessment and Scenario Tool (CAST). Management Board viewed this first action as low hanging fruit and agreed to: build upon the Tetra Tech report and the supporting spreadsheet; make the information more accessible and user-friendly; incorporate the qualitative results directly into the CBP Partnership's Chesapeake Assessment and Scenario Tool (CAST); and develop a matrix that crosswalks the full list of CBP-approved BMPs with our current best understanding of additional benefits to be used to prioritize further work on quantification of benefits besides water quality. This work will be handled by the Associate Director for Science in cooperation with the Associate Director for Partnerships and Accountability.

The Management Board also approved the recommendation to factor existing understanding of additional benefits into Partnership's documents, thereby agreeing to request Jeremy Hansen add in the forthcoming CBP Quick Reference Guide short narrative descriptions of the additional benefits to BMPs for those BMPs that the CBP Goal Implementation Teams have already identified additional benefits beyond nutrient and sediment pollutant load reductions.

The Management Board agreed that the Partnership should assemble the appropriate expertise to examine existing methods to quantify additional benefits. The outcome would be a proposed framework and approach by which the quantification of these and other future identified benefits from implementation of the BMPs could be measured and incorporated into Partnership's CAST tool. We intend to keep the CBP approval process for quantification of benefits simple and based on the BMPs, the respective lead Goal Implementation Team will be responsible for approving new additional BMP benefits prior to adding them to the CBP partnership's BMP benefits matrix and CAST. If the benefits are human health related, they would be assigned to the Water Quality Goal Implementation Team for review and approval. The Goal Implementation Teams will be working on a framework system for valuation with the Associate Directors, and intend to bring a recommendation back to the Management Board in the spring once additional outreach with stakeholders has been done in consultation with experts on ecosystem quantification.

The Management Board also agreed that targeted outreach efforts, listening sessions or focus groups should be held to solicit input from a broader array of stakeholders. Specifically, input is needed on the specific ecosystem services/additional benefits that are of the most importance/relevance to them; their recommendations for a more understandable set of terminology to be adopted and used by the Partnership; and feedback on the relative importance of identification versus quantification versus valuation across the range of priority benefits. We intend to seek input from broader set of stakeholders immediately and incorporate this outreach throughout the entire process. Part of that input will be sought in partnership with Local Government Advisory Committee. LGAC's plan to host roundtables (6 in VA during June-July, 8 in PA during April-May, and 1 on Delmarva) will really help us broaden input on what matters to local communities in terms of ecosystem services. These listening sessions are meant to help with Phase 3 WIP design, but of course would immensely help with our understanding of important values beyond Bay WQ held across the watershed. LGAC expects summary results would be available late summer of 2018.

After consultation with stakeholders and local officials, the Goal Team Chairs in cooperation with the Associate Directors for Partnership and Science will present a comprehensive game plan to institutionalize bringing additional benefits into the Partnership's decision support tools and systems supporting collaborative decision making. The Goal Team Chairs intend to bring a GIT funded project forward that starts with the outreach to stakeholders to find out what they care about, what they would use, whether it needs to be monetized and how they would use the information. Starting with the five priority benefits identified by the workshop members and approved by Management Board: ecosystem sustainability, hazard mitigation, recreation and aesthetics, drinking water and human health, the intended project would also ground truth the list of twelve outcomes Management Board and the jurisdictions identified as important considerations in WIP Phase III planning, evaluate them in comparison to the five priority categories identified in the workshop, and also see if any additional outcomes need to be quantified in some way. Further, the project would identify existing tools or expertise in calculating return on investment and quantification of the collective benefits - build off tetra-tech and WIP templates through CAST to develop a quantified co-benefits score (quantify the input deck based on the list), seeking to always keep the co-benefits valuation fresh in CAST and in use (living matrix) importantly reflect unintended consequences (negative benefits).

Again, on behalf of the Management Board, I can say we appreciate STAC's efforts to bring these recommendations forward, and will continue to work with you on the implementation and continued learning opportunities it provides.

Sincerely,

James Edward

Acting Director and Chair of Management Board