

THE PATH FORWARD

***Chesapeake Bay Program Response to
Chesapeake Bay Environmental Finance Symposium Recommendations and Final Report, August 2016
Response Report Date***

PURPOSE AND CHARGE

The purpose of this document is to respond to the charge of the Chesapeake Bay Program (CBP) Management Board (MB), and is the collective product of the Environmental Finance Symposium Report Action Team (AT).

The Charge: The Management Board will convene an action team that will include the members of the GIT 6 Budget and Finance Workgroup and other interested partners to propose a “path forward” regarding the recommendation in the report and the issues raised at the symposium. The action team will report to the Management Board by March 2017. The action team will seek input on priorities from the PSC and consult with symposium attendees and others with financing and environmental market expertise. (Appendix X)

In developing its proposed response and path forward, the Environmental Finance Symposium Report Action Team shall undertake, at a minimum, the following actions:

1. **Draft a plan and a “path forward”/schedule** for further analysis, studies, or other actions that may need to be taken by the CBP to address these recommendations over time Present the draft plan at the March 2017 Management Board Meeting and at the Spring 2017 PSC Meeting.
2. **Identify those recommendations that are most likely to benefit from a coordinated CBP partnership approach** vs. those that may be best addressed through separate actions by individual jurisdictions, agencies or other partners.
3. **Assess challenges of and opportunities** to support selected recommendations, including, but not limited to, cost, workload, and resource implications.
4. **Prioritize which recommendations should be acted on first** so that other responses can build upon those actions as well as any that can be pursued simultaneously.
5. **Consider short-term vs. long term actions** that may be taken to address each recommendation.
6. **Identify work being done by the CBP, our partners, and in other regions of the country** that may serve as models for others seeking to address recommendations.
7. **Identify which Goal Team, workgroup or other partner** within the CBP organization would take the lead in responding to recommendations. Also identify those actions that may require use of an external entity through use of a grant, contract or other vehicle.

BACKGROUND***Chesapeake Executive Council (EC) Resolution for Environmental Finance Symposium***

At the July 2015, EC meeting they resolved:

That the Chesapeake Bay Program, under the leadership of the Principals’ Staff Committee conduct a symposium on environmental financing within the next 12 months and report any findings and

recommendations at the next meeting of this council. That the symposium include representatives from federal, state and local governments, private capital firms, non-profit organizations, academic institutions and others. (Appendix X)

Environmental Finance Symposium, Report and Recommendations

On April 25---26, 2016, the Environmental Finance Center (EFC) at the University of Maryland, in collaboration with the EPA Chesapeake Bay Program (CBP), convened the **Chesapeake Bay Environmental Finance Symposium**. The event gathered more than 130 creative, successful leaders from diverse fields including finance, business, policy, and resource protection to discuss options for advancing a more market---like approach to achieving Bay restoration goals. Symposium participants engaged in robust and fruitful discussions, both during and following the event, and these conversations have provided the foundation for the analysis and recommendations for the final report issued in August 2016. (Appendix X)

The report recommendations were organized into one overarching recommendation to Create a Chesapeake Bay Program Financing Advisory Board, with five core recommendations and four theme recommendations.

The five core recommendations are:

1. Advance a Chesapeake Bay restoration economic development effort.
2. Create a credit-based financing system and market infrastructure, basin-wide.
3. Establish implementation and performance standards, basin-wide.
4. Reduce unnecessary transaction costs.
5. Facilitate the flow of capital through innovative institutional structures.

The four theme recommendations are:

1. Pilot pay for success investment models.
2. Establish proactive stormwater banking programs.
3. Advance public-private partnerships, where appropriate.
4. Incentivize commercial landowners to mitigate nutrient and sediment emissions.

Management Board (MB) commissions the Environmental Finance Symposium Report Action Team (AT)

In October of 2016, the MB provided the above stated charge to the AT.

The AT sought input on the priorities from the Principal's Staff Committee (PSC) who narrowed focus to three of the recommendations in the report for initial` action.

Those three priority recommendations, are summarized here, and discussed just below.

Core Recommendation #1: Advance a Chesapeake Bay restoration economic development effort.

Theme Recommendation #3: Advance public-private partnerships, where appropriate.

Theme Recommendation #1: Pilot pay for success investment models.

Remaining Recommendations

While the above recommendations from the EFC report have been prioritized by the PSC, the remaining recommendations are important steps towards meeting water quality goals for the Chesapeake Bay and may be implemented in the future. Many of the recommendations made in the report are interconnected, with some creating enabling conditions for others. For example, it would likely be necessary for implementation and performance standards to be established for a watershed-wide credit based finance and market system to be successful. Standards will also help to facilitate pay for success models and would further the restoration as economic development effort. Creating a credit based finance and market system for the watershed (Core Recommendation #2) is systemically transformational, integrating the currently separate state nutrient trading programs and restoration finance mechanisms. This would be a major shift, and potentially difficult, but was identified as being foundational to meeting Bay goals in an economical way. Establishment of a standard credit finance system for the watershed was acknowledged as being the most important component of Core Recommendation #2, and could be pursued independent of an integrated market or performance financing. A standard credit based finance system is an enabling condition for many of the other recommendations, including those being prioritized. It may not be necessary for the prioritized recommendations to be implemented, but it is likely that credit based financing would allow for greater success, particularly in engaging private finance.

Certain recommendations were determined to be most appropriately addressed at the scale of the states, rather than the Bay Program. In particular, the states would be best able to address reducing procurement costs (Core Recommendation #4), establishing proactive stormwater banking programs (Theme Recommendation #2), and incentivizing commercial landowners to mitigate nutrient and sediment emissions (Theme Recommendation #4).

Doing Things Differently

Harnessing the creativity of the business community is the best way to generate new ideas and successful business-private partnerships. To harness that creativity, government agencies may need to step away from a top-down approach of choosing projects and instead, provide seed funding or other incentives that entice businesses to generate solutions. The CBP can facilitate good decisions on business partnerships by giving decision makers (i.e., those with money to invest in business development) enough of a background in business and finance fundamentals so that they can evaluate alternative investments. Also, partners may want to invest in collaborations with business schools or environmental finance experts who can guide decision makers in creating successful programs and developing financing structures. Finally, the partnership can facilitate collaboration and coordination across jurisdictions to share knowledge gained or leverage multiple funding sources.

It is necessary to choose business investments wisely to avoid the pitfalls that uninitiated environmental groups have fallen into when they attempted business partnerships. In 2010, The Nature Conservancy endured a reputation-tarnishing scandal due to their business investment choices. An example close to home is explained by this quote from the Washington Post's special section on the scandal, "In Virginia, the Conservancy has invested in a number of for-profit businesses on the Eastern Shore: a bed-and-breakfast, an oyster-and-clam farm, an "heirloom" sweet-potato-chip operation, a seaside home development. The businesses failed, leaving a \$24 million debt." The take-home message is that partnerships need to be developed through due diligence and not through irrational exuberance.

THREE PRIORITY RECOMMENDATIONS***Core Recommendation #1: Advanced a Chesapeake Bay restoration economic development effort.***

Strengthen the linkage between the Bay restoration effort and the region's economy and economic development framework – a paradigm shift that views water quality as economic development. Three opportunities are identified: develop industries and products that are naturally linked with a clean and healthy Bay; target investment in BMPs that also support the local and regional economy; and local and state governments can create incentives to grow innovative initiatives that both generate revenue and function as restoration practices in and of themselves.

Examples of related and ongoing work being implemented in the Chesapeake Bay watershed include the following.

- IMPLAN (Impact Analysis for Planning) data exists for economic impact modeling/jobs created for the financial investment sector. These types of analysis can be run or modeled for any segment of the Chesapeake Bay Watershed.
- Prince George County, Maryland, and Corvias established a partnership that is an excellent example that local governments can replicate of how to structure public-private partnership programs. This example demonstrates how local governments can encourage business participation by demonstrating a willingness to 1) lower barriers to entry, 2) minimize costs of doing business, and 3) generate a steady income stream (e.g., by imposing fees). The government agencies can get more per dollar spent by removing barriers that create inefficiencies or hinder innovation. (Appendix X)

Theme Recommendation #3: Advance public-private partnerships, where appropriate.

A P3 is a “contractual arrangement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public.”

Examples of related and ongoing work being implemented in the Chesapeake Bay watershed include the following.

- Maryland Chesapeake and Atlantic Coastal Bays Trust Fund engaged in a P3 (Public-Private Partnership) **ELLIOTT** – PLEASE PROVIDE A SENTENCE DESCRIPTION.
- US EPA Region 3 published a guide for local governments titled, “Community Based Public-Private Partnerships (CBP3s) and Alternative Market-Based Tools for Integrated Green Stormwater Infrastructure”. (Appendix X)

Theme Recommendation #1: Pilot pay for success investment models.

A social impact bond, also known as a pay for success contract, is an agreement between a public agency and a private firm, in which a commitment is made to pay for improved social outcomes that result in public sector savings.

Examples of related and ongoing work being implemented in the Chesapeake Bay watershed include the following.

- PENNVEST identifies possible avenues to identify funding opportunities for Bay restoration in activities that simultaneously improve water quality as well as generate revenues. PENNVEST is exploring a fresh water mussel hatchery that will yield product to be sold in both Delaware and Chesapeake Bay watershed, revenues generated will be for funding restoration. Additionally, PENNVSET has been investing in revenue-generative riparian buffers. The buffers are part of the Pennsylvania best management practice or BMP commitment to reduce pollution; these switchgrass buffers can be harvested as a revenue generating crop. (Appendix X)
- Pay-for-success learning hub, includes an assessment tool for governments to evaluate readiness to implement these programs. The learning hub is located at <http://www.payforsuccess.org/>

ACTION ITEMS LIST AND PROPOSED RESPONSIBLE LEADS FOR EACH

Short-term (12 to 18 months)

Action: Identify and develop implementable business cases for revenue-generating Bay restoration activities.

(Core recommendation #1)

Lead: University-based business administration or related entities that have the personnel, resources and expertise to engage the various business communities in the Bay jurisdictions. One such entity could be identified as the sole lead or a partnership among several could be the lead entity.

Purpose: The chosen lead entity would be charged with identifying activities that can potentially generate financially self-sustaining revenues while simultaneously contributing to Bay restoration. One example of this would be riparian buffers that generate revenues from crops grown on the buffers while simultaneously reducing nutrient discharges into the Bay watershed. The revenues generated would have to cover both initial investment expenses as well as on-going operation and maintenance. Among the tasks that the lead entity would undertake to accomplish this mission would be to:

- Engage the USDA and other potential sources of data to help build business cases
 - Look for models or pilots elsewhere in the U.S. or internationally to identify revenue-generating water quality benefitting activities
 - Involve Bay state departments of commerce and chambers of commerce to identify industries within their states that could either benefit financially from Bay restoration or generate revenues from Bay restoration activities, or both simultaneously
 - Consult with economic development and education professionals to determine what, if any, business climate and workforce development needs should be addressed to foster this effort
- Ultimately, the lead entity would be charged with identifying and developing defensible business cases for investment opportunities that would lead to Bay restoration.

Priority level: High

Action: Quantify the economic impact of water quality capital investments, including projects funded by grants.

(Core Recommendation #1)

Lead:

Purpose:

Priority level:

Action: Evaluate statutes in each state to determine current authority for PPP projects addressing water quality, stormwater and related issues. Identify existing successful partnerships and discuss with them the pros and cons, including their advice for what to avoid/potential issues and lessons learned. Pros and cons may be directly linked to the underlying statute as well as any contracts developed pursuant to those statutes.

(Theme Recommendation #3)

Lead:

Purpose:

Priority level:

Action: Categorize potential private entities and see if there's any area to focus this effort. Further explanation of this is necessary. This focus should be on water quality practices, particularly in urban areas.

(Theme Recommendation #3)

Lead:

Purpose:

Priority level:

Action: Compile successful pay for success pilot project case studies from across the country. Undertake similar pay for success pilot projects or efforts in the Chesapeake Bay Watershed (buffers or similar approaches).

(Theme Recommendation #1)

Lead: Budget and Finance Workgroup of Goal Implementation Team 6 of the Chesapeake Bay Program

Purpose: Expand the pay for success model into standard practice more broadly through the watershed.

Priority level: Medium

Intermediate (1.5 to 3 years)

Action: Identify options for leveraging grant funds for increased capital investment / economic impact.

(Core Recommendation #1)

Lead:

Purpose:

Priority level:

Action: Create enabling conditions for engaging private finance in Bay restoration by developing a standardized water quality credit system for the watershed. This could be done by the CBP BMP Verification Review Panel and STAC.

(Core Recommendation #1)

Lead: STAC (Science and Technical Advisory Committee to the Chesapeake Bay Program)

Purpose: Build a watershed-wide water quality credit system into the routine verification operations for the CBP.

Priority level: Medium

Action: Municipalities need to more fully assess local capacity and gaps, and identify remedies for future action adaptive iterations of the Chesapeake Bay Management Strategies and Biennial Plans.

(Theme Recommendation #3)

Lead: LGAC (Local Government Advisory Committee to the Chesapeake Bay Program)

Purpose: Undertake the baseline analysis to understand local capacity and gaps, and build into the CBP strategies, actions, and timing to address that identified.

Priority level: High

Action: Pilot Project: Nutrient purchase (\$/pound) as a commodity for cash, in lieu of funding the BMP

(Theme Recommendation #3)

Lead: Maryland Department of Environment

Purpose: First in Maryland, pilot the use of nutrient and sediment load purchases at a lower cost/lb than using grant funds for higher capital cost BMPs. Measure success by evaluating growth of private equity investments in Bay restoration and decreasing cost per pound over time.

Priority level: High

Long-term (>3 years)

Action: Measure overall metrics of success for the following.

- Growth of private equity invested in Bay restoration
- Decreasing cost of pounds of nutrients reduced over time
- TMDL goals being met at or below cost projected
- Other programmatic goals met in timeframe projected

(Core Recommendation #1, and Theme Recommendations #1 and #3)

Lead: CBP, perhaps using CBARA data

Purpose: Ensure that the decisions being made are yielding desired results in terms of watershed wide Bay restoration efforts.

Priority level: High

Action: Measure project specific metrics of success

- Goals of the project (nutrients reduced, etc.) are clear and status of the goals are regularly reported
- Project goals delivered at or below cost projected
- Private enterprise profits from exchange
- Synthesize factors of success or failure and amend funding programs using this information (adaptively manage)

(Theme Recommendations #1 and #3)

Lead: Bay Funders Network, Jurisdictions

Purpose: Ensure that the success or failure of individual projects and the driving factors of either result are being reported and used to guide the overall effort.

Priority level: High

APPENDICES

1. Recommendations Matrix with List of Contributing Organizations
2. Public Private Partnership STAC one-pager
3. "Community Based Public-Private Partnerships (CBP3s) and Alternative Market-Based Tools for Integrated Green Stormwater Infrastructure"

4. PENNVEST examples on fresh water mussel hatchery and revenue-generating riparian buffers
5. Action Team Charge and Report Summary in Brief, October 2016
6. Action Team Membership
7. Chesapeake Bay Environmental Finance Symposium Recommendations and Final Report, August 2016
8. EC Financing Resolution - 2015 #2