



# Environmental Finance Action Team

Final Report – *“The Path Forward”*

October 25, 2017



## BACKGROUND

At the **July 2015 Executive Council meeting**, it was resolved that the Chesapeake Bay Program would conduct a symposium on environmental financing and report any findings and recommendations at the next meeting of this council.

In April 2016, the Environmental Finance Center at UMD, in collaboration with the CBP, held the **Chesapeake Bay Environmental Finance Symposium**, which provided the foundation for the analysis and recommendations for the **final report issued in August 2016**.

In October 2016, the Management Board convened the **Environmental Finance Action Team**, and charged the team with proposing a “path forward” regarding the recommendations in the report, with input from the Principals’ Staff Committee, symposium attendees, and others with financing and environmental market expertise.

## ACTION TEAM MEMBERS

Name	Organization
Jag Khuman, Chair (retired)	Maryland Department of the Environment
Jim Edward, Vice Chair	U.S. Environmental Protection Agency
Julie Winters, Coordinator	U.S. Environmental Protection Agency
Emily Freeman, Staff	Chesapeake Research Consortium
Greg Allen	U.S. Environmental Protection Agency
Gayle Barry	USDA Natural Resources Conservation Service
Russ Baxter	Virginia Office of Natural Resources
Sheila Besse	District of Columbia Department of Energy & Environment
Dr. Elliott Campbell	Maryland Department of Natural Resources
Kari Cohen	USDA Natural Resources Conservation Service
Mary Gattis	Alliance for the Chesapeake Bay, LGAC
Hayley Jeffords	Pennsylvania Department of Environmental Protection
Paul Marchetti	Pennsylvania Infrastructure Investment Authority
Lisa Wainger	University of Maryland Center for Environmental Science, STAC

## ● THE PROCESS

● The Action Team first conducted an exploratory analysis of all ten recommendations in the symposium report (**Appendix 4 – Environmental Finance Recommendations Matrix**).

● **The PSC identified three priority recommendations for the Action Team to focus on** in its report: Core Recommendation #1, Theme Recommendation #3, and Theme Recommendation #1 (Appendix 1 – Finance Symposium Report Summary).

● **The Action Team developed a draft report in March 2016** outlining short (12-18 months), intermediate (1.5-3 years), and long-term actions (>3 years) for the three priority recommendations, as well as examples of existing related work from throughout the watershed.

## ● THE DRAFT REPORT

● The Draft report was reviewed and **comments received from members of the Management Board and Principal's Staff Committee in Spring 2016.**

● **Final report was prepared for May 2017** Principal's Staff Committee meeting approval.

● **Report put on hold** until after 2017 Executive Council meeting.

# Appendix 4: RECOMMENDATIONS MATRIX

Action Team Working DRAFT

March 21, 2017



## Chesapeake Bay Program Environmental Finance Symposium Recommendations Matrix

Core Recommendation #1: Advance a Chesapeake Bay restoration economic development effort.					
Partnership vs. Individual Approach?	Opportunities	Challenges/Barriers (ex. cost, workload, resource implications)	Action Item(s)	Existing Related Work (internal, external)	Responsible Entity (ex. GIT, Workgroup, other partner)
Partnership	<p>EPA and jurisdiction green infrastructure programs - green streets, green jobs</p> <p>Analyze current CBP BMPs to determine how they can support local and regional economies, including multiple benefits</p> <p>Since revenues for clean-up activities are hard to come by, and the need is great, we should look to alt. ways of bringing in financial resources. Identifying ways that we could generate revenues while helping with Bay clean-up is crucial</p>	<p>EPA &amp; States help to eliminate regulatory barriers (e.g. waste-to-energy systems)</p> <p>Lack of consistency across state boundaries</p> <p>Need to add economic development experts into the PSC and/or State Finance Advisory Boards.</p> <p>Resources needed: Economists, universities, community colleges, EFC, State Economic Development Authorities, etc.</p>	<p><b>Short-term 12 to 18 months:</b> Quantify the economic impact of WQ capital investments including grants (MDE)</p> <p>Possible steps:</p> <ol style="list-style-type: none"> <li>1. Determine which grants will be evaluated.</li> <li>2. Establish progress for determining economic impact of spending of grant money including procurement, employment, and other economic elements.</li> <li>3. Determine reporting procedures (responsibility of grantee or grantor) (VA)</li> </ol>	<p>EPA G3 program and jurisdiction GI programs</p> <p>IMPLAN (Impact Analysis for PLANning) data exists for economic impact modeling/jobs created for financial investment by sector</p> <p>PG County and Corvias partnership is an excellent example of how to structure such programs. See attachment: "Elements of effective</p>	<p>Water Quality GIT</p> <p>Budget &amp; Finance Workgroup</p> <p>EPA Region III, with help from States and HQ</p> <p>Initial costs may be able to be offset by benefits realized</p>

## ● PRIORITY RECOMMENDATIONS

●  
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.



# Short-Term Actions

**12-18 months**



## ● Action Item – A

Recommendation(s) Addressed: Core Recommendation #1

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

- **Purpose:** Identify financially self-sustaining revenue generating activities, while simultaneously contributing to Bay restoration.
- **Proposed Lead:** Jurisdictions (through existing grant vehicles, e.g. CRC or similar) to access university business schools.

## ● Action Item – B

Recommendation(s) Addressed: Theme Recommendation #1

- Compile successful pay for success pilot project case studies from across the country. Share information through workshops, or other means, with organizations which may undertake similar efforts in the Chesapeake Bay Watershed.

- **Purpose:** Expand the pay for success model into standard practice more broadly through the watershed, where feasible.
- **Proposed Lead:** Budget & Finance Workgroup, in coordination with jurisdictions.

## ● Action Item – C

Recommendation(s) Addressed: Theme Recommendation #3

- Evaluate statutes in each jurisdiction to determine current authority for P3 projects addressing water quality, stormwater and related issues.
  - **Purpose:** To identify jurisdictions current authorities for P3 projects and lessons learned.
  - **Proposed Lead:** Budget & Finance Workgroup with support of EPA Region 3 and LGAC.



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## Intermediate Actions

1.5-3 Years

## ● Action Item – D

Recommendation(s) Addressed: Core Recommendation #1

- Create enabling conditions for engaging private finance in Bay restoration by developing a standardized water quality credit system for the watershed.
  - **Purpose:** Build a watershed-wide water quality credit system into the routine CBP operations to increase predictability of ROI for private entities. Critical element in advancing an economic development effort.
  - **Proposed Lead:** Budget & Finance Workgroup, in collaboration with jurisdictions and STAC.

## ● Action Item – E

Recommendation(s) Addressed: Theme Recommendation #3

- Undertake a Pilot Project using nutrient purchases (cost/pound) as a commodity for cash, in lieu of funding a BMP.
  - **Purpose:** Pilot the use of nutrient and sediment load purchases at a lower cost than using grant funds for implementing BMPs. Measure success by growth of private equity investments in Bay restoration and decreasing cost per pound (or ton) over time. Maryland plans to share lessons learned with the jurisdictions and other partners.
  - **Proposed Lead:** MDE



## Long-Term Actions

>3 Years

## ● Action Item – F

Recommendation(s) Addressed: All Priority Recommendations

## ● Measure project-specific finance metrics of success:

- Example: Project goals delivered at or below cost projected
- Example: Private enterprise profits from exchange
- **Purpose:** Ensure that the success or failure of individual projects and the driving economic factors of either result are being reported and used to guide the overall effort.
- **Proposed Lead:** Budget and Finance Workgroup, in coordination with the Bay Funders Network and jurisdictions.



## ● Action Item – G

Recommendation(s) Addressed: All Priority Recommendations

## ● Measure overall finance metrics of success:

- Example: Growth of private equity invested in Bay restoration
- Example: Decreasing cost of pounds of nutrients reduced over time
- **Purpose:** Ensure that the decisions being made are yielding desired economic results in terms of watershed wide Bay restoration efforts.
- **Proposed Lead:** Budget & Finance Workgroup

Thanks!

ANY QUESTIONS?

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