

Proposed Project Charge for Environmental Financial Advisory Board (EFAB) to the U.S. EPA to Identify Finance Metrics of Success

Identify project-specific and overall finance metrics of success to reduce cost inconsistency for private equity investment in water quality restoration.

Many examples exist across the country and world from the development of certified natural commodity markets, land conservations, public-private partnerships, among others; each having particular requirements and relative amounts of risk and reward for private investors. Economic development opportunities exist through the economic activity associated with restoration activities and financing methods. A better understanding of the methods and markets will help all watershed programs, including the Chesapeake Bay, in the United States determine the applicability to jurisdictions in advancing water quality improvement and restoration.

At the direction of the Chesapeake Executive Councilⁱ, the Chesapeake Bay Program, working through the Environmental Finance Center (EFC) at the University of Maryland, convened a symposium in April 2016, on environmental financing “to identify innovative approaches for leveraging or incentivizing private investment in Bay restoration and protection efforts.”ⁱⁱ The EFC developed and reported ten primary findings and recommendations resulting from the two-day symposium.

Several of the EFC’s recommendations pointed to the need to identify project-specific and overall finance metrics of success to reduce cost inconsistency for private equity investment in water quality restoration in the Chesapeake Bay watershed. The recommendations that lead the Chesapeake Bay Program to focus on the need for better finance metrics of success are as follows and have broad applicability to any watershed:

- Pilot pay-for-success investment models (Theme Recommendation #1).
- Advance public-private partnerships, where appropriate (Theme Recommendation #3).
- Advance a Chesapeake Bay economic development effort (Core Recommendation #1).

Uncertainty in how to consistently define risk in restoration investments was identified as the primary barrier to consistently engaging private finance in restoration practices. Establishing consistent metrics for projects, restoration success, and end goals will help to both better define and reduce risk associated with restoration investments. We believe the need to identify project-specific and overall finance metrics of success has much broader applicability to other watersheds in the United States beyond the boundaries of the Chesapeake Bay, which makes this project a perfect fit for the consideration of the Environmental Financial Advisory Board. We offer the Chesapeake Bay watershed as the test or pilot case to develop answers to the following study questions.

Questions/Issues that arise:

1. How does one ensure the success or failure of individual projects and the driving economic factors of either result are being reported and used to guide the overall water quality restoration efforts? To this end, develop metrics to measure project-specific finance metrics of success for the following:

- 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)
 - Tracking nutrients and sediment reduced in terms of credit system would aid in benchmarking cost performance of individual projects in relation to other similar restoration practices
2. How does one ensure the decisions being made are yielding desired economic results in terms of watershed-wide water quality restoration efforts by developing methods to measure overall finance metrics of success for the following?
- Growth of private equity invested in Bay restoration
 - Decreasing cost of pounds of nutrients reduced over time
 - Water quality goals being met at or below cost projected
 - Other programmatic goals met in timeframe projected
 - Creation of a standard water quality crediting system to aid in tracking costs for restoration practices over time and between jurisdictional boundaries and increasing the predictability of cost per nutrient reduced
3. Have restoration efforts translated to increasing economic benefits derived from the natural environment, i.e. ecosystem services?
- Recreational fishing participation rates
 - Commercial catch of indicator fish species (e.g., blue crab in the Chesapeake Bay)
 - Population assessment of sensitive species
 - Incidence rate of water borne illnesses

The EFAB work on these questions/issues would resonate anywhere across the county.

The Chesapeake Bay Program requests that the EFAB identify project-specific and overall finance metrics of success to reduce cost inconsistency for private equity investment in water quality restoration. More specifically, we request the EFAB to address the questions listed above, and add other related questions that may arise from the expertise of the board members. The results of this EFAB project would then equip watershed programs with the foundational metrics needed to advance economic development, including broader use of private investment in restoration and protection efforts.

ⁱ The Chesapeake Executive Council is comprised of the governors of Maryland, Pennsylvania, Virginia, West Virginia, Delaware and New York; the administrator of the U.S. Environmental Protection Agency; the mayor of the District of Columbia; and the chair of the Chesapeake Bay Commission, a legislative body serving Maryland, Pennsylvania, and Virginia

ⁱⁱ Chesapeake Bay Environmental Symposium Recommendations and Final Report, Environmental Finance Center at the University of Maryland, August 2016.