

## Chesapeake Bay Environmental Finance Symposium

### Preliminary Summary

May 26, 2016

**Introduction.** The following document provides an initial assessment of the Chesapeake Bay Environmental Finance Symposium, which was convened at the University of Maryland on April 25-26, 2016. Through this event, the Environmental Finance Center brought together more than 130 creative, innovative, and successful financing, business, and policy leaders to identify options for advancing a more market-like approach to Chesapeake Bay protection and restoration. The conversations, discussions, and debate that resulted from the Symposium will be translated into a suite of financing recommendations that will be forwarded to the Chesapeake Bay Executive Council later this summer.

**Background.** On July 23, 2015 the Chesapeake Executive Council issued Resolution 2015 #2, which directed the EPA Chesapeake Bay Program (CBP), under the leadership of the Principals' Staff Committee, to convene an Environmental Finance Symposium. The Symposium's intent was to address key restoration financing needs and issues in the Chesapeake Bay states, with a specific focus on developing policies and programs that effectively leverage and incentivize investment and implementation participation by the private sector. The Symposium was designed to be implemented within the year, and a report containing key findings and recommendations was to be delivered to the Executive Council at their next meeting in 2016.

**Discussion Themes.** The Executive Council's directive was very clear in that the primary focus of the Symposium was to be the interaction and engagement of the private sector, including the role of environmental markets in the Chesapeake Bay restoration financing effort. The decision to focus on this issue makes sense, given the magnitude of the restoration effort. It is unreasonable to assume that the Bay jurisdictions and communities have the capacity to achieve restoration goals without the engagement of citizens, businesses, and investors. Therefore, the overarching theme of the event was how the public sector—primarily state and local governments—can effectively engage and partner with the private sector. More specifically, the Symposium identified opportunities for scaling investment, creating financing efficiencies and cost reductions, reducing restoration financing risk, expanding economic development opportunities, and incentivizing innovation and new approaches to water quality restoration.

Ultimately, the goal is to provide public leaders across the Chesapeake Bay watershed with a clear and concise roadmap for establishing the enabling conditions necessary for creating effective public-private partnerships and market programs. With that in mind, the Symposium discussions revolved around six themes: reducing implementation costs; incentivizing

innovation; creating and expanding consumer demand for conservation and restoration; integrating public and private capital; mitigating investment risk; and, establishing water quality markets and trading programs. The conversations around each of the themes focused on the opportunities and barriers associated with creating more effective linkages between the public sector, the private sector, and the marketplace. The following is a description of each theme, as well as a summary of the associated conversations that took place around each.

**Theme 1: Reducing Implementation Costs.** Perhaps the most fundamental reason for engaging the market and private sector is to achieve restoration goals more efficiently and effectively. Market-based economies and financing processes are predicated on achieving goals in the most cost-effective manner possible. As a result, there is an opportunity throughout the region to maximizing the level of pollution reduction achieved per dollar invested. The forum identified the types of conditions that are necessary for market forces to function efficiently. As a starting point for the discussions, participants considered potential financing innovations such as pay-for-success or social impact bonds, as well as pay-for-performance financing systems.

Key discussion issues, topics, and goals:

- Identifying the market and finance strategies that have the highest potential for reducing costs.
- Focusing on innovative new policy and financing approaches, such as social impact bonds and pay-for-success programs.
- Incentivizing projects with demonstrated environmental or social outcomes.

Barriers:

- There is a lack of clarity associated with market and pay-for-performance financing systems that could be addressed with a common vocabulary.
- There is a need for a consistent approach to establishing ecosystem service value.
- The government's procurement procedures are often counter to efficiency efforts.
- The public sector's financing and implementation approach is often prescriptive rather than performance based.
- There is inconsistency in regulations and policies.

Solutions:

- Clarity of markets and common vocabulary:
  - Bring stakeholders together and get started, this process will develop language and trust.
  - Recognize that perceived failures can be opportunities for growth.
  - Track and disseminate examples and case studies.
- Ecosystem service evaluation and value:
  - Engage more professional accounting firms.
  - Engage a more diverse collection of players and stakeholders.
- Government procurement procedures:
  - Assess examples from national and international spheres and create a system of best practices.

- Establish adaptive processes and check points for managing and tracking implementation results.
- Public Sector allocation process:
  - Set and focus on standards rather than implementation goals.
  - Enable and incentivize governments to set a market-like playing field. This will require creating a better understanding of government’s role in the financing process.
  - Allow and incentivize industry to determine the most efficient implementation processes.
  - Move towards paying for performance as opposed to specific projects.

**Theme 2: Incentivizing Innovation.** The market forces that help reduce costs and create efficiencies also incentivize innovation. In fact, the push towards innovation in technology, financing, and production is one of the most important and beneficial aspects of market activity. However, driving innovation in an ecosystem restoration process is complicated by regulatory and policy dynamics. Therefore, the conversation in this forum focused on overcoming regulatory and policy barriers, thereby creating unique and effective options for financing and implementing restoration practices and programs. Specific discussion topics and potential financing innovations included using technology to accelerate restoration, as well as the use of formal public—private partnerships.

Key discussion issues, topics, and goals:

- The need for consistent regulatory and policy frameworks to promote more restoration innovation.
- The need for governments at all levels to incentivize and innovative technologies that can assist in the collection of data while at the same time directly engaging citizens in the restoration effort.

Barriers:

- Regulations prioritize outputs over outcomes.
- There is a language barrier among different disciplines and sectors.
- Venders experience significant contracting delays at all levels of government.
- Bureaucrats are often unnecessarily risk-averse.

Solutions:

- Regulating actual outcomes:
  - Develop metering and monitoring systems to track outcomes for all sectors.
  - Include the cost of monitoring in project cost estimates.
  - Provide financial incentivizes that encourage sustainability and cost-effectiveness.
  - Allow for flexibility; relax precision.
- Overcoming language barriers:
  - Push for financial literacy among environmental professionals and vice-versa.
  - Create mechanisms for cross-cultural, multi-discipline dialogue.
  - Establish a financial advisory group at the Chesapeake Bay Program.

- Bureaucratic delays:
  - Accelerate priority permitting – pipeline innovative, sustainable projects.
  - Minimize rigidity and provide requirements that allow for innovation.
  - Tie science into statutory, regulatory and funding decisions.
- Minimize risk to public service programs:
  - Allocate unspent funds for innovation.
  - Remove adverse consequences for risk-taking.
  - Review models and case studies for agency leadership on risk/innovation.

**Theme 3: Creating and Building Consumer Demand.** Though a market-like restoration system will be primarily predicated on effective regulations and policy, there are opportunities to achieve restoration goals by creating, building, and leveraging consumer demand. There are a number of opportunities for better positioning a healthy Chesapeake Bay watershed in the consumer marketplace through industries such as organic and sustainable agriculture, sustainable fisheries, recreation, and sustainable stormwater management.

Key discussion issues, topics, and goals:

- Identify new and innovative ways to build consumer demand outside of the regulatory process.
- Create processes to engage key industry sectors.
- Incentivize public recreation areas such as marinas, boat launches, and the like as opportunities to foster a public interest and investments into restoring the Bay.
- Focus restoration efforts that support the Bay's restoration and improvement.

Barriers:

- While sustainable fisheries, recreation, stormwater management, and agriculture all have their unique challenges, several themes emerged from the group discussions.
  - The individual culture of each of these sectors has inhibited the flexibility to act aggressively on a collaborative basis.
  - Public education limitations prevent the public from effectively engaging.
  - Uncertainty around costs, benefits and impact deter greater investment.
  - Deficiencies and confusion in labeling impedes market activity.

Solutions:

- Create a well-defined pipeline of locally-sourced products with proceeds returning to Bay restoration.
- Strengthen partnerships and communication around economic development and conservation.
- Prioritize natural asset management at the community level.
- Improve public awareness.

**Theme 4: Integrating Public and Private Capital.** Though it is clear that private investment and engagement will be necessary to achieve restoration goals, it is public investment that will drive the financing process. Linking and integrating public investment to the private sector and the marketplace will be essential for creating financing scale and efficiency. This forum focused on

potentially innovative approaches for maximizing the efficiency and effectiveness of existing financing mechanisms such as the State Revolving Loan Fund program. In addition, the conversation focused on how to improve the performance and effectiveness of state-based funding programs, which have the potential to invest billions of dollars in water quality practices and programs.

Key discussion issues, topics, and goals:

- Linking and integrating public investment to the private sector to create financing scale and efficiencies.
- Using the State Revolving Fund as a foundation for financing other water quality infrastructure needs.
- Linking public funding to performance-based outcomes in order to create efficiencies and reduce costs.

Barriers:

- There is a lack of scale necessary for efficient financing.
- Changing political environments and a lack of civic involvement and community outreach make it difficult to effectively link public and private capital.
- There is a need to educate legislators on private sector perspectives.

Solutions:

- Create a non-state entity to convene and bundle projects.
- Establish a special-purpose vehicle to specifically target water quality infrastructure investments.
- Identify high-level educators and conveners that could serve as a coordinating entity.
- Have the public sector act as an aggregator to create financing pools.

***Theme 5: Mitigating Investment and Implementation Risk*** Given the scale of the Chesapeake Bay Restoration effort, addressing financing and implementation risk will be important at all levels of government. The Symposium's goal was to identify options and opportunities for the public sector to leverage the capacity and innovation of the private sector to ensure the financial and physical performance of water quality investments. The Symposium's forums specifically addressed established risk-based institutional and financial mechanisms such as public—private partnerships and mitigation banking programs, and how those financing tools and processes can serve as the foundation for other innovative approaches for reducing the risk and improving the performance of water quality investments. As with the other issues addressed, the goal was to identify the enabling conditions that are necessary for establishing effective market-based risk mitigation programs and tools.

Key discussion issues, topics, and goals:

- Employing public-private partnerships to improve the quality and effectiveness of BMP operations and maintenance.
- Apply lessons learned from wetland and habitat mitigation banking programs.

Barriers:

- Local and state regulations do not enable innovative programs that can shift risk to the marketplace.
- Effective risk management is often blocked by traditional procurement processes.

#### Solutions:

- Create regulatory and policy templates that will enable market-based financing processes.
- Incentivize the application of public/private partnerships and other innovative risk reducing systems.
- Expand the use of mitigation banking type financing processes.

**Theme 6: Water Quality Trading and Environmental Markets.** Regulatory-based trading programs are perhaps the most discussed, debated, and potentially impactful financing system available to state and local governments. In spite of the significant attention these market systems receive, the level of market activity has been relatively low in many Chesapeake Bay jurisdictions, and nonexistent in others. This forum focused specifically on the potential benefit of trading and the necessary enabling conditions for bring these programs to scale.

#### Key questions and issues:

- Establishing the necessary framework to generate marketplace demand.
- Identifying the options and possibilities for applying mitigation banking programs in a stormwater or urban environment.
- Establishing standards for BMP construction and maintenance.

#### Barriers:

- The certainty of demand is in question.
- The local government procurement model is challenging.
- There is fear of litigation from the environmental community.

#### Solutions:

- Enable and incorporate trading and market programs into regulations and permits.
- Create clear and transparent rules that decisions can be made against.
- Establish publically-backed insurance policies and credit assurance programs.

**Conclusion.** This report provides an initial assessment of what was a very robust and diverse series of conversations addressing Chesapeake Bay restoration financing. The next step will be for the project team, and the experts who have given their time to make this process a success, to translate the results of the conversations into a set of clear, concise, and actionable recommendations that will help guide restoration financing into the future. Those recommendations, and the supporting report documents, will be delivered to the Chesapeake Executive Council later this year.