

# GREEN INFRASTRUCTURE OPPORTUNITY

## Environmental Impact Bond Services for Green Infrastructure Investments in the Chesapeake Bay Watershed

Deadline:  
October 31, 2017

### OVERVIEW:

### Green Infrastructure, Environmental Impact Bonds, and Opportunity

The Chesapeake Bay Foundation and Quantified Ventures will provide our services at no charge to up to four jurisdictions and will work with such jurisdictions to help with financing of green infrastructure projects. Jurisdictions will need to engage their own bond counsel and independent registered municipal advisor as well as an independent evaluator who will review project performance. See below for a full description of this project.

Green infrastructure is an approach to stormwater management that uses natural features—such as rain gardens, infiltration trenches, and green roofs—to absorb polluted runoff and divert it from city sewer systems. Many cities recognize green infrastructure's potential to meet stormwater management needs, as it is often less costly to implement than traditional infrastructure while providing numerous environmental, economic, and community benefits. However, it can be difficult to implement enough green infrastructure through traditional funding and procurement models to meet permits and other needs. Further, some jurisdictions are reluctant to invest in green infrastructure due to perceived uncertain results.

Environmental Impact Bonds use a Pay for Success financing approach that shares program risk with private investors. Private investors provide up-front capital for the project, and the payments from the public sector to investors may be adjusted based on the achievement of desired environmental outcomes.



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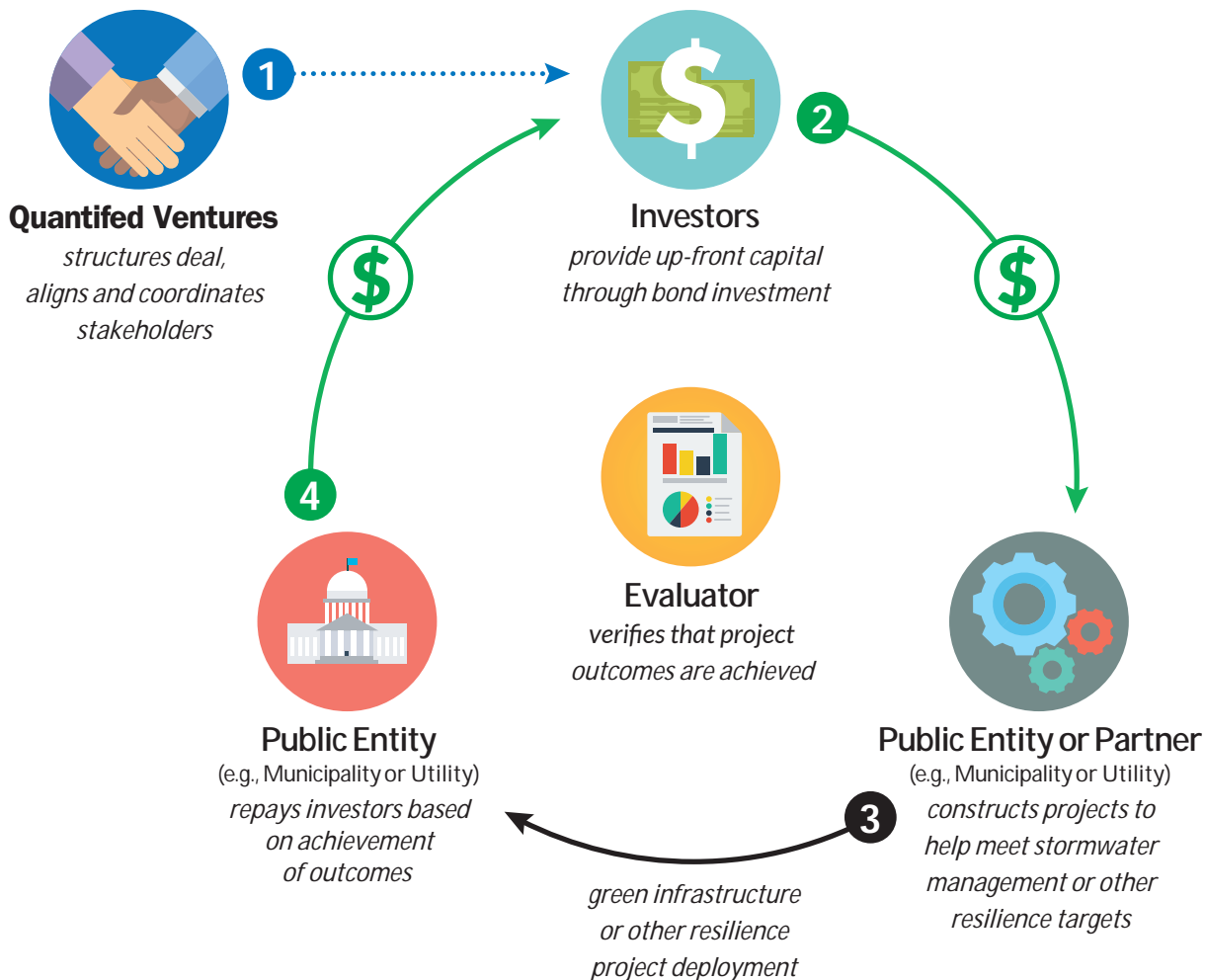
**Quantified  
Ventures**

# The Opportunity for your Jurisdiction

*Environmental Impact Bonds are a flexible mechanism that can be tailored to align investors' and jurisdictions' goals of deploying the most green infrastructure practices possible in a cost-effective manner.*

In this kind of financing:

1. Investors' returns are linked to green infrastructure performance. Better results equal higher returns, lower performance results in lower returns.
2. Environmental Impact Bonds work within existing procurement processes. Environmental Impact Bonds can be used within traditional (design, bid, build) models or innovative full delivery (design-build) procurement, and fund projects on public and/or private land.
3. Environmental Impact Bonds can be structured as bonds (general obligation or revenue) or a loan.
4. Environmental Impact Bonds can be structured to fit municipalities' finances. Institutional and local investors finance innovative green practices to meet sustainability and community investment goals. We will help municipal advisors identify investors.
5. Additional performance metrics can be included. Additional criteria such as local job and business creation, flood control, and climate resiliency can be part of the evaluation.



# CASE STUDY

## DC Water

Quantified Ventures worked with DC Water, which issued the first-ever Environmental Impact Bond in September 2016. Like many cities, Washington, D.C., had green infrastructure plans to meet its EPA consent decree, but was concerned about whether green infrastructure would deliver sufficient stormwater management benefits. With the Environmental Impact Bond, DC Water pays interest at a fixed rate, with three performance outcomes—underperform (investors receive principal and interest but pay a risk sharing payment to DC Water), outperform (DC Water pays investors principal and interest plus an outcome payment), and as expected (investors receive principal and interest but no additional payments are made by either party).

### SITUATION:

#### Green Infrastructure Performance Concerns

- Under consent decree with green infrastructure requirement, but wanted to pilot practices on 20 acres before broader deployment to gather performance data.
- Had projects ready to go, and wanted to draw on outside capital, but was concerned about taking on debt given the performance risk of green infrastructure.

### SOLUTION:

#### DC Water Issues \$25 Million Bond

- DC Water will pay for outcomes (performance of green infrastructure in terms of stormwater runoff). Different performance benchmarks set with help of QV and monitored by third-party evaluator.
- Goldman Sachs and Calvert Foundation invested \$25 million and agreed to share in the risk of nonperformance. Other than that, the Environmental Impact Bond looks like a normal bond for DC Water.

# The Chesapeake Bay Foundation and Quantitative Ventures

The Chesapeake Bay Foundation is a non-profit working with communities across the Chesapeake Bay watershed to save the Bay. CBF has helped several local jurisdictions undertake some of the work required under their municipal stormwater permits. Quantified Ventures is a leader in Pay for Success and recently worked with DC Water in its issuance of the nation's first Environmental Impact Bond for stormwater management through green infrastructure practices.

CBF and QV will select up to four municipalities within the Chesapeake watershed to work with us at no charge (except for the cost of their own advisors), to develop green infrastructure practices through funding with Environmental Impact Bonds or loans. Specifically, we will:

1. Help each municipality structure and participate in a green infrastructure program involving an Environmental Impact Bond/loan, in service to the locality's municipal stormwater permit or related needs;
2. Work closely with the municipality and its financial advisors, new investors, and regulators to accommodate local issues; and,
3. Demonstrate links to local job creation and other ancillary benefits (flood control, climate adaptation, neighborhood enhancement), as appropriate.



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## PROPOSAL EVALUATION CRITERIA

Applicants may propose a single or suite of projects for support. Proposals will be evaluated on:

- Implementation-Ready: Green infrastructure project(s) identified and planned.
- Jurisdiction Capabilities: Financial, engineering, and construction capabilities of applicant, demonstrated commitment to innovation, and buy-in from relevant stakeholders.
- Impact: Special consideration will be given to projects that serve disadvantaged communities, residents, and businesses.
- Project Size: Preference given to green infrastructure project(s) valued at \$3 million and above.

**Applicants must identify and engage their own legal advisors and independent registered municipal advisors.**

## APPLICATION PROCESS

Interested jurisdictions will go through the following process with CBF and QV:

1. Download full application with submission instructions at [cbf.org/eib](http://cbf.org/eib).
2. Attend introductory webinar about the program on September 14 or 21, 2017. For details visit [cbf.org/eib](http://cbf.org/eib).
3. Submit an application by midnight on October 31, 2017. CBF and QV will follow up with interviews and site visits with finalists.
4. Receive final decision in January, 2018. Work with QV and CBF will commence early in 2018.

## FOR MORE INFORMATION

QV and CBF are happy to discuss this opportunity with you in more detail. Please contact:

**Chesapeake Bay Foundation:**  
Lee Epstein, [lepstein@cbf.org](mailto:lepstein@cbf.org)

**Quantified Ventures:**  
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NEITHER CBF NOR QV IS RECOMMENDING ANY ACTION TO ANY MUNICIPAL ENTITY AND IS NOT, AND WILL NOT BE, ACTING AS AN ADVISOR OR FIDUCIARY TO ANY MUNICIPAL ENTITY. CBF AND QV ARE ACTING FOR THEIR OWN INTERESTS. MUNICIPAL ENTITIES SHOULD DISCUSS ANY INFORMATION AND MATERIAL CONTAINED IN THIS COMMUNICATION WITH ANY AND ALL INTERNAL OR EXTERNAL ADVISORS AND EXPERTS THAT THE MUNICIPAL ENTITY DEEMS APPROPRIATE BEFORE ACTING ON THIS INFORMATION.



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