



ENVIRONMENTAL FINANCE CENTER

GREEN FUTURES

September 2016 Edition

Dear Friend

After a busy and productive few months since our last newsletter, the EFC welcomes fall and the start of a new academic year on campus. This summer we completed some of our most important environmental finance projects, including the delivery of recommendations related to the *Chesapeake Bay Environmental Finance Symposium*, which was convened in April 2016. EFC also completed its water quality and resilience capacity assessment project in Annapolis, MD.

As usual, completed projects lead to exciting new opportunities, and we are excited about several new projects that will begin this fall. EFC has just started work on a four-year stormwater research project called the *Community-enabled Lifecycle Analysis of Stormwater Infrastructure Costs* (CLASIC). The CLASIC project will result in new models to assess the life cycle costs and benefits of green infrastructure stormwater practices. The project is being lead by the Water Environment Reuse Foundation (WERF), with engagement by other universities across the country.

By the very nature of our work at the EFC, we are constantly looking ahead to new issues and environmental finance needs across the region. To that end, we are expanding our climate change adaptation and resilience programing through the launch of our new **Resilience Collaborative**. The collaborative will work with urban communities across the region and the country to create the conditions that are necessary for incentivizing public and private investment in resilience infrastructure. Our goal is to enable communities to create to use resilience as a platform to more vibrant economic development and growth.

As always we appreciate your interest in our Center and we look forward to the opportunity to engage in the near future.

Dan Nees
Director

Agriculture Finance

[More info](#)

Air Quality

[More info](#)

Stormwater Financing
& Outreach

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Green Infrastructure

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Climate and Energy

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Sustainability

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Integrated Public-
Private Financing

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EFC-UMD IN THE NEWS

MOST Center launch

[Link](#)

EPA awards University
of Maryland six-year
grant to expand the
work of its EFC

[Link](#)

UMD Sustainable
Maryland certifies 12
municipalities

[Link](#)

EFC-UMD PUBLICATIONS

Financing Green
Infrastructure in Blair
County, PA

[Link](#)

Berkeley County Public
Service Sewer District
Stormwater Financing
Feasibility Study

[Link](#)



EPA staff members from Headquarters in Washington, DC, and Region 3 in Philadelphia joined EFC staff members on a tour of ECO City Farms

On September 22, EFC staff treated visitors from EPA regional and national offices to a guided tour of ECO City Farms, a non-profit urban agriculture organization with located in Prince George's County, MD. In addition to selling food at local farmers markets and through a CSA (Community-supported Agriculture) operation, ECO City Farms conducts educational programming onsite for local underserved communities. Farm staff gave us a tour of the hoop houses, composting operations, bee hives, and classroom facilities at their farm in Bladensburg. A highlight was the vermiposting operation, which harnesses the free labor of earthworms to transform food scraps from local elementary schools into rich compost for the farm's garden beds. For more information, check out www.ecoffshoots.org

CAPCOG TECHNICAL ASSISTANCE WORKSHOP IN HERSHEY, PA



Lead Planner Megan Lehman tells communities about how a collaborative approach is streamlining stormwater management in her community of Lycoming County, PA.

On August 30th, Alliance for the Chesapeake Bay, EFC, and the Capital Region Council of Governments kicked off a multi-year effort to deliver technical assistance to local governments in the area with a day long stormwater finance workshop in Hershey, Pennsylvania. More than 30 participants

Stormwater Financing Feasibility Study for Wrightsville Borough, Pennsylvania

[Link](#)

EFC 2014 Annual Report

[Link](#)

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represented municipalities throughout the Capital Region. EFC's Jen Cotting, a Research Associate for Green Infrastructure, led a session on developing financing strategies that include cost saving measures, revenue generating mechanisms, and market-based approaches. Following this, Donna Morelli from the Alliance facilitated a panel discussion where representatives from York and Lycoming counties spoke of their experiences in taking a collaborative, municipal approach to addressing stormwater and Hampden Township shared their story of developing a dedicated revenue stream for stormwater programming.

The workshop was preceded by an early morning dialogue on stormwater management for elected officials, and a second workshop is scheduled for October 2016. Following these events, project partners will begin a process of working directly with municipal staff and elected officials. The EFC's role will be to analyze local stormwater programming and develop recommendations for how to sufficiently, efficiently, and equitably finance water quality goals and requirements.

BALTIMORE COUNTY SETS GOALS WITH THE MSEC PROGRAM



On August 29, Baltimore County adopted ambitious energy generation and reduction goals as part of their participation in the Maryland Smart Energy Communities program. EFC's Sean Williamson was on hand as County Executive Kevin Kamenetz signed two executive orders. View the related county press release [here](#) and the Baltimore Sun article [here](#).

NFWF ANNOUNCES AWARD TO EFC AND ALLIANCE



The EFC is part of team lead by the Alliance for the Chesapeake Bay that the National Fish and Wildlife Foundation will award over \$700,000 to improve drinking water by advancing the implementation of agricultural best management practices in the Octorara watershed. This multi-year effort will focus on the Plain Sect community and includes partners at the Octorara Watershed Association.

MOST CENTER LAUNCHES NEW COURSE: STORMWATER FINANCING 101

EFC just launched **Stormwater Financing 101**, a new course in the Municipal Online Stormwater Training (MOST) Center. Developed by the EFC based on its experience providing stormwater management and financing



Municipal Online Stormwater Training Center

support to communities throughout the region, the course is designed to provide local leaders and their staff with an overview of mechanisms used to sustainably finance a stormwater management program. Topics such as cost reducers, revenue generators, engaging the private sector, and public education and outreach are introduced as valuable components of a long-term financing strategy. Participants will receive one hour of seat time and a MOST Center Certificate of Completion. Please go to <https://mostcenter.org/courses> to register for this and other MOST Center courses.

Be sure to look for additional online courses coming soon!

- Erosion and Sediment Control for Construction Sites - coming Fall 2016
- Asset Management for Stormwater - coming Fall 2016
- Green Infrastructure and LID 101 - coming Winter 2016

Potential partners interested in working with the MOST Center to develop new stormwater education or training products should contact the EFC at mostcenter@umd.edu.

CHESAPEAKE BAY ENVIRONMENTAL FINANCE SYMPOSIUM REPORT DELIVERED TO EXECUTIVE COUNCIL



Informed by the conversations during and following the Chesapeake Bay Finance Symposium convened by the EFC last spring, EFC prepared a report that distills the key findings and in September presented a set of recommendations for leveraging private sector engagement in the Bay restoration financing effort. The report focused on the enabling conditions necessary for incentivizing private investment, as well as the key opportunities for bringing water quality investments to scale in the

Chesapeake Bay region.

The draft report received comment by more than a dozen external reviewers, including private sector experts, and a final version was submitted on September 1 to the Chesapeake Bay Program Office and the Chesapeake Executive Council. This report will be shared with governors of Bay states (Delaware, Maryland, New York, Virginia, West Virginia) and the mayor of Washington, DC, at the next Executive Council meeting.

DECISION TOOL FOR COMMUNITIES TO ASSESS GREY, GREEN AND HYBRID STORMWATER INVESTMENTS

The EFC at University of Maryland is part of research team awarded \$1.95 million by US EPA to develop a tool that helps communities across the country assess options for investing in stormwater management. The project team comprises nonprofits, universities and EFCs, including Water Environment & Reuse Foundation, Water Environment Foundation, Colorado State University, University of Utah, and the EFC at Wichita State University.

Increasingly, communities are facing the difficult challenges of making costly investments to address aging water infrastructure in a complex regulatory setting. This project responds to those challenges by developing a decision

tool, called Community-enabled Lifecycle Analysis of Stormwater Infrastructure Costs - or CLASIC. CLASIC will utilize a lifecycle analysis framework to help communities compare multiple stormwater infrastructure options. Through a lifecycle approach, communities will be able to comprehensively assess and understand the dynamics of performance, costs and benefits over time between grey, green and hybrid approaches to stormwater management.

For more information about this project, contact [Naomi Young](#).

CHRISTINA WATERSHEDS PARTNERSHIP - PILOT COLLABORATIVE PROGRAM

The EFC is part of team that received a Delaware River Restoration Fund grant from the National Fish and Wildlife Foundation. One of twelve successful grant applications, the project is testing the feasibility and gains of small-scale, coordinated collaboration among multiple municipalities in the Pennsylvania portion of the Brandywine-Christina Basin. The basin is located southwest of Philadelphia, PA and straddles the Pennsylvania-Delaware border.

The project leverages existing work by nonprofit organizations and local governments with the aim of enabling regulatory obligations to be delivered at lower costs and demonstrating institutional arrangements that are relevant and viable to other municipalities. The pilot collaborations are organized around three dominant restoration landscapes (urban, suburban and agricultural) that represent areas throughout Brandywine-Christina Basin and the broader Delaware River watershed.

The EFC is excited to be a part of this project, working under the leadership of the Brandywine Red Clay Alliance and in partnership with the Chester County Water Resource Authority, Gaadt Perspectives, Delaware Water Resources Center at University of Maryland, Brandywine Conservancy, and White Clay Creek Wild and Scenic Management Committee.

For more information about this research, contact [Naomi Young](#).

SUSTAINABLE MARYLAND PROGRAM FEATURED IN MARYLAND MUNICIPAL LEAGUE MAGAZINE THIS MONTH



Attention Maryland elected officials and municipal staff: Keep an eye out in your mailbox for the September/October edition of the Maryland Municipal League Magazine, which is dedicated to the Sustainable Maryland program and features highlights of sustainability projects at the municipal level from all across the state of Maryland. This issue will be mailed to more than 2,000 elected officials and municipal staff this month, and in addition to the municipal profiles, will feature a handy resource guide to sustainability resources across a spectrum of topic areas. When it's published, you can find the magazine online as well at the MML [website](#).



In early November, EFC Director Dan Nees will discuss **New Models of Financing: Green Infrastructure Through Stormwater Fees & Credits** with other expert panelists at the **CitiesAlive: 14th Annual Green Roof & Wall Conference**. This Washington, DC event

will focus on stormwater management with technical sessions on policy, research, emerging technologies and design. For more information about this conference or to register, visit citiesalive.org.

The [Environmental Finance Center](#) at the University of Maryland works to equip communities with the knowledge, resources and leadership needed to empower decision-making that advances resource management priorities in an innovative and efficient way. Through direct technical assistance, capacity building, and program and policy analysis, we strive to move communities towards a more sustainable and resilient future.

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