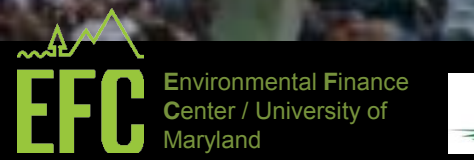
Welcome and Introductions

East Coast/West Coast Knowledge Exchange

February 11th, 2015

LA County Public Works Department



EFC

EFCWest

Environmental Finance Center West

DOMINICAN
UNIVERSITY
of CALIFORNIA
1890

DOMINICAN UNIVERSITY
of CALIFORNIA

greenMBA

SCHOOL OF BUSINESS & LEADERSHIP


Operational Categories
www.efc.umd.edu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Antes

Despues


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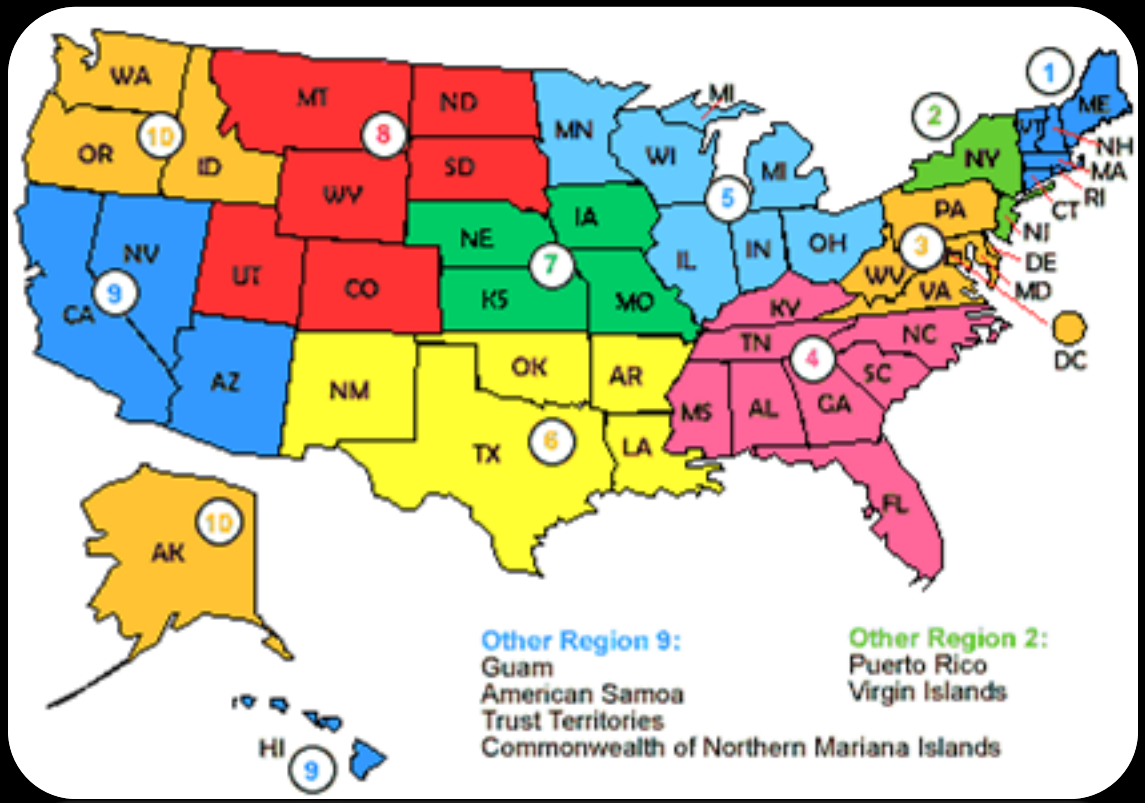
The EFC Partnership



Applying a financing lens across sectors . . .

- Technical Assistance
- Stormwater
- Green Infrastructure
- Agriculture
- Air Quality
- Climate & Energy
- Sustainability
- Program & Policy Analysis
- Sustainable Materials Management (SMM)
- Environmental Financing Boot Camps

The Environmental Finance Center

EFC

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Chesapeake Bay Watershed

- 64,000 sq. miles
- 6 states and DC
- 17 Million people
- Bay Proper: 200 miles long
- 11,684 miles of shoreline
- 1,800 local governments

Photo retrieved from EPA, www.epa.gov/chesapeakebaytmdl/

Effective & Innovative Stormwater Financing Strategies

Prepared by:
Brenton McCloskey & Monica Billig
Environmental Finance Center /
University of Maryland
www.efc.umd.edu

Local Perspective of Stormwater Challenges and Opportunities in California

Big Sur - photo courtesy of EFCWest

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Enabling Conditions for Stormwater Finance: EFC Mid-Atlantic Perspective

Lititz Borough, Lancaster County, PA

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Where Does It All Begin?

A comprehensive strategy

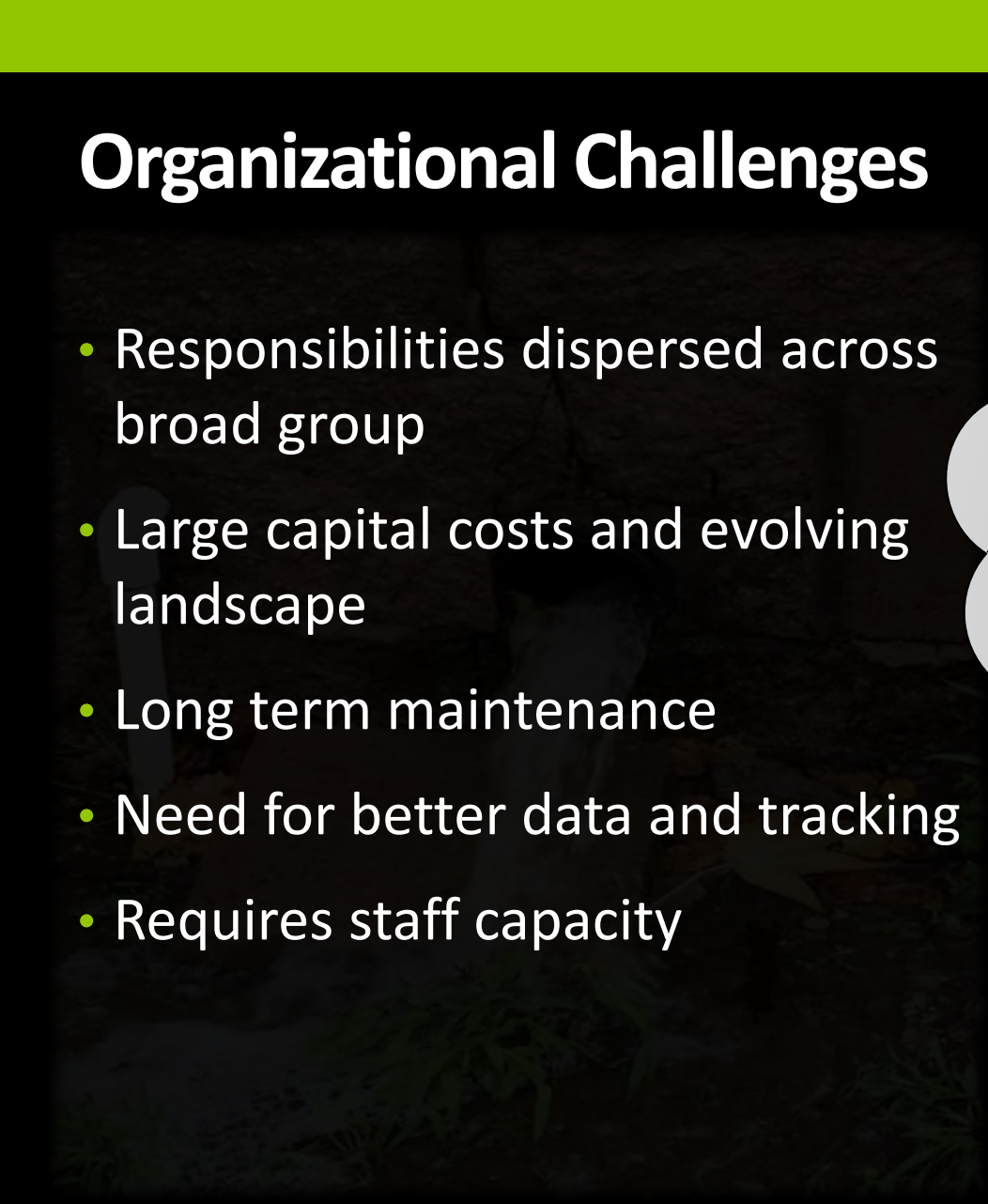
Make sure to…

- Estimate annually but plan for the long term
- Make program transparent and cost effective
- Get to know your system – above and below the ground
- Engage public early and often

Organizational Challenges

- Responsibilities dispersed across broad group
- Large capital costs and evolving landscape
- Long term maintenance
- Need for better data and tracking
- Requires staff capacity

Which of these challenges do you face? Which issues are most pressing?



Oakland, CA - photo courtesy of EFCWest

Political / Leadership Challenges

- Legislative

  CA Prop. 218; CA AB 2403; MD HB 987; PA Stormwater Authorities

- Water quality

  TMDLs

- Extensive stakeholder and public education/outreach

Yosemite National Park - photo courtesy of EFCWest

Stormwater Utilities in Recent Years

Western Kentucky University 2013 Stormwater Utility Survey

Number of SWUs Identified in Survey, 2007-2013

2007: 600+

2008: 923+

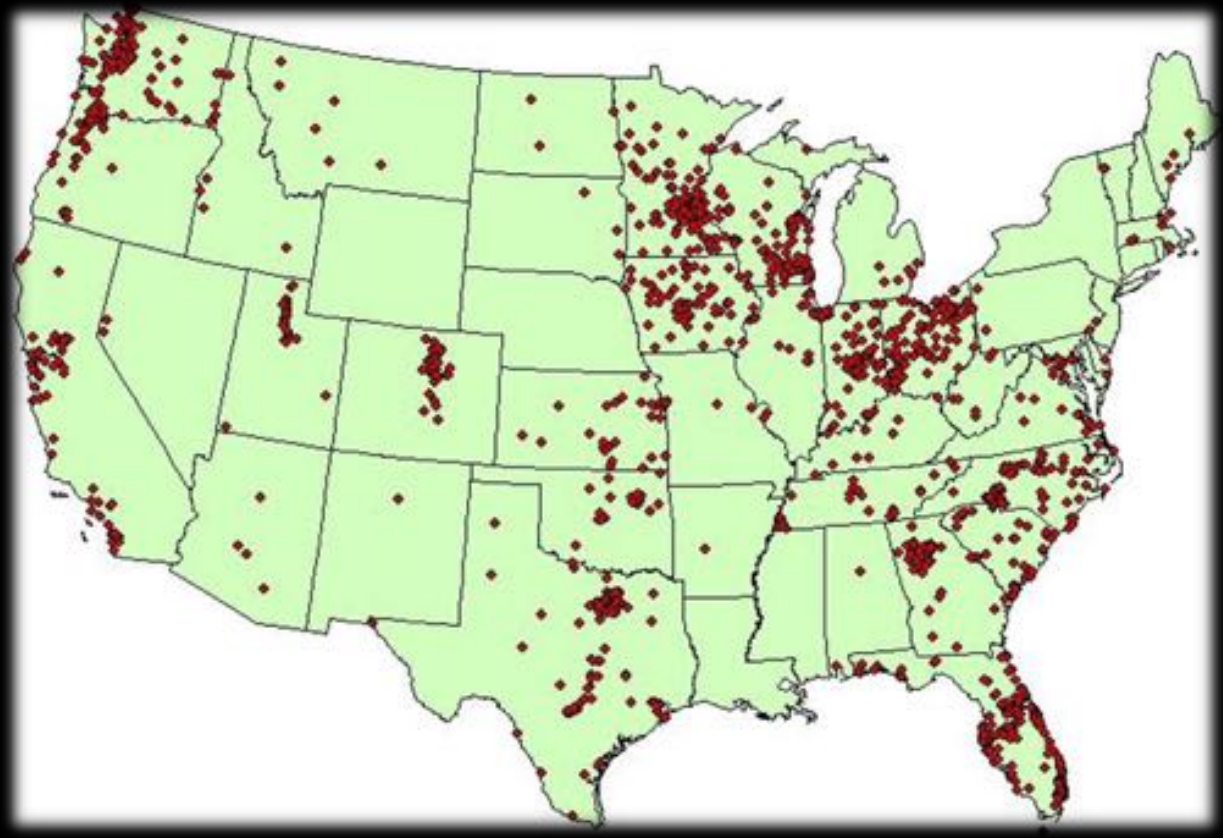
2009: 1,022+

2010: 1,100+

2011: 1,175+

2012: 1,300+

2013: 1,400+



Campbell, C. Warren (2013). Western Kentucky University 2013 Stormwater Utility Survey, Western Kentucky University, Bowling Green.

All Western Kentucky University Stormwater Utility Surveys can be accessed here: http://www.wku.edu/engineering/civil/fpm/swusurvey/

Stormwater Program Analysis and Development

1. Assess current stormwater program

2. Identify gaps in existing program and evaluate future needs

3. Determine where current program fits into level of service and evaluate costs

4. Develop and finalize proposed stormwater program budget

5. Develop a financing strategy to support budget

Develop outreach strategy and conduct outreach throughout steps 1-5

1 Assess current stormwater program

Bring together stakeholders, and identify:

- Community sentiment
- Political landscape
- Organizational capacity
- Regulated activities
- Local drivers
- Existing resources
- Existing relationships and partnerships

Local Drivers

Stringent regulations

2 Identify gaps in existing program and evaluate future needs

- Multiple community benefits
- Future resources (i.e. EIFDs)
- Partnership opportunities

Begin to conduct gap analysis for existing and future level of service (LOS):

Minimal → Medium → High

3 Determine where current program fits into level of service and evaluate costs

- Break down level of service by activity (by MCM, cost category, responsible entities, etc.)

What are your resource needs to implement the enhanced LOS?

LABOR
% FTE of existing staff
Hire additional staff
Contractors

OPERATIONS & MAINTENANCE
Software
Supplies
Equipment maintenance

CAPITAL
Equipment
Project identification
Land acquisition

4 Develop and finalize proposed stormwater program budget

- Budgeting for all stormwater-related expenses or only additional expenditures?

What are the individual line-item costs?

LABOR

OPERATIONS & MAINTENANCE

CAPITAL

5 Develop a financing strategy to support budget

- Identify funding source for each budget item

Some examples include:

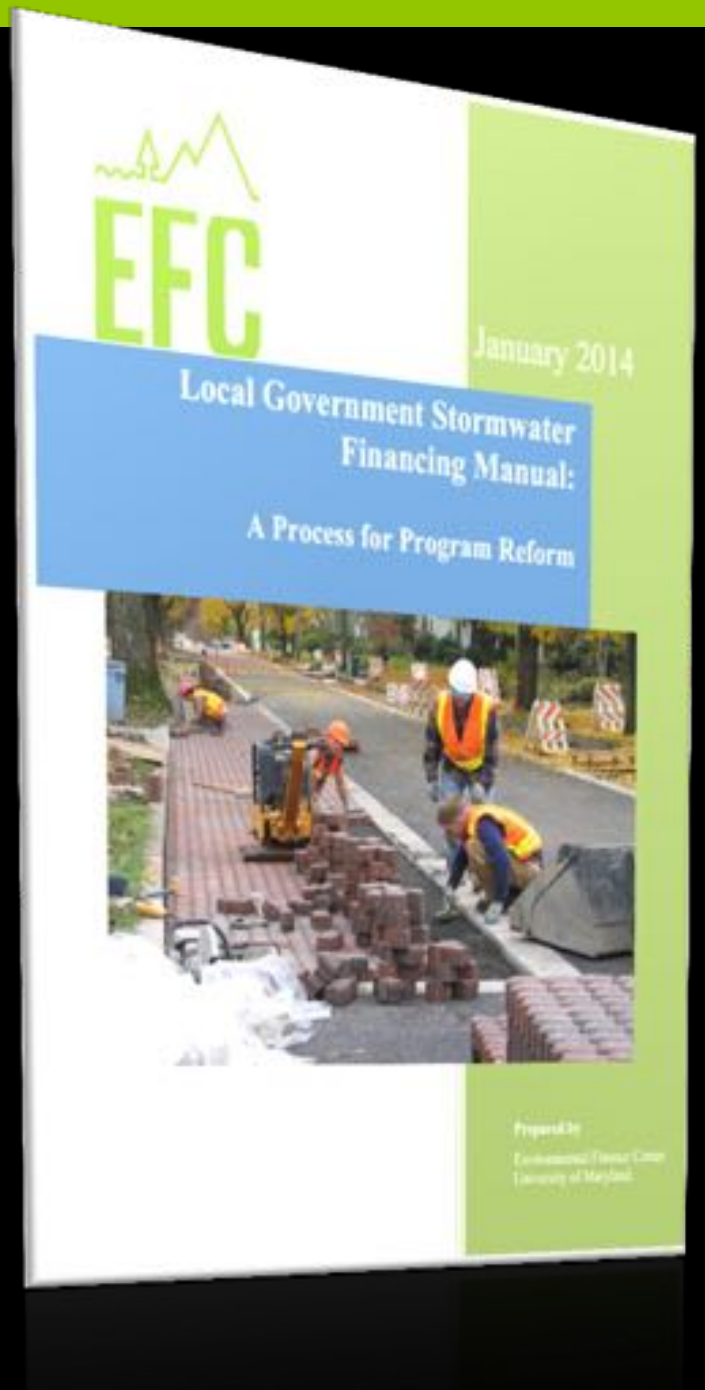
GENERAL FUND	STORMWATER FEE	GRANT (2015-2017)	CLEAN WATER SRF LOAN
Existing staff	Maintenance of existing infrastructure	Education and outreach	3 rain gardens
2 new public works staff	Long term maintenance of new BMPs	2 green demonstration projects	Replacement of aging infrastructure
Contracted engineer	Billing system	Asset management program	
GIS software	Debt repayment		

Importance of Community Outreach

- Build community support
- Implement demonstration projects
- Frame issues locally
- Target outreach to identified stakeholders
- Partner with local stakeholders

What are some examples of successful outreach activities in your area?

Berlin, MD



EFC / UMD Stormwater Financing Manual

Resource and framework that mirrors the EFC process

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Community Outreach: Examples from the field

Rain Barrel Give Away in Oxford, MD

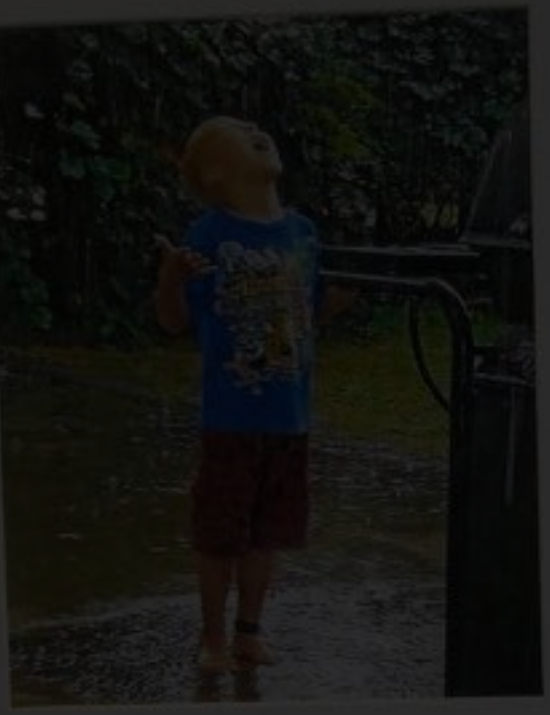


Photo Contest in Berlin, MD

BREAK

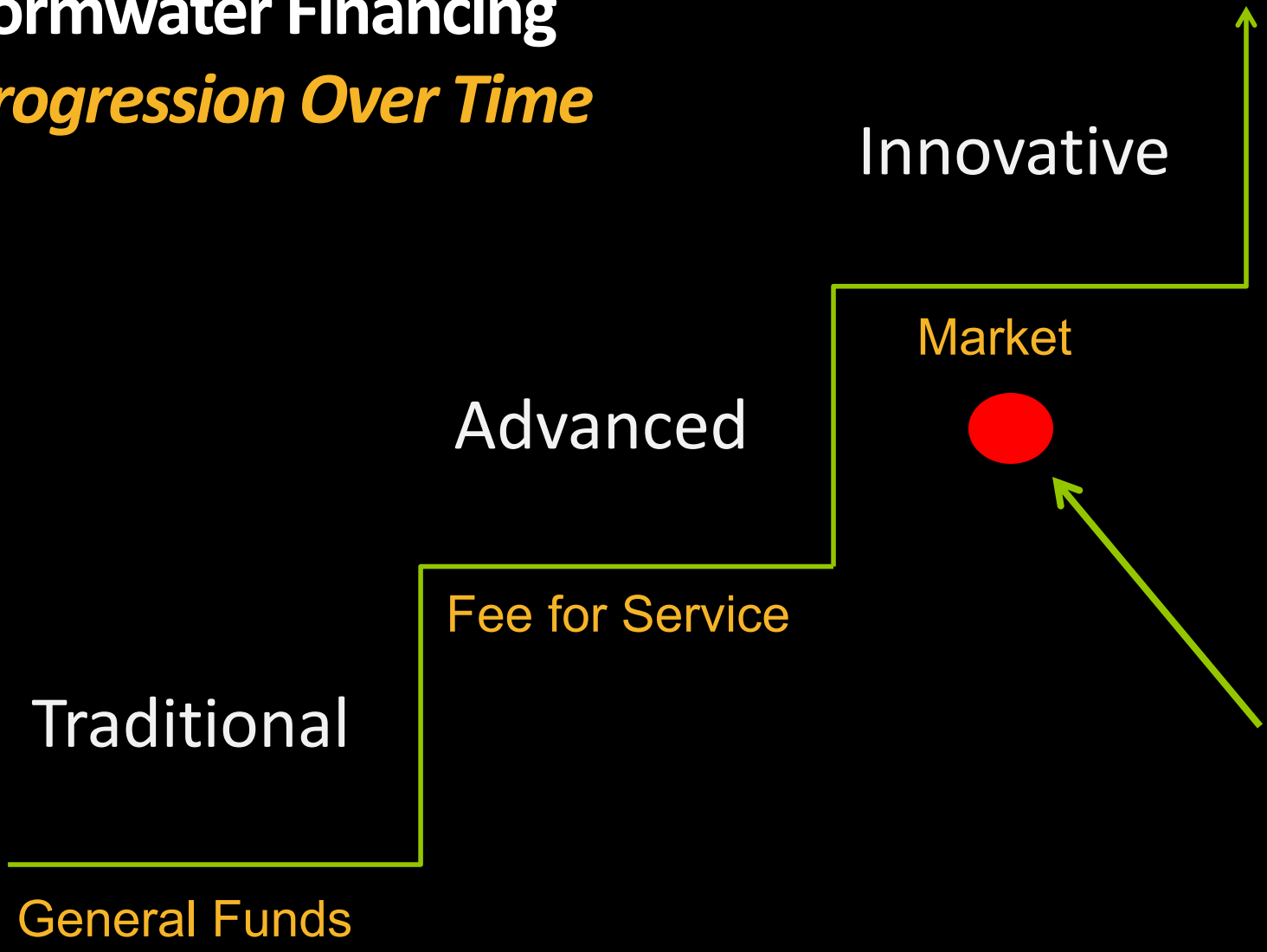
Stormwater Financing Approaches and Cost Saving Strategies

Scranton, PA

www.efc.umd.edu

Stormwater Financing

A Progression Over Time



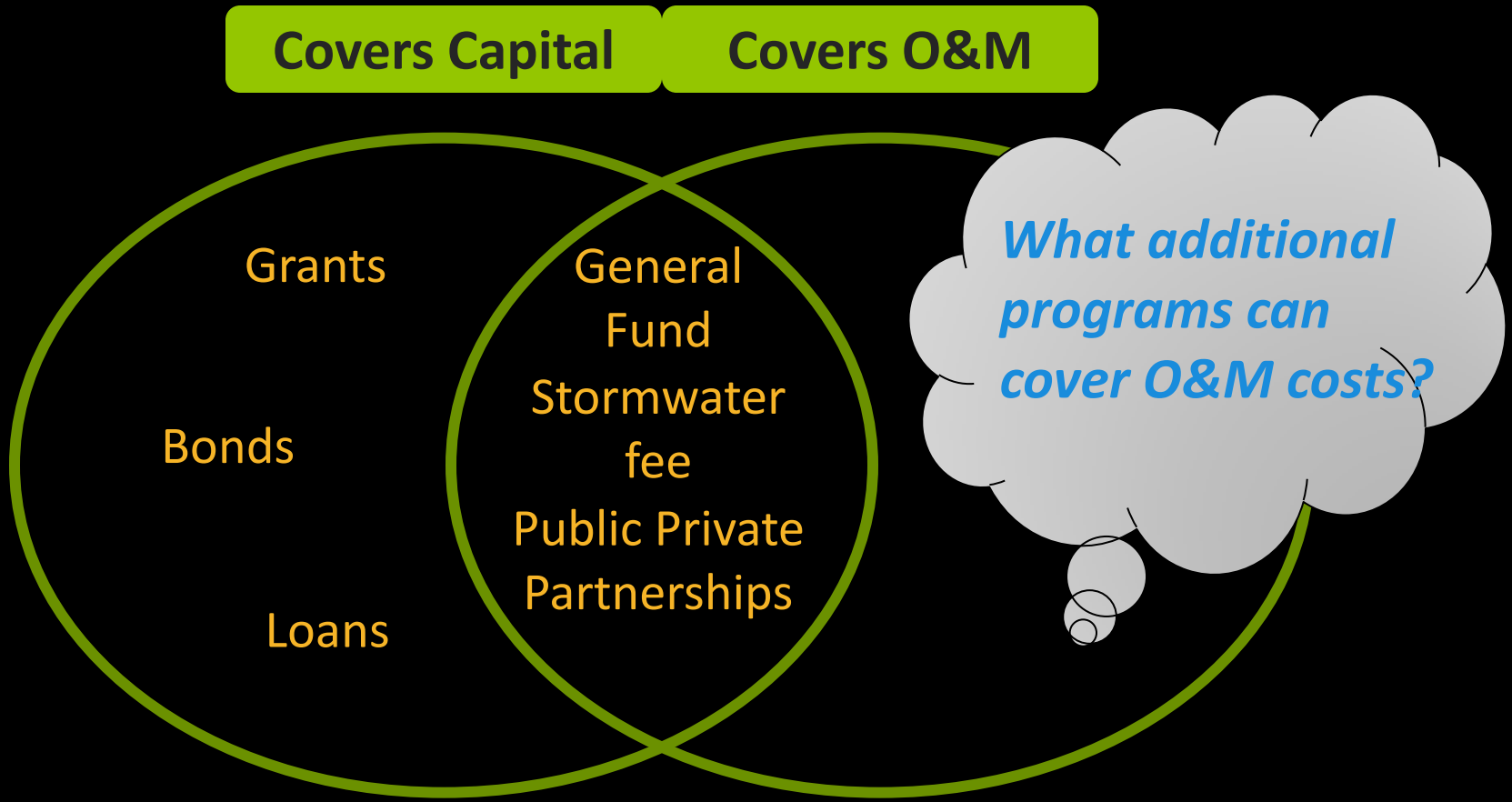
Case Study: Maryland House Bill 987

An opportunity and a challenge

A bill that was supposed to create local watershed restoration and protection funds, generated by stormwater remediation fees.

Locally dubbed as:

Stormwater Infrastructure Financing Options



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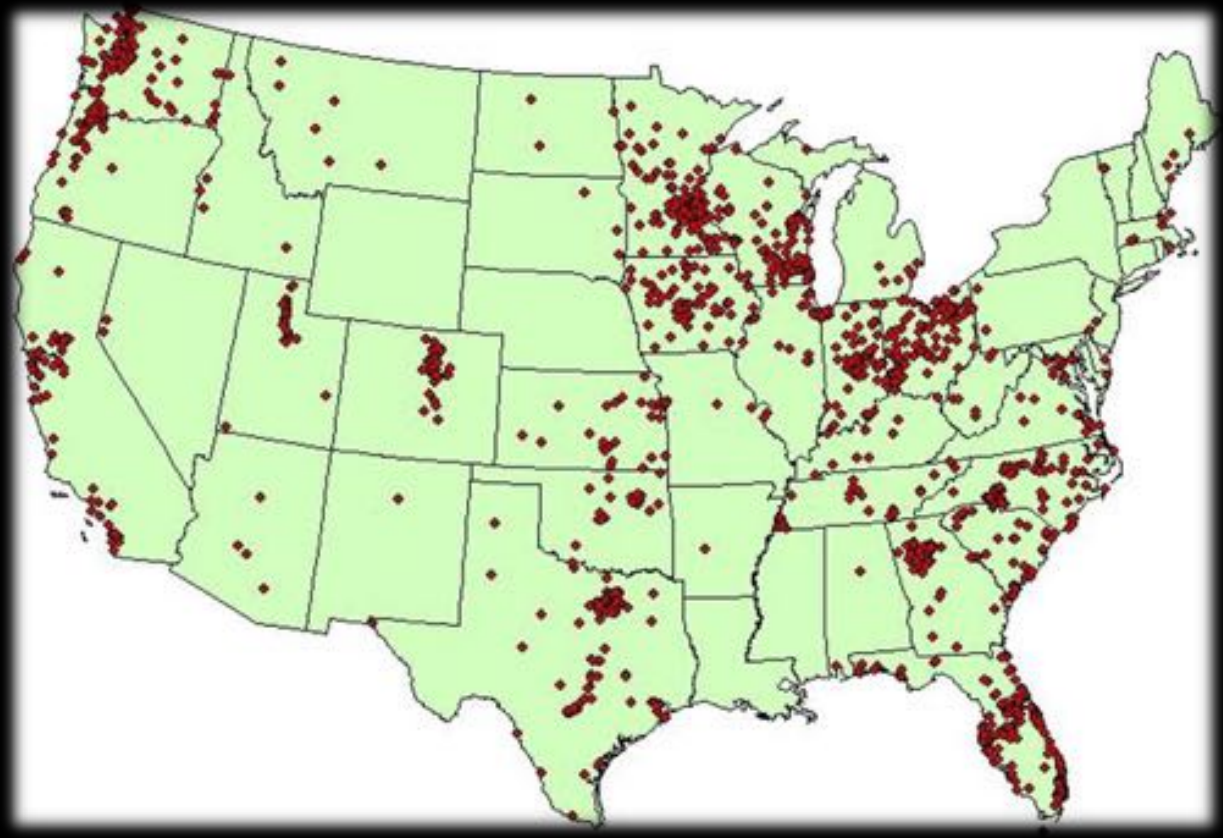

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Innovative Stormwater Finance Management

- Asset Management
- Green and Gray Infrastructure
- Regional Approaches
- Integrated Public Private Financing

Asset Management

- Understand and visualize assets
- Conduct condition assessment
- Prioritize asset investments for maintenance and replacement
- Communicate with decision makers

The ability to do more with less

Asset Management: Examples from the field

Scranton, PA

Warwick Township, PA

Green Infrastructure

- Reduce implementation costs
- Deliver benefits that serve multiple community priorities
- Engage the private sector
- Spur behavior change through the marketplace
- Provide return on investment to local economies



Green Infrastructure: Examples from the field

Lancaster City, PA

Warrington Township, PA

$300 million (Gray)
$140 million (Green)

Green Infrastructure Financing Map

Twenty communities

Diverse drivers, geography, scales, approach

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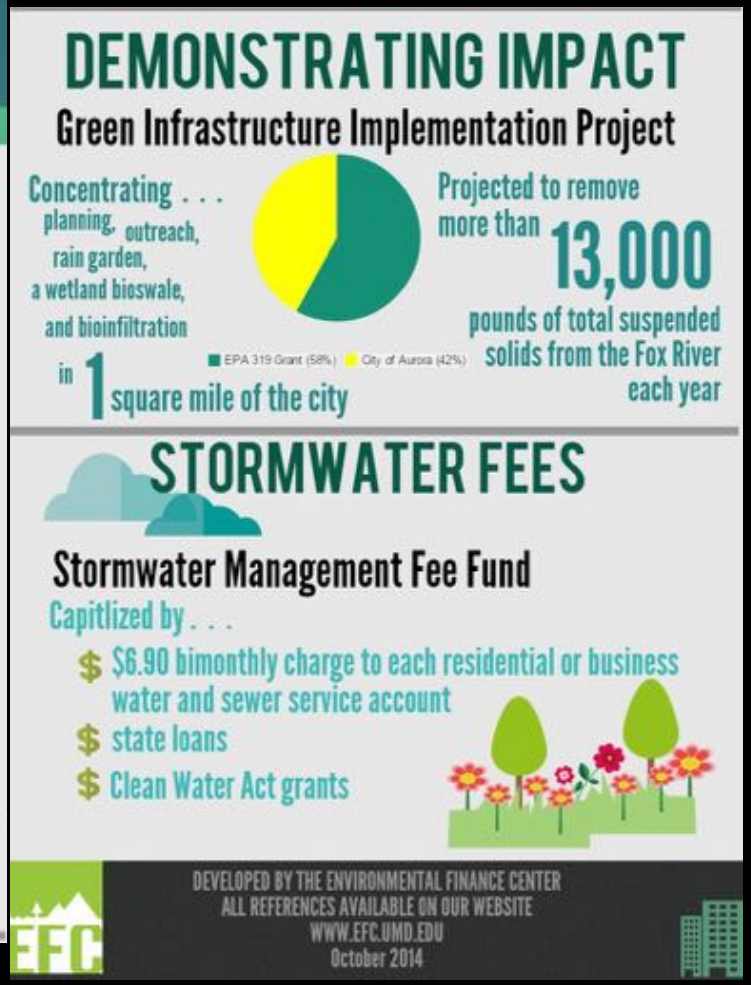
Green Infrastructure Mapping

Telling the financing story through the use of graphics

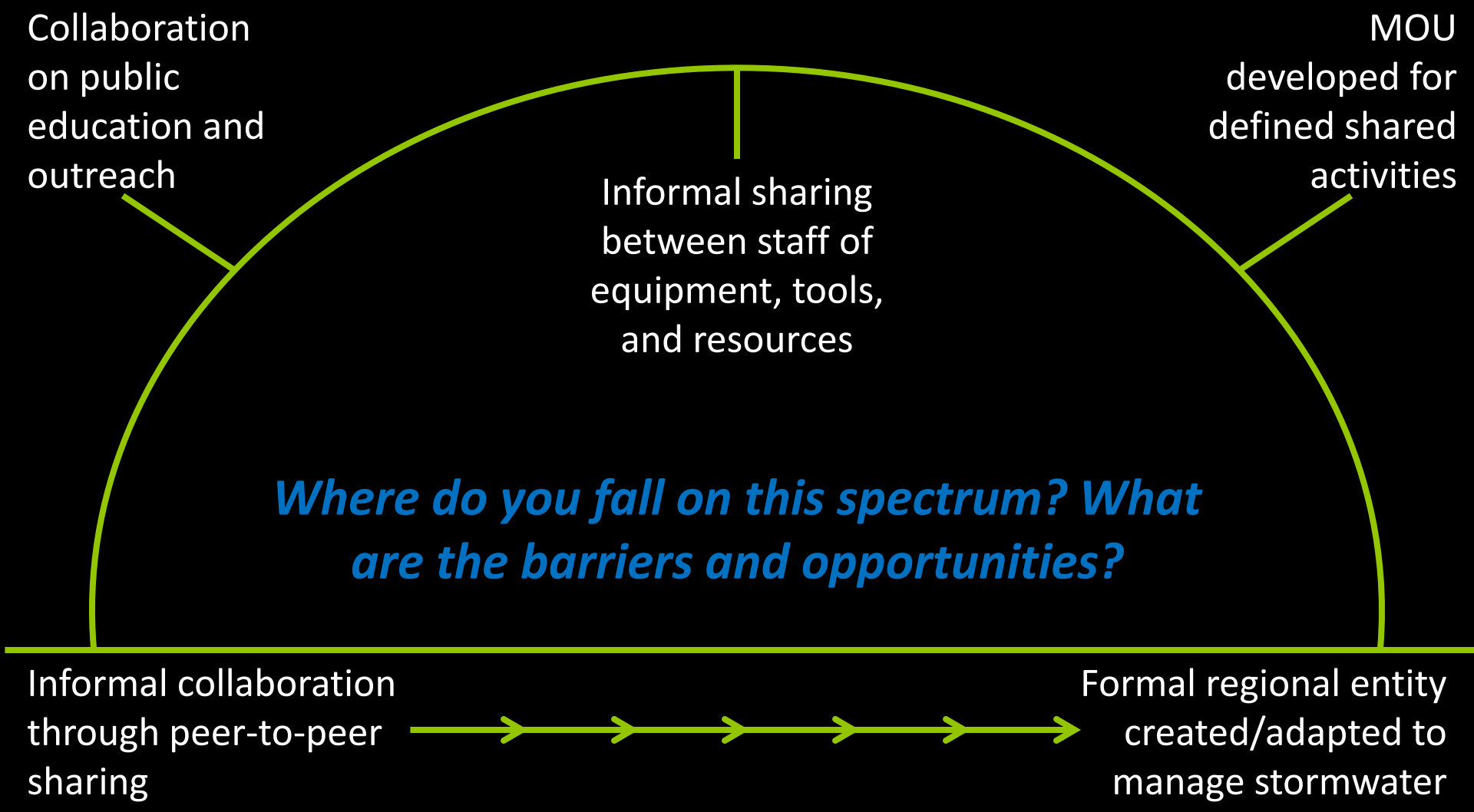


For more examples like this, check out EFC/UMD's interactive Green Infrastructure Map at http://efc.umd.edu/gimap

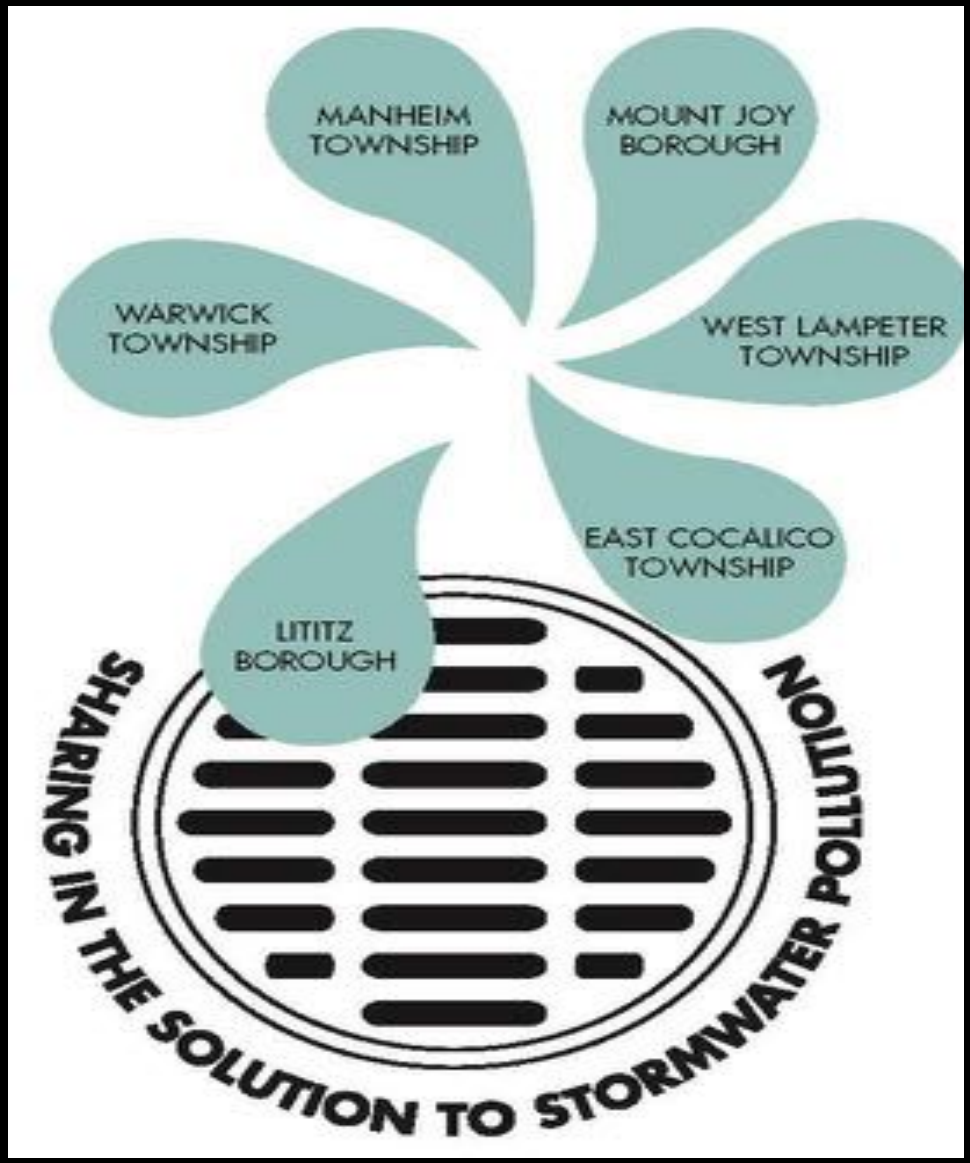
Regional Approaches

- Create efficiencies
- Fill resource and capacity gaps
- Tap into existing resources and capacity
- Become more attractive and competitive to funders

Spectrum of Regional Approaches



Regional Approaches: Examples from the field



Regional Stormwater Management Program

Level 1 and Level 2 tiers – *all member communities level 2*

Integrated Public Private Financing

- Diversify partners to expand investment
- Reduce tax payer burden
- Operations and Maintenance restrictions are reduced
- Employs a sense of civic pride
- Accelerates implementation

Integrated Public Private Financing

Case Study: Chesapeake Ecosystem Restoration

Public sector financing problem:

- Local responsibility
- Highly complex
- High costs, limited revenue

Public sector financing needs:

- Reduce cost through greater efficiencies
- Reduced and/or mitigated risks
- Innovative solutions to entrenched problems

Integrated Public Private Financing

Case Study: Chesapeake Ecosystem Restoration

Private sector needs:

- Return on investment and/or profit
- Investments in ecosystem restoration must compete with other market-based investment opportunities

Integrated Public Private Financing

Convergence of public need with private capacity: incentivizing investment

- **Focus on outcomes rather than outputs: "pay for pounds not for practices" (in our part of the world)**
  - The result: reduced costs and greater efficiency
- **Adaptive decision-making: financing based on science**
  - The result: reduced risk of project and investment failure
- **Be market-like with all financing: focus on costs and incentivizing innovative**
  - New and efficient solutions to entrenched environmental problems

Integrated Public Private Financing: Examples from the field

Hampton, VA

Prince George's County, MD

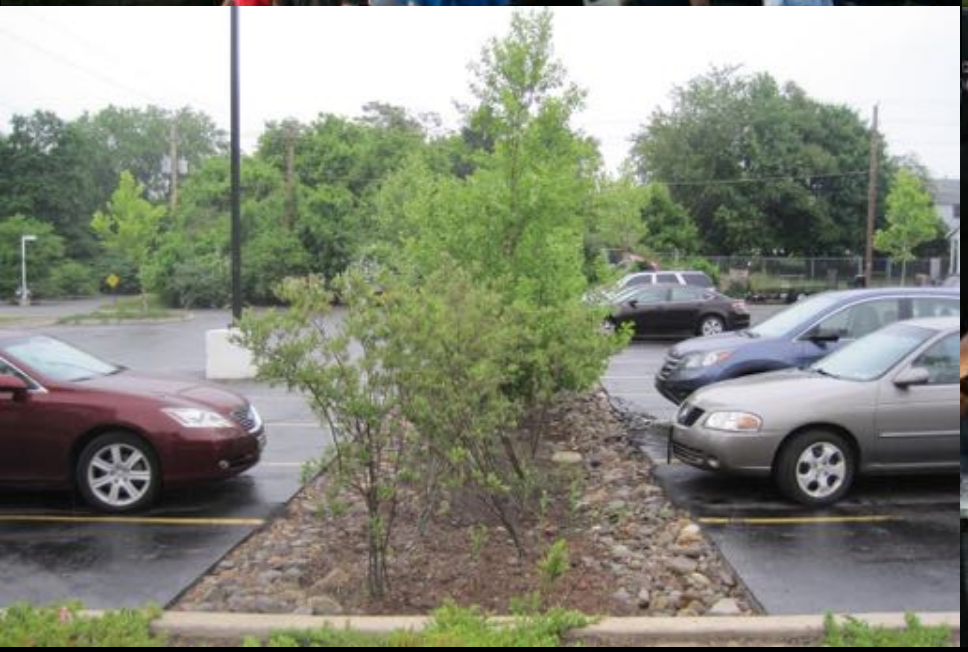
"Clean Water Partnership"

Corvias $100 M, 30-Year Public-Private Partnership

$1.2 B reduced by 40%

Integrated Public Private Financing: Examples from the field

Discussion and Wrap-Up



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