Welcome and Introductions

East Coast/West Coast Knowledge Exchange
February 11th, 2015
LA County Public Works Department
TOHONO O'ODHAM NATION

OUR NATION, LET'S KEEP IT CLEAN TOGETHER!
Antes  

Después
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
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/
Local Perspective of Stormwater Challenges and Opportunities in California
Enabling Conditions for Stormwater Finance: EFC Mid-Atlantic Perspective

Lititz Borough, Lancaster County, PA
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

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

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
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

What is driving your community?
Identify gaps in existing program and evaluate future needs

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

Where does your program fall on this scale and how can you improve?

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

Minimal → Medium → High
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
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
**Develop a financing strategy to support budget**

- Identify funding source for each budget item

*Some examples include:*

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

Some examples include:
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?
EFC / UMD Stormwater Financing Manual

Resource and framework that mirrors the EFC process
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
Stormwater Financing

A Progression Over Time

- Traditional
- Fee for Service
- Advanced
- Innovative
- Market

General Funds
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:

THE RAIN TAX
Stormwater Infrastructure Financing Options

What additional programs can cover O&M costs?

- Covers Capital
  - Grants
  - Bonds
  - Loans

- Covers O&M
  - General Fund
  - Stormwater fee
  - Public Private Partnerships
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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

$300 million (Gray)

$140 million (Green)

Warrington Township, PA
Green Infrastructure Financing Map

Twenty communities
Diverse drivers, geography, scales, approach
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

- Collaboration on public education and outreach
- Informal sharing between staff of equipment, tools, and resources
- MOU developed for defined shared activities

Where do you fall on this spectrum? What are the barriers and opportunities?
Regional Approaches: Examples from the field

Regional Stormwater Management Program
Level 1 and Level 2 tiers – all member communities level 2

www.efc.umd.edu
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

Prince George’s County, MD

“Clean Water Partnership”

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

$1.2 B reduced by 40%

Hampton, VA
Integrated Public Private Financing: Examples from the field

WASHINGTON, DC

$350 MILLION CENTURY BOND

1st 100-year municipal bond for water or wastewater

DC Water 'green bond'

CREDIT TRADING

Stormwater utility program offers first-of-its-kind credit trading

Voluntarily private sector implementers of BMPs can sell credits to other properties or developments in need of off-site solutions

DC WATER'S BIG PICTURE

DC Water is investing $100 million ratepayer dollars in green infrastructure projects

As a part of the $2.6 Clean Rivers Project which seeks to reduce CSO discharges by 96% over 20 years, using gray and green infrastructure

Since 1996, DC Water has reduced CSO overflow volume by 40%

GREEN INFRASTRUCTURE CHALLENGE

In 2013, DC Water awarded $1 million in prizes innovative green infrastructure plans

Winning projects included a plan for managing stormwater in a 19th century neighborhood, and integrating green and bike infrastructure

DEVELOPED BY THE ENVIRONMENTAL FINANCE CENTER
ALL REFERENCES AVAILABLE ON OUR WEBSITE
www.efc.umd.edu
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Discussion and Wrap-Up
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