Stormwater Utilities: Impacts from Legislative Exemptions
Wednesday, July 15, 2021
2:00 - 4:00 pm Eastern
How to Participate Today

• Audio Modes
  • Listen using Mic & Speakers
  • Or, select “Use Telephone” and dial the conference (please remember long distance phone charges apply).

• Submit your questions using the Questions pane.

• A recording will be available for replay shortly after this webcast.
Agenda

• Welcome: Adriana Caldarelli, Director, Stormwater Institute
• Introductions and Background: Randall Wakumoto
• Stormwater Infrastructure Financing: Fernando Pasquel, Chair, Stormwater Institute Advisory Committee
• Flexibility of stormwater utilities: Andy Reese, Andrew Reese LLC
• Utilities from the airport/transportation perspective, Jeff Longsworth, Partner, Barnes and Thornburg
• Facilitated Q & A, Andy Sauer, Chair WEF Stormwater Policy Subcommittee
• Closing, Andy Sauer, Chair WEF Stormwater Policy Subcommittee
Background

Randall Wakumoto, HWEA
Stormwater Infrastructure Financing

Fernando Pasquel, Stormwater Institute Advisory Committee
Stormwater Infrastructure Financing

July 15, 2021
Agenda

1. WEF MS4 Needs Assessment Survey
2. Funding Options & Financing Strategies
3. EPA Stormwater Infrastructure Financing Task Force Update
WEF National MS4 Needs Assessment Survey

SWI MS4 SURVEY WORK TEAM
- Scott Taylor, P.E., D.WRE (Chair), National Municipal Stormwater Alliance
- Fernando Pasquel, Arcadis
- James Gibson, Jr., Sanitation District No. 1 of Northern Kentucky
- John Kosco, P.E., U.S. Environmental Protection Agency
- Fatemeh Babakhani, Ph.D., P.E., Hubbell, Rush & Clark, Inc.
- Michael Beezhold, CPM, Kansas Department of Health and Environment
- Garrett Bergey, SDE, Inc.
- Tyler Carson, Arcadis
- Zach Henderson, Woodard & Curran
- Matthew Jones, Ph.D., P.E., Hazen and Sawyer
- Adrienne Nemura, P.E., Geosyntec Consultants
- Dan Redulescu
- Andrew Sauer, P.E., ENV SP, Burns & McDonnell
- James Schlaman, P.E., ENV SP, Black & Veatch Corporation
- Andrew Smith, P.E., CFM, ENV SP, Black & Veatch Corporation
- Mark Van Auken, P.E., ENV SP, Arcadis

SWI PROJECT TEAM
- Rebecca Arvin-Colon, SWI Senior Manager
- Adriana Caldarelli, SWI Director
- Seth Brown, Ph.D., P.E., SWI Senior Advisor
WEF National MS4 Needs Assessment Survey

Program challenges

Chart depicts the percent of respondents indicating challenge as challenging or very challenging.

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/
Funding Needs

Do you have an annual budget gap for your stormwater program? In other words, are you deferring some expenditures due to lack of funding?

<table>
<thead>
<tr>
<th># of Responses</th>
<th>Yes</th>
<th>No</th>
<th>Null</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>58.6%</td>
<td>28.5%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Phase II</td>
<td>59.3%</td>
<td>28.9%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Non-traditional</td>
<td>45.5%</td>
<td>49.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>DOTs</td>
<td>56.5%</td>
<td>26.1%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Average annual program budget reported: $3.41M

Average additional annual budget needed: $2.92M

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/
Funding gap analysis & results

2020 Survey Funding Gap Analysis results
• Estimated gap using “simple” method = $8.2B
• Estimated gap using “complex” method = $7.7B
• Midpoint between two estimates = $8.0B

2018 Survey Funding Gap Analysis results
• Estimated gap using “simple” method = $8.1B
• Estimated gap using “complex” method = $6.9B
• Midpoint between two estimates = $7.5B

Source: WEF Stormwater Institute, https://wefstormwaterinstitute.org/programs/ms4survey/
Stormwater related funding impacts of proposed $2T infrastructure plan

- Plan titled “American Jobs Act” announced by President Biden in early April
- $56 billion for wastewater and stormwater grants & loans
- $17 billion for ports and inland waterways
- $50 billion for infrastructure resilience
Funding options and financing strategies

- Available funding options and GI considerations
- Process to develop a financing strategy
Financing Strategy

“The combination of actions that a utility or local government undertakes in order to generate funds to pay for stormwater programs, including compliance, operations, and infrastructure planning, design, construction, maintenance, and monitoring.”

WEF, 2014. Green Infrastructure Implementation, Financing Strategies Chapter
Numerous funding options available

Some options are tied to specific functions, costs or projects. Direct taxation and stormwater utilities can be used as dedicated sources to fund a program.

Traditional
- Stormwater utilities and taxing districts
- General appropriation revenues
- Grant and loan programs
- Municipal bonds
- Fee in-lieu-of programs
- Developer funding
- Water/wastewater revenues

Innovative
- Capital markets (EIB, incentives)
- Cost sharing
- Private and non-profit sources
- Public-private partnerships
- Mitigation banking
- Credit trading
- Subsidies, fee reductions, etc.
A systematic process to develop a financing strategy leads to successful implementation

1. Define goals and objectives
2. Identify potential funding options
3. Calculate potential revenue from selected options
4. Recommend and implement financing strategy
Stormwater funding task force update

• AWIA was signed into law on October 2018

• Section 4101 calls for EPA to establish a Stormwater Infrastructure Funding and Finance Task Force, composed of representatives of Federal, state, and local governments, and private (including nonprofit) entities

• Objective is to conduct a study on, and develop recommendations to improve, the availability of public and private sources of funding for the construction, rehabilitation, and operation and maintenance of stormwater infrastructure to meet the requirements of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.)
The Stormwater Infrastructure Finance Task Force (EFAB Workgroup) provided recommendations to the EPA in the following areas:

- Identify how funding for stormwater infrastructure from such sources has been made available, and utilized, in each state to address stormwater infrastructure needs;
- Identify how the source of funding affects the affordability of the infrastructure, including consideration of the costs associated with financing the infrastructure;
- Evaluate whether such sources of funding are sufficient to support capital expenditures and long-term operation and maintenance costs
Stormwater Infrastructure Finance Task Force findings

- Current stormwater funding as well as outreach on the importance of stormwater infrastructure are insufficient to meet existing needs
- Identified an estimated annual funding gap of $7-10 billion
- EFAB made eight recommendations to EPA in its March 2020 report grouped into two overarching categories:
  - Allocate new federal stormwater funding
  - Provide stormwater funding education and technical assistance
Conclusions

- Stormwater / green infrastructure program challenges are understood and the need for funding is clear
- There are several funding sources available, but gaining stakeholder buy-in is still difficult
- A systematic process to develop a financing strategy leads to successful implementation
Thank you!

Fernando Pasquel  
Senior Vice President, National Director,  
Stormwater and Watershed Management  
Arcadis  
fernando.pasquel@arcadis.com, 703-842-5621
Innovative funding sources for SW and green infrastructure

- Cost sharing – identify incentives
- Private and non-profit sources
  - GI offers versatility in framing ideas
  - Leverage other infrastructure costs
  - Green jobs!
- Public-Private Partnerships
  - Accelerate implementation
  - Lower construction and maintenance costs
  - Access to new sources of capital
  - Shift risk
Flexibility of Stormwater Utilities

Andy Reese, Andrew Reese, LLC
Utilities from the airport/transportation perspective

Jeff Longsworth, Barnes and Thornburg