



Meeting Minutes
NMSA Member Call
June 13th, 2019
11 am to 12:30 PDT, 2pm to 3:30 EDT

Agenda Discussion:

1. Introduction / Review of Agenda

S. Taylor reviewed the agenda, and noted that the focus of the call was on the Alliance's work on the Chesapeake Bay Trust grant program

2. WEF Stormwater Institute and Legislative Update

a. Legislative Update

S. Brown provided an update on some current stormwater related legislation. The American Water Infrastructure Act was passed in the fall of 2018. It included funding for the Clean Watershed Needs Survey let by EPA. This survey was last completed in 2012. This survey provides national level data on water programs. Stormwater has historically been under represented in the survey. The Act provided \$500k of support to ensure stormwater is included.

The Act included direction for EPA to form a Task Force to examine funding sources for MS4 stormwater programs. Recall that this was an item NMSA assisted in placing in the legislation. EPA has formed this Task Force – NMSA representatives were not selected to participate – and will produce a report by April 2020.

Highway Reauthorization Bill: NMSA is working to get resources for more flexibility for use of federal funds for offsite stormwater projects into this bill as well as to support a national BMP testing program.

Clean Water SRF: Reauthorization for the SRF will probably not occur until 2020.

b. MS4 Survey/ASCE Report Card

S. Taylor noted that the ASCE Infrastructure Report Card committee has voted to include Stormwater as an independent category on the national IRC due out in 2021. This has been a long-standing goal of NMSA and will further public understanding regarding stormwater programs and resource needs.

c. Waterweek Recap

o Ask document

NMSA worked with the WEF Stormwater Institute (SWI) to develop an 'ask' document to support attendees at Water Week (April, 2019). A copy of the document is attached to the notes for reference. It provides legislation oriented next step suggestions for the stormwater program.



- SWI Meeting
S. Taylor reviewed the agenda for the meeting of the SWI Advisory Committee (AC) at Water Week. NMSA serves as an appointed member to the AC. A copy of the agenda is attached to these notes for reference.

3. Chesapeake Bay Trust Grant (Brown)

- Scope of Work and deliverables
Seth Brown described the planned work products under the NMSA Chesapeake Bay Trust Grants. Four projects will be completed, largely this year. Each project was reviewed, and members were polled to provide assistance with each. The projects will be led by Seth Brown, Storm and Stream, LLC. An outline of the projects and member subcommittees that were formed on the call follows:

Stormwater Pond Summit – Project No. 1

- Purpose: To highlight critical issues surrounding stormwater ponds today.
- Content: Plan for two summits – one in Chesapeake Bay, one outside of the Bay region
- Next Steps:
 - Project start: Start on this immediately
 - Project completion: Summit 1 in September, Summit 2 in December
 - Identify locations and partners/stakeholders
 - Develop agendas for summits
 - Identify summit presentations
- Notes:
 - Both summits will be broadcast via web-based platforms
 - Summary notes will be developed and posted publicly
- NMSA Member Engagement/Assistance – light to moderate
 - Help to brainstorm on topics covered and develop agenda(s) accordingly
 - Provide support on finding speakers/reviewing speaker information
 - Promote to memberships
 - Attend/participate in event(s)
 - Review follow up notes/report
 - Promote final report
- NMSA Members Interest in Engagement:
 - Randy Neprash
 - Nathan Walker
 - Zach Henderson (need some overview on what is being requested regarding engagement, etc.)
 - Robin Craver
 - J.B. Dixon
 - Lori Gates



Community-Based Public-Private Partnership Webcast and Technical Assistance – Project No. 2

- Purpose: To share information on the Community-Based Public-Private Partnership (CBP3) program approach and identify
- Content:
 - Hold one webcast focusing on municipal applications of CBP3 and seek 1-2 communities to provide follow-up in-depth technical assistance that will focus on the assessment of the community(ies) to apply the CBP3 and/or other alternative project delivery approaches and/or innovative funding/financing options.
 - Hold one webcast focusing on Departments of Transportation (DOTs) applications of CBP3 and seek 1-2 DOTs to provide follow-up in-depth technical assistance that will focus on the assessment of the DOTs to apply the CBP3 and/or other alternative project delivery approaches and/or innovative funding/financing options.
 - The outcome of these efforts will be an assessment summary memo and associated options matrix.
- Next Steps:
 - Start on this immediately – hold webcasts in August/September/October
 - Project completion: January, 2020
 - Develop agendas for webcasts and speakers
 - Schedule webcasts
 - Identify communities/DOTs seeking technical support either during webcasts
 - Provide technical support
 - Report out on assessments
- NMSA Member Engagement/Assistance: moderate
 - Review proposed agenda and speakers
 - Promote the webcast and offer for technical assistance
 - Consider engaging in technical assistance offer
 - Review report documenting the effort and engagement
 - Promote final report
- NMSA Members Interest in Engagement:
 - Adrianna Caldarelli
 - Scott Taylor
 - Zach Henderson

Smart Green Corridor Webcast/Workshop/Design Competition – Project No. 3

- Purpose: To introduce the concept of the Smart Green Corridor, which is an approach that seeks to identify cross-sectoral investments in water/wastewater/stormwater, clean energy and agriculture that drives down costs, enhances community benefits and increases environmental conditions.
- Content:



- Hold a webcast covering Smart Green Corridor concept and to promote a design competition based upon the SGC concept.
- Next Steps:
 - Project start: Start planning for this in July
 - Project completion: January, 2020
 - Develop agendas for webcast and speakers
 - Schedule webcast
 - Develop information to support the design competition (rules, scoring criteria, technical content for competition, etc.)
- NMSA Member Engagement/Assistance: moderate
 - Engage in calls/meetings to discuss the topic overall
 - Help to develop topics, event agendas and design competition structure
 - Promote the event and design competition
 - Review report on project
 - Promote/share report/findings
- NMSA Members Interest in Engagement:
 - Beth Dutton
 - Pat Sauer

MS4 Sector Support - Economic Analysis: Quantifying the Business Case for Stormwater Investments – Project No. 4

- Purpose: A missing element in expressing the value of stormwater management program and infrastructure is a quantitative measure of economic returns associated with investments in stormwater infrastructure. An analysis that provides a dollar-for-dollar measure of investment/ROI will be developed to illustrate and document the positive economic return associated with stormwater investments.
- Content:
 - Project start: Start planning in July
 - Project completion: March, 2020
 - Work with NMSA members to develop an outline for this project
 - Finalize analysis outline
 - Perform analysis
 - Write up analysis assessment summary
- NMSA Member Engagement/Assistance: moderate
 - Engage in calls/meetings to explore the topic
 - Review relevant information on the topic
 - Help to develop the outcome(s)/output(s) that would be most beneficial to the MS4 sector
 - Help to develop the structure of the project
 - Review report on project
 - Promote/share report/findings



- NMSA Members Interest in Engagement:
 - Scott Taylor
 - Randy Neprash
 - Beth Dutton
 - Zach Henderson
 - Robin Craver
 - Brian Currier

4. NMSA - EPA Meeting (Neprash/Taylor)

a. April – Recap

R. Neprash gave an overview of the NMSA/EPA meeting held on April 2. The following items were discussed at the meeting:

- i. Municipal Ombudsman. EPA is working on implementing this position, which will be oriented to integrated planning. Should be in place by October, 2019.
- ii. Promote Green Infrastructure. This was included in the Water Infrastructure Improvement Act of 2017, but no funding was provided. EPA is reviewing how to implement the requirements of the Act.
- iii. Stormwater Infrastructure Funding Task Force. NMSA will monitor the progress of this body.
- iv. Local Government Advisory Committee. NMSA has nominated Randy Bartlett, of Fairfax County, to serve on this Committee. Selections will be made in August, 2019.
- v. Chesapeake Bay Trust Grants. NMSA updated EPA staff on the progress under the grants (Agenda Item 3).
- vi. Water Reuse Action Plan. NMSA is working to include stormwater in this plan, and discussed options with EPA staff.
- vii. Water Quality Trading Memorandum. EPA is unsure on the next steps associated with this Memo. NMSA to monitor.
- viii. Initiative for Stormwater Program Outreach. EPA staff provided NMSA with a look at some early materials for this project. This is one of NMSA's primary work objectives: Educating the public and elected officials on the importance of stormwater management. R. Craver indicated that the MA Think Blue campaign is now statewide, and offered that any MS4 program can use the materials. More information at: <https://www.thinkbluemassachusetts.org/ms4-communities>

5. EPA MS4 Handbook (Taylor/Brown)

a. Overview

S. Taylor noted that NMSA is working with EPA Region IX to host a MS4 Handbook. The content is under development by an EPA contractor (PG Environmental) and the final product will be hosted on the NMSA website. NMSA will have editorial review of the initial product, and be the owner of the Handbook once it is on the website. It is expected to be posted by the Fall of 2019. S. Taylor asked for volunteers to review the



content. Interested parties are:

Zach Henderson

JB Dixon

Robin Craver

Pat Sauer

Geoff Brosseau

6. EPA Water Reuse Plan (Neprash)

a. FR Comments

R. Neprash noted that it is important to include stormwater concerns in the Reuse Plan. NMSA will be working with EPA to ensure this happens.

7. AOB

No items.

8. Next Call

a. 9/12/19 @ 11am PDT.

The call was adjourned at 12:35 pm PDT.



RECOMMENDATIONS TO IMPROVE THE **STORMWATER PROGRAM** IN THE U.S.



**WATER
WEEK
2019**

wef | Stormwater
Institute



SUMMARY

The introductory text to the Clean Water Act (CWA) noted, "It is the national goal that the discharge of pollutants into navigable waters be eliminated by 1985." This goal has yet to be achieved, and new tools are needed to help make this goal a reality. This fact sheet outlines a long-term strategy to guide the stormwater program through the next 20 years. These strategies are reasonable and practical actions for Congress and the Executive Branch to enact. These recommendations address the fundamental issues of: reliable funding, infrastructure retrofit and maintenance and pollution source control as the next steps to achieve the goals of the Clean Water Act.

STORMWATER PROGRAM RECOMMENDATIONS

1. Stormwater Infrastructure Funding Tools

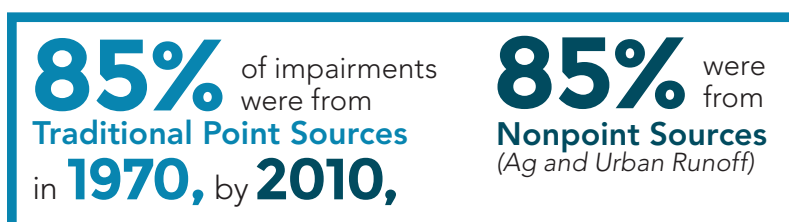
Request: Create a technical assistance grant program (at regional or federal level) to assist communities with identifying funding resources for stormwater infrastructure. The EPA is assessing funding options for the 'construction, rehabilitation, and operation and maintenance of stormwater infrastructure' with a congressionally authorized stormwater infrastructure task force.

Communities have a keen interest in securing sources of funding for stormwater and green infrastructure retrofits but lack a comprehensive set of tools to construct and maintain the required improvements. States, cities, DOTs and counties need infrastructure investment in the next decade to ensure public safety and meet the requirements of the Clean Water Act. Funding tools for states can help them identify approaches to finance the required infrastructure using general funds, grants, fees, and utilities in combination with public and private financing such as state revolving funds, bonds, private loans, social capital, and equity investments. These financing options can

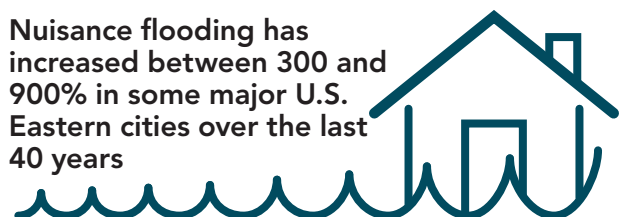
be utilized through emerging vehicles and platforms such as the Community-Based Public-Private Partnership, an approach championed by U.S. EPA designed to enhance project delivery efficiencies.

The available funding streams and project delivery options are complex and varied. Communities need assistance in developing successful financing mechanisms and reducing finance risk. We recommend that the current federal infrastructure task force be continued for a second year to develop funding, financing and project delivery templates for municipalities.

DID YOU KNOW?



Nuisance flooding has increased between 300 and 900% in some major U.S. Eastern cities over the last 40 years



2. Stormwater Treatment System Verification Program Funding

Request: Provide funding to EPA Regions to develop a national performance verification program for stormwater best management practices (BMPs).

Stormwater pollution is a persistent issue in urban watersheds throughout the United States. To ensure that engineered stormwater management systems are achieving their intended benefits, better information is needed linking the performance of specific treatment system designs to their ability to remove common stormwater pollutants. The performance of conventional landscape-based stormwater treatment systems has been studied, however system designs and study techniques vary widely. As a result, performance estimation for specific treatment systems is challenging and imprecise.

In addition, over 50 different modular stormwater management systems have been developed in recent years by private industry for use in urban environments where available land area is scarce such as transportation corridors. These systems may be standalone solutions or can be integrated into treatment trains to enhance the functionality and increase the design life of green infrastructure (GI) systems. There are

several successful state and regional stormwater treatment system testing and verification programs for these systems, but adoption of results from these programs outside of their immediate jurisdictions has been limited. A national performance verification program, drawing on the success of these programs, is being developed by local, regional and national stakeholders to:

- inform and guide significant local investments in stormwater infrastructure,
- accelerate the implementation and adoption of innovative stormwater management technologies,
- create regulatory confidence and provide accurate “regulatory credit”,
- to minimize duplicative performance evaluation efforts, and
- establish a common framework for testing and evaluation of both public domain and proprietary stormwater control measures.

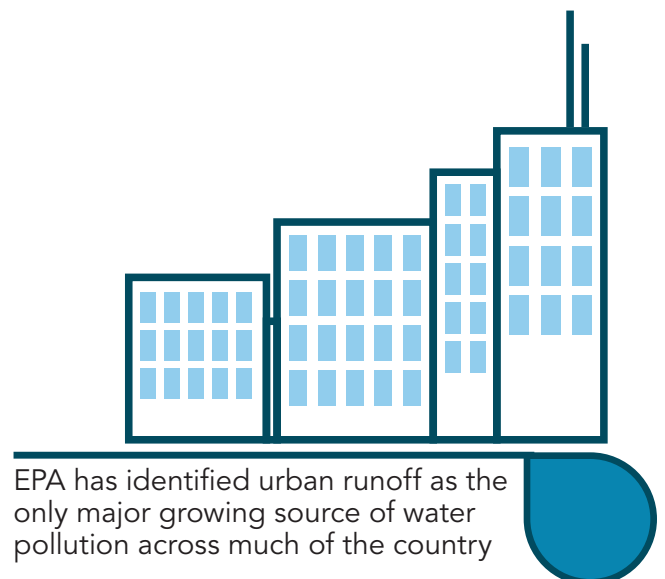
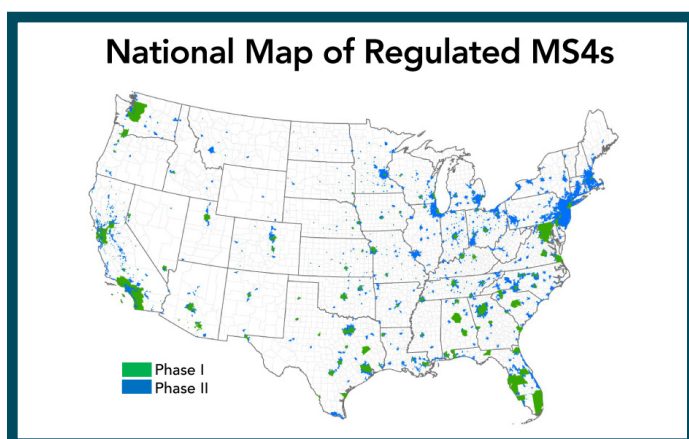
3. Improved Stormwater Infrastructure Needs Data Collection

Request: Insert “municipal stormwater” in to the required data collected through the Clean Watersheds Needs Survey, CWA SEC. 516 (b)(1). Provide \$500,000 per year for two years to the EPA to complete the Clean Watershed Needs Survey.

The Clean Water Act (CWA) regulates stormwater through the National Pollution Discharge Elimination System (NPDES), which requires permit holders, such as communities, business and industry, and state transportation departments, to meet federal regulatory water quality standards. The infrastructure needed to meet those regulations require a substantial investment by communities, primarily paid for by local taxes and utility rates. To improve design and maintenance efficiencies of practices needed for communities, a long-term data record relating design, maintenance activities, performance of stormwater practices, and cost is required.

We recommend that Congress insert “municipal stormwater” into CWA SEC 516 (b)(1). This would add to the EPA Clean Watershed Needs Survey data collection process the

requirement that States request Municipal Separate Storm Sewer System (MS4) entities to submit data on the cost and effectiveness of their stormwater management and maintenance activities. This first of its kind database would then be reported to Congress through the Clean Watersheds Needs Survey to help guide national policy and stormwater infrastructure design and funding decisions. The last Clean Watersheds Needs Survey was completed in 2016 using 2012 data although the CWA statute directs EPA to complete it every two years. FY19 appropriations included \$500,000 of the \$1 million needed to complete the survey. Congress should provide the remaining \$500,000 in FY20 to complete the survey and establish a permanent funding source for the Clean Watershed Needs Survey.



4. Modernize NPDES Permits

Request: Direct EPA to work with permit holders to develop incentives for development and implementation of integrated plans, as well as model permit language for watershed-based permits.

Water Infrastructure Improvement Act of 2018 (HR 7279), passed by Congress in late 2018 and enacted in early 2019, provides that the EPA's Integrated Planning Process is an option for municipalities to meet their wastewater and stormwater management requirements. It encourages municipalities to include green infrastructure and allows the use of compliance schedules to meet water quality standards. Stormwater NPDES permits should be written to encourage the use of EPA's integrated planning framework which would include the development of a master plan relating both water quality and quantity, from all contributing point and non-point sources. The plan needs to describe infrastructure

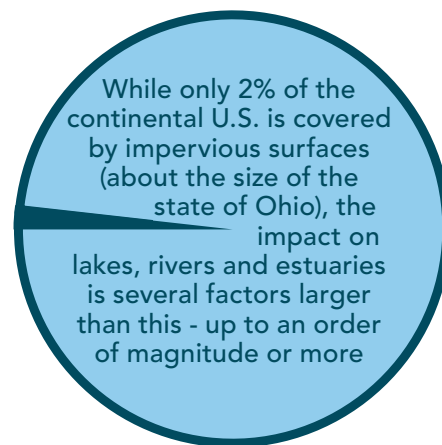
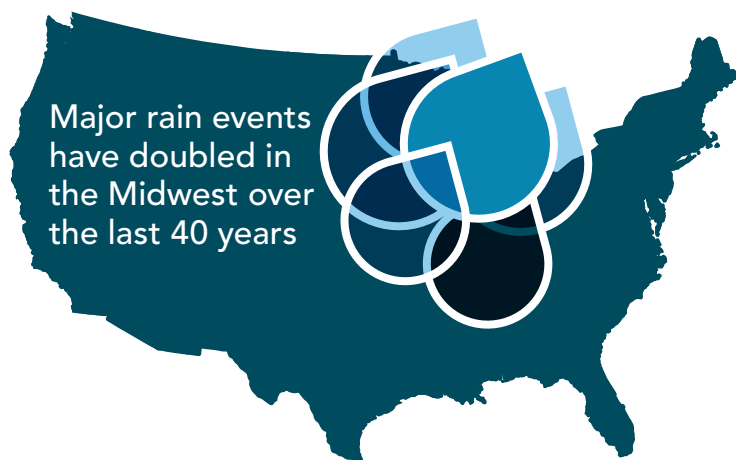
improvement needs, modeling to demonstrate compliance with water quality goals and standards, asset management maintenance requirements, a schedule and a cost estimate, developed with community input. We recommend this legislation be followed by a congressional directive to EPA to provide guidance to the states for model permit language for both integrated planning and watershed-based permits. This is the critical next step to modernize the NPDES permit process, integrating all components of the issue, promoting innovation and bringing new efficiencies for stormwater program implementation.

5. Implement Source Control for Stormwater Pollution

Request: Direct EPA to examine the authority under the Clean Water Act and Toxic Substances Control Act and other legislation as appropriate, to control pollutants in stormwater at the source, and assist states developing pollutant source control programs. We recommend that Congress direct EPA to identify a preferred regulatory pathway for source control and develop tools to support source control implementation by permit holders.

It is technically infeasible to remove many common pollutants once they become entrained in stormwater. It is also costly to treat or remove pollutants once they are in the environment. Source control is by far the most effective and cost-efficient approach for control of pollutants such as pesticides, nutrients, many metals and emerging pollutants. An example of source control is the reduction of copper in automotive brake pads, instituted in California and Washington. Vehicle brake linings were found to represent up to half of the copper load in urban stormwater. Substituting other materials in brake pads is estimated to save over \$1 billion in California

at the municipal level by eliminating urban copper control programs. EPA's use restriction of several organophosphate pesticides is another successful example of the application of source control. Other examples include measures in Minnesota to restrict phosphorus in lawn fertilizer and ban the sale and use of coal-tar sealants on pavements. The only practical approach to controlling emerging pollutants such as PFAS/PFOA and microplastics is source control. These actions will save municipalities billions of dollars in future expenditures attempting to remove pollutants from the environment.



(note: developed land is not impervious surface area - approximately 25% of developed land is impervious)

WEF Stormwater Institute

<http://wefstormwaterinstitute.org/>

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National Municipal Stormwater Alliance

<http://nationalstormwateralliance.org/>

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2019 Water Week – SWI Subscriber Policy Forum

Tuesday, April 2nd, 2019

University of the District of Columbia

Student Center, Ballroom B

4200 Connecticut Avenue, NW, Washington, DC

- Noon – 12:15 **Lunch**
- 12:15 – 12:30 **Welcome**
- Dwane Jones, PhD, University of the District of Columbia
 - Sandra Ralston, SWI Advisory Committee Chair
- 12:30 – 1:00 **Luncheon Keynote**
- Lee Currey, Water and Science Administration Director, Maryland Department of the Environment
- 1:00 – 2:00 **Federal and State Regulators**
- Christopher Kloss, US EPA, Office of Water
 - Jana Davis, Chesapeake Bay Trust
 - Jeffrey Seltzer, PE, DC Department of Energy & Environment
 - Moderated by Sandra Ralston
- 2:00 – 2:30 **Congressional Update**
- Ryan Dilworth, Office of Rep. Bob Gibbs R-OH
 - Mae Stevens, Signal Group
- 2:30 – 2:50 **Break**
- 2:50 – 4:00 **Hot Topics Panel**
- Sonia Brubaker, US EPA, Water Infrastructure and Resiliency Finance Center
 - Kahlil Kettering, The Nature Conservancy
 - Danielle Giannantonio, Northeast Ohio Regional Sewer District
 - Joseph Kane, The Brookings Institution
- 4:00 – 4:20 **SWI Programs Update**
- Adriana Caldarelli, WEF SWI Director
 - Rebecca Arvin-Colón, WEF SWI Senior Manager
 - Steve Dye, WEF Legislative Director
 - Seth P. Brown, PE, WEF SWI Senior Advisor
- 4:20 – 4:50 **SWI Subscriber Open Discussion**
- 4:50 – 5:00 **Meeting Summary**

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University of Louisville

John Kosco, P.E.

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Daniel Lillis

City of Kearney, NE

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AND ENVIRONMENTAL SCIENCES

**Thank you to UDC
for sponsoring the
Policy Forum!**

Please join us for an informal reception after the meeting in the Water Week hotel bar – Hyatt Regency Washington on Capitol Hill, 400 New Jersey Avenue, NW, Washington, DC!