



**Meeting Minutes**  
**NMSA Member Call**  
**June 7, 2018**  
**8am to 9:30am PDT, 11am to 12:30pm EDT**

**Agenda Discussion**

1. Introduction / Review of Agenda

Present on the call were representatives from Arizona, California, Indiana, Nebraska, Tennessee, Iowa, Pennsylvania, Massachusetts, WEF, Utah and Louisiana.

2. WEF Stormwater Institute – Water Week (Brown/Dye)

- “Ask” document

NMSA previously created a stormwater ‘Ask’ document for WEF’s Water Week. The purpose of the document was to describe some of the major challenges of the MS4 stormwater program, and provide some suggestions that could be considered by Congress to improve program implementation. The document was well received. Steve Dye reported that Senator Cardin’s office included funding for a Task Force to study stormwater infrastructure funding alternatives (Item No. 1 in the Ask document). *The Ask document is appended to these notes for reference.*

- Legislative Update

Steve Dye reported Congressman Heck is reviewing the possibility of the Army Corps of Engineers assess the potential for the Corps to meet NPDES requirements. The current House version of the WRDA bill is purely USACE related, and still needs to be reconciled with the Senate version. Senator Cardin is interested in a policy briefing on stormwater in the context of the flooding in Ellicott City MD.

Future incarnations of the SRF will include a green project reserve, a repository for new funds to be earmarked for GI.

Steve Dye is working on draft legislation to improve the SRF application process for GI. Pat Sauer noted she has a go-by similar to this that may be useful and will forward it to Steve. Currently only about 4% of funds in the SRF go to stormwater projects. EPA and WEF will be producing a webinar on the use of SRF for stormwater this year.

- MS4 Survey

Seth Brown described WEF’s MS4 survey. The purpose of the survey is to assess, nationally, the needs of the MS4 sector through a survey distributed to MS4



program managers. Survey results should be available later this year.

- MS4 Award  
Seth Brown described the WEF MS4 Stormwater Program award. More information can be found here: <https://wef.org/membership/awards-recognition/wef-awards/national-municipal-stormwater-and-green-infrastructure-awards-program/>

### 3. ASCE Report card

NMSA is working with the American Society of Civil Engineers (ASCE) to include stormwater as a category on the ASCE Infrastructure report card. The report card is published in two forms: At the state level, as compiled by the ASCE chapters in each state, and nationally, as compiled by ASCE national staff. The state and national report cards are completed independently.

NMSA objective is to ensure that stormwater is included on both the state and national Report Cards. To date, NMSA has collaborated with ASCE staff to develop report card assessment criteria for the stormwater category. This criterion is currently being beta tested in California. Ultimately, this draft criterion will be provided to each state for use in developing their report cards.

The national report card requires national assessment data. The national report card is not a consolidation of individual state report cards. The WEF MS4 survey is being used to provide this national level information on the state of MS4 program infrastructure. National and state report cards are published every four years on a staggered schedule. The next national report card will be published in 2021.

### 4. EPA Groundwater/Surface Water Proposed Review

NMSA developed and submitted a comment letter to the U.S. Environmental Protection Agency (EPA) in response to the agency's request for comment on whether pollutant discharges from point sources that reach jurisdictional surface waters via groundwater may be subject to regulation under the Clean Water Act. The NMSA comment letter to EPA is posted on the NMSA website.

*A copy of the NMSA comment letter provided to EPA is attached to these notes.*

### 5. NMSA State of Stormwater Report

The NMSA "State of Stormwater Report" is being developed to provide an overview of the current state of program implementation of municipal separate stormwater permits



(MS4s) in the US under the National Pollutant Discharge Elimination System (NPDES) permitting program.

The report will provide a brief overview of stormwater programs in participating states. The information will be compiled by NMSA member organizations but will not reflect any official state position on permit compliance or receiving water quality. Rather, the information provided will be a snapshot of overall MS4 NPDES program implementation, current regulatory issues in the state, and a general estimate of the trend and overall quality of the state's receiving waters.

NMSA will produce this report annually, with the intent of providing information on sector needs and a qualitative assessment of US receiving water quality and trends.

The goal will ultimately be to provide information from all states. The goal is to provide information that supports and improves MS4 program implementation and continuing development. The report card will include a Forward by Paul Davis, formerly with the Tennessee Department of Environment and Conservation. The report card will be published in July, 2018.

#### 6. NMSA Annual Meeting (Taylor)

- a. Location/time/date: The NMSA Annual Meeting will be held this year at WEFTEC in New Orleans on Wednesday October 4, from 8am to noon, at the New Orleans Convention Center.
- b. Agenda: A draft agenda for the meeting was provided during the call for review and comment. *The draft agenda is attached to these notes for reference.*

#### 7. Other NMSA Activities (Taylor)

- a. Newsletter: The NMSA Newsletter is published quarterly, and provides short introductory information and hyperlinks to items of interest to the MS4 Sector. Past issues of the newsletter are posted on the NMSA website at [www.nationalstormwateralliance.org](http://www.nationalstormwateralliance.org). Randy Bartlett noted that it would be beneficial to have a Legislation page on the NMSA website to track legislative issues.
- b. MS4 Database: NMSA leadership is pursuing a source of funding for this project. The project objective is to list all MS4 Permits as well as contact information for the program administrator, for all MS4 permittees in the US. This type of information has not been compiled in a comprehensive manner to date. The initial development of the database is in the conceptual stage. Maintaining the database will require significant resources. Funding must be secured for database maintenance prior to the initial development of the project to ensure that it remains current. The information will ultimately be accessible on the NMSA website through a graphic user interface.
- c. Future Webinar Topics: NMSA recently co-hosted a webinar on trees and their benefit for stormwater quality. Future webinar topics for NMSA to pursue were discussed, and



topics for future webinars were solicited.

- d. Next Call: The next call was scheduled for December 6 at 9am PST, 12pm EST.



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

 **wef** | Stormwater  
Institute

  
National  
Municipal  
Stormwater  
Alliance

# DID YOU KNOW?

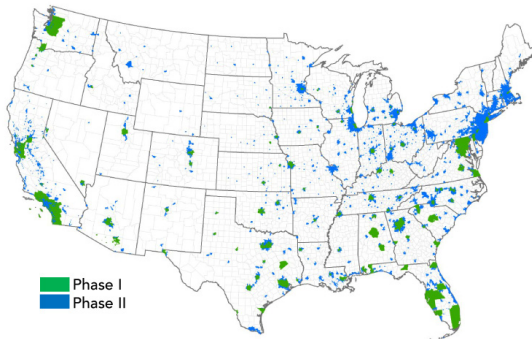
There are

**7,550 MS4** stormwater permittees

in the United States, including more than **6,500 MS4 cities.**

Communities with MS4 stormwater permits include **more than 80% of the U.S. population.** (EPA)

## National Map of Regulated MS4s



**STORMWATER** is not currently included in the **ASCE Infrastructure Report Card** due to a lack of sector data.

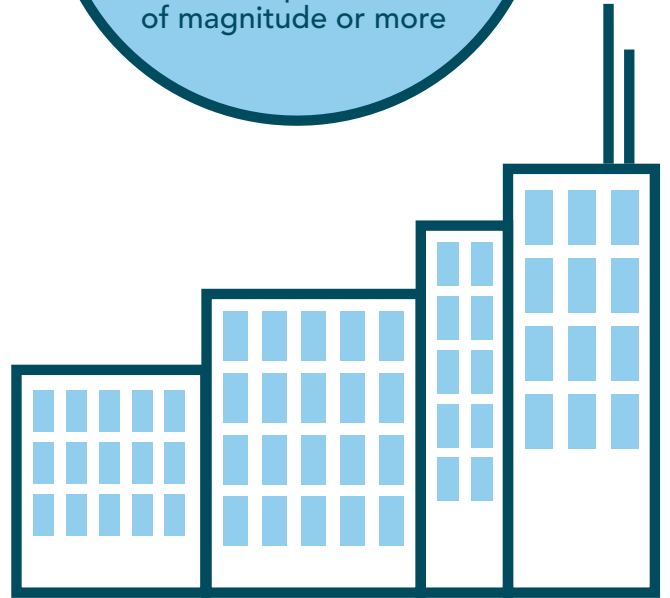
Only approximately

**1,500**  
OF THE  
**7,550**

permitted entities in the U.S. have a dedicated revenue source.

EPA estimates that **\$150 BILLION IS NEEDED** for MS4 and CSO investments over the next 20 years across the country.

While only 2% of the continental U.S. is covered by impervious surfaces (about the size of the state of Ohio), the impact on lakes, rivers and estuaries is several factors larger than this - up to an order of magnitude or more



EPA has identified urban runoff as the only major growing source of water pollution across much of the country

As of August 2005, over **26,000,000 organic & inorganic substances**

have been documented,

**9,000,000**

of these are commercially available.

Of these, fewer than 240,000 are inventoried or regulated (3%). These chemicals make their way into surface waters across the country.

## 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 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.

*Request: Convene a Task Force to study funding for stormwater infrastructure (and green infrastructure) through existing federal funding and financing programs, such as the Clean Water State Revolving Fund, USDA Rural Development, and Economic Development Administration.*

Stormwater gray and green infrastructure are widely viewed as a key part of the solution to surface water quality issues, local flooding problems, and improved infrastructure resiliency. Green infrastructure is being introduced in many states in the urbanizing fringe but is largely absent in the built urban environment due to lack of funding. To improve surface water conditions (protect beneficial uses and reduce urban flooding) green infrastructure and/or other stormwater control measures will need to be retrofit into the existing urban landscape to achieve watershed-specific goals.

The challenges related to funding in the stormwater sector are daunting. The U.S. Environmental Protection Agency’s (EPA) estimates costs for stormwater retrofits in the Chesapeake Bay alone at about \$7.9 billion per year. Municipalities need state and federal assistance in defining funding sources. The funding must be available in all states, be affordable per the EPA’s integrated planning guidelines, and sufficient to support both the capital expenditures as well as long-term operation and maintenance costs. We recommend the creation of a federal task force to study this problem and provide workable solutions, with participation by the permittees and other program stakeholders.

## 2. 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).*

Under the Clean Water Act stormwater is regulated through the National Pollutant 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 needs to meet those requirements account for a substantial investment by communities, which is primarily paid for by local taxes and utility rates. While these investments are required under the CWA, there is limited and inconsistent data about the amount of infrastructure investments needed for communities to meet the requirements of their NPDES Permits.

A solution to this lack of data is to insert “municipal stormwater” into CWA § 516 (b)(1). This would add to the Clean Watershed Needs Survey data collection process the requirement that States request Municipal Separate Storm Sewer System (MS4) entities to submit data about their future infrastructure investment needs to meet the requirements of their NPDES Permit. That data will then be reported to the EPA and Congress to help guide national policy and infrastructure funding decisions. We recommend the creation of a federal task force to study this process change and provide workable solutions, with participation by the affected communities.

### 3. Provide New Program Tools.

*Request: Direct EPA to work with permit holders to develop model permit language and incentives to develop integrated water plans.*

Stormwater NPDES permits should be written to encourage the use of EPA's integrated planning framework as an optional voluntary program framework, which would include the development of a master plan describing infrastructure improvement needs, asset management, modeling to demonstrate compliance with water quality goals and standards, a schedule and a cost estimate. This approach would likely transcend the current 5-year permit cycle. Permits could include reductions in other program requirements to provide incentives for MS4s to choose the optional framework and create integrated plans. Additionally, EPA should be directed to provide technical assistance and grant funding to MS4s willing to adopt stormwater NPDES permits through a voluntary integrated planning framework.

### 4. Create a Basis for the Implementation of Source Control for Stormwater Pollution.

*Request: Direct EPA to examine the authority under the Clean Water Act and Toxic Substances Control Act as appropriate, to better control pollutants in stormwater at the source, and assist states developing pollutant source control programs.*

It is technically infeasible to remove many common pollutants once they become entrained in stormwater. We need to keep them from being introduced in the environment in ways that allow contact with stormwater. Source control is by far the most effective and cost-efficient approach for pollutants such as pesticides, nutrients and many metals. An example of source control is the reduction of copper in automotive brake pads, instituted in California and Washington. Copper in vehicle brakes was found to represent up to half of the pollutant load in urban stormwater. Substituting other materials in brake pads is estimated to save over \$1 billion in California at the municipal level for urban copper control programs. EPA's use restriction of several organophosphate pesticides is another successful example of the application of source control.

- We recommend that EPA identify pollutants in stormwater that are amenable to source control, and develop tools to support source control implementation by permit holders for the identified pollutants.

We urge support of the following for better stormwater management:

- Improve federal and state stakeholder processes to engage the wider population of MS4 permittees in community solutions.
- Improve information exchange among MS4 permittees and promote the "one water" concept among water agencies (see: [www.uswateralliance.org/one-water](http://www.uswateralliance.org/one-water))
- Increase funding and emphasis on urban stormwater research and technology transfer at the federal and state levels. Provide national coordination.

#### **WEF Stormwater Institute**

<http://wefstormwaterinstitute.org/>

**Seth P. Brown, P.E.** | Director of Stormwater Programs  
202.774.8097 | [sbrown@wef.org](mailto:sbrown@wef.org)

#### **National Municipal Stormwater Alliance**

<http://nationalstormwateralliance.org/>

**Scott Taylor, P.E., D.WRE, FASCE** | Chair  
760.603.6242 | [STaylor@mbakerintl.com](mailto:STaylor@mbakerintl.com)





**Scott Taylor**  
California Stormwater  
Quality Association  
*Chair*

**Randy Neprash**  
Minnesota Cities  
Stormwater Coalition  
*Vice-Chair*

#### **Member Organizations**

Arizona Stormwater Outreach for  
Regional Municipalities

California Stormwater  
Quality Association

Central Massachusetts Regional  
Stormwater Coalition

Kentucky Stormwater Association

Indiana Association for Floodplain  
and Stormwater Management

Iowa Stormwater  
Education Partnership

Louisiana Urban  
Stormwater Coalition

Maine Water Environment Association

Minnesota Cities  
Stormwater Coalition

Nebraska Floodplain & Stormwater  
Managers Association

Ohio Stormwater Association

Pennsylvania Water Environment  
Association

Tennessee Stormwater Association

Virginia Municipal  
Stormwater Association

Utah Stormwater Advisory Committee

Water Environment Federation

May 21, 2018

Scott Wilson  
Office of Wastewater Management, Water Permits Division  
(MC4203M)  
United States Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

RE: Comments from National Municipal Stormwater Alliance  
Docket ID No. EPA-HQ- OW-2018-0063  
“Clean Water Act Coverage of Discharges of Pollutants via a  
Direct Hydrologic Connection to Surface Water”

Mr. Wilson:

The National Municipal Stormwater Alliance (NMSA) appreciates this opportunity to provide comments as EPA considers whether pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a direct hydrologic connection to the jurisdictional surface water may be subject to CWA regulation. The member organizations of NMSA are state or regional-level coalitions of Municipal Separate Storm Sewer System (MS4) permittees. NMSA exists to be the voice of local MS4 programs throughout the United States. Additional information about NMSA can be found at: <http://nationalstormwateralliance.org/>

This letter is in response to EPA’s request for comments posted in the Federal Register on February 20, 2018: “Clean Water Act Coverage of Discharges of Pollutants via a Direct Hydrologic Connection to Surface Water”. Specifically, this is in response to the following statements from the Notice:

*“EPA also seeks comment on whether EPA should clarify its previous statements concerning pollutant discharges to groundwater with a direct hydrologic connection to jurisdictional water in order to provide additional certainty for the public and the regulated community.”*

*“EPA also seeks suggestions on what issues should be considered if further clarification is undertaken, including, for example, the consequences of asserting CWA jurisdiction over certain releases to groundwater or determining that no such jurisdiction exists.”*



The MS4 permittees that are associated with NMSA own and operate stormwater conveyance systems throughout the United States. These systems store, treat, and convey urban stormwater. Urban stormwater includes a wide variety of pollutants. Some of these pollutants may leave our municipal separate storm sewer systems and enter groundwater. A portion of the pollutants are attenuated as they move through treatment systems, vegetation and/or soil. Another portion of the pollutants may travel to deep groundwater aquifers. Some of the pollutants may move through shallow groundwater and shallow aquifers to waters that are jurisdictional under the Clean Water Act (CWA).

NMSA is concerned that the issues discussed in this Docket are appearing in multiple and varied court cases. NMSA concurs with the Federal Register Notice's characterization of the current status of case law as "mixed". The Notice also included the following sentence:

*"As one court noted, 'the inclusion of groundwater with a hydrological connection to surface waters has troubled courts and generated a torrent of conflicting commentary.'"*

NMSA is especially concerned about third-party lawsuits under the CWA.

Based on the variety of current lawsuits focused on these issues, it is apparent that these issues are complex, and the possible resolutions carry significant risk of unintended consequences. NMSA is especially concerned about unintended consequences that will result if the resolutions of these issues are primarily or solely guided by court rulings. Therefore, it is important for EPA to issue a comprehensive position statement and initiate a formal notice-and-comment rulemaking to address these issues.

NMSA requests that the following items be considered in the process of addressing these issues. NMSA also requests and strongly recommends that the relevant stakeholders be invited to participate in discussions to arrive at EPA's policies and clarifications related to these topics. From the perspective of MS4 permittees, issues related to urban stormwater and the operation of local municipal separate storm sewer systems significantly impact the local program managers, whom NMSA represents.

### **1. Leakage from pipe systems**

Every pipe system leaks. This is especially true for underground pipe systems. Every pipe system owner and operator works to minimize leakage, but leakage cannot practicably be eliminated.

MS4 permittees throughout the United States own and operate underground storm sewer and storm drain piping systems. These pipe systems are "point sources" under the CWA. These pipe systems carry stormwater that include pollutants. It is inevitable that some of these pollutants will leak from the pipe systems into the ground. As described above, some of these pollutants may travel through shallow groundwater and shallow aquifers to waters that are jurisdictional under the CWA.



NMSA requests that any EPA policies and clarifications on these issues explicitly address (through exemption) pipes as point sources. There cannot be an expectation, under the CWA, that pollutants leaking from storm sewer/drain systems, traveling through the ground, and reaching jurisdictional waters can be eliminated. Similarly, there cannot be a regulatory regime under which numerous, relatively small leaks from storm sewer pipe systems must be permitted under the CWA. Please note that this concern extends to sanitary sewer and drinking water pipe systems.

## **2. Stormwater infiltration**

MS4 permittees throughout the United States are constructing and promoting Stormwater Control Measures (SCMs) based on infiltrating stormwater. One of the most important recommendations from the study: “Urban Stormwater Management in the United States” (National Research Council, 2008), was:

*“SCMs that harvest, infiltrate, and evapotranspire stormwater are critical to reducing the volume and pollutant loading of small storms.”*

Of these methods, infiltration is the most widely and frequently used and implemented. Most types of “green infrastructure” SCMs rely on infiltration for stormwater treatment and management.

Some of these infiltration SCMs are owned and operated by MS4 permittees. As part of permitted MS4 systems, piped discharges from underdrains in these SCMs are considered point source discharges. Other infiltration SCMs are constructed by private or other parties to meet local stormwater design standards that have been promulgated to meet MS4 permit requirements.

The urban stormwater entering and leaving infiltration SCMs contain some pollutants. Some of the water leaving these SCMs does so via underdrain pipes. Much of it leaves these SCMs as infiltration to the ground. Some pollutants are attenuated by the vegetation and/or soil, and other portions of the pollutants may travel to deep groundwater aquifers. A portion of the pollutants may go to shallow groundwater or shallow aquifers and travel to waters that are jurisdictional under the CWA.

NMSA requests and recommends that EPA policies and clarifications addressing discharges of pollutants traveling through groundwater to WOTUS include an explicit exemption for stormwater infiltration SCMs. NMSA estimates the current number of infiltration SCMs in the U.S. to be in the range of hundreds of thousands to more than a million, with that number growing rapidly. There cannot be a regulatory regime under the CWA that requires or promotes the construction of infiltration SCMs and then considers the discharges of pollutants from those infiltration SCMs as possible CWA violations or discharges that must be permitted under the CWA.



### 3. Additional research

The fact that these issues have risen to the fore is instructive. The facts that the courts are “troubled” and we have a “torrent of conflicting commentary” is additionally instructive. This indicates a lack of understanding and knowledge about the interactions between urban stormwater and groundwater.

This is a significant source of concern related to the issues discussed above, but extends to other more important concerns. For example, in the northern U.S., we have chloride (from road salt and other sources) in urban stormwater. In response to regulatory pressure, some MS4 permittees are promoting infiltration of stormwater from roads. It is understood that vegetation and soil do not attenuate chloride in stormwater as it moves through the ground. There is concern that the infiltrated chloride will travel to and significantly contaminate groundwater drinking water sources.

NMSA requests and recommends that additional research be done to better understand the interactions and potential problems related to urban stormwater and groundwater. NMSA additionally recommends that the full range of stakeholders be involved in identifying and prioritizing the research needs related to these topics and selecting research projects to be funded. Finally, NMSA strongly recommends that a robust technology transfer program be implemented at the national level to translate the results of research projects and disseminate them to local implementers in forms that are useful for local implementation.

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In order to provide clarity and certainty, NMSA urges EPA to issue a comprehensive position statement addressing these issues. EPA should also initiate a formal notice-and-comment rulemaking to clarify and memorialize EPA’s position, thereby remedying the regulatory ambiguity and constitutional uncertainty that is currently plaguing courts, permittees, regulatory agencies, and other stakeholders. As always, NMSA urges EPA to include stakeholders in the process of developing the position statement and rule.

NMSA appreciates the opportunity to submit these comments. Please contact us if you would like any additional information or have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Randy Neprash", is written over the word "Sincerely,".

Randy Neprash, PE  
Vice-Chair, National Municipal Stormwater Alliance  
[randy.neprash@stantec.com](mailto:randy.neprash@stantec.com)  
651-604-4703



## **NMSA ANNUAL MEETING**

### **AGENDA**

WEFTEC, New Orleans, LA  
Morial Convention Center  
October 3, 2018  
Rm 283-285  
10:00 am to Noon

- I. Welcome and Introductions (Taylor)
- II. National Stormwater Program Overview – Paul Davis
- III. WEF Stormwater Institute Update (Brown)
- IV. WEF Stormwater Committee Update (Sydnor)
- V. MS4 Survey (Brown)
- VI. USEPA update (Kloss)
  - a. EPA report-out
  - b. Open discussion
- VII. Report Out: Activities from Year, Activities for 2018 (Neprash)
- VIII. NMSA Planned Activities for 2019 (Taylor/Neprash/Brown)
- IX. Member's Report-out (Members)
- X. Legal Update (Invited)
  - a. State rules/legislation
  - b. Lawsuits
- XI. Membership and Treasurer's Report (Brown/Stark)
- XII. Open Discussion (All)(noon)