



Meeting Minutes
NMSA Member Call
March 13, 2018
8am to 9:30am PDT, 11am to 12:30pm EDT

Agenda Discussion:

1. New NMSA Members (Taylor)

New members from the Kentucky Stormwater Association, and Pennsylvania and Maine Member Associations were welcomed. Beth Dutton and Nathan Shireman represent the Pennsylvania MA, Zach Henderson represents the Maine MA, and Brooke Shireman the Kentucky Stormwater Association. Welcome.

Seth Brown noted that NMSA is talking with other potential members in Hawaii, Texas, Montana and Alabama. NMSA's goal is to have a member in each of the 50 states. We currently have 15 states represented and cover 8 of 10 EPA Regions.

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

Scott Taylor noted that Water Week will be held April 12 -14 in Washington DC. As a part of Water Week, WEF's Stormwater Institute (SWI) will meet. NMSA holds a seat on the SWI Advisory Committee (AC). In association with the SWI, NMSA has developed a stormwater 'ask' document for Water Week. One purpose of Water Week is for attendees to visit their Congressional representatives to discuss water program issues. The purpose of the 'ask' document is to serve as talking points for meeting with representatives of Congress. The document will carry the NMSA logo. The 'ask' document was previously reviewed by NMSA members. The document will carry the NMSA logo. The document is appended to these notes for reference.

Randy Neprash indicated that Minnesota will be visiting Congressional representatives, and asked that anyone else planning visits to the Hill coordinate with him.

Seth Brown gave an overview of other Water Week activities as well as WEF's involvement.

Nathan Walker asked how the 'ask' paper will be delivered. Scott Taylor indicated that it should be hand carried when meeting with Congressional representatives and staff. It also serves as a leave-behind, and makes excellent talking points for NMSA members.

3. ASCE Report card (Brown)

NMSA has been working with ASCE to secure a spot on the ASCE Infrastructure Report Card (IRC) for stormwater. The IRC is run in two separate operations: States produce their own,

* Denotes group discussion item



and a national report card is produced. NMSA is working with ASCE to appear in each state's IRC as well as the National IRC. NMSA has developed draft criteria for grading the stormwater sector, which is currently under review by ASCE. A draft copy of the criteria is attached for reference.

Seth Brown discussed the state datasets for stormwater that are available, as well as the need for national datasets. Currently, little national data is available, which is needed for a national report card.

WEF is in the process of issuing an MS4 Survey, to better understand the needs of MS4 Permittees in implementing their stormwater programs. This survey has been modified to accommodate data needs for the IRC. The survey is due to be sent in April/May of this year. This is a major step in ensuring that stormwater will appear on the National IRC in 2021.

It was noted that some states currently have stormwater in the state IRC. NMSA's goal is to have all states include the stormwater line item on their report cards.

Seth Brown also noted that the National Council for Public Private Partnerships (NCPPP) requested a letter of support (provided) for grant funding to promote the IRC.

4. EPA Groundwater/Surface Water Proposed Review (Neprash)

The USEPA has requested comment on the idea of regulating MS4 (and other) NPDES Permit holders relative to surface water contamination of ground water. NMSA has developed a draft comment letter on the issue, Randy Neprash reviewed the letter. The letter is attached to these notes for reference.

Randy Bartlett noted that in addition to storm drains exfiltrating water and potentially contaminating groundwater resources, contaminated groundwater may infiltrate into storm drains and be discharged to receiving waters. Randy and Randy to collaborate on updating the letter to comment on this possibility.

5. USEPA Meeting in January (Taylor)

Scott Taylor gave an overview of the NMSA/EPA meeting held on January 9th. A copy of the agenda is attached for reference. The meeting covered multiple topics including a framework for NMSA activities:

1. Establish Communication – Public and Decision Makers
2. Planning – Develop a Plan
3. Cost – Develop a Cost Estimate

* Denotes group discussion item



4. Financing – Find a way to pay to implement the plan

Each of NMSA's efforts will support an element of this overall framework.

Randy Bartlett noted that we need to get cost information for implementing regulations. Robin Craver noted there is a cost of compliance study in MA, and will forward this information for distribution.

6. Chesapeake Symposium (Taylor/Brown)

http://communitymodeling.org/chesapeakemeetings/dev/event_details.php?event_id=31

Scott Taylor gave an overview of this symposium, and noted that he will give a talk on NMSA, and Seth Brown will give a talk on green infrastructure financing.

7. NMSA State of Stormwater Report (Brown)*

Seth Brown gave an overview of a new NMSA effort to produce a 'State of Stormwater' report. The idea is to publish, annually, a report describing the implementation challenges, and state of implementation of MS4 stormwater programs. A draft template for each NMSA member to complete was distributed and discussed (see attached). It was decided that 4 states will be completed as 'examples'

Randy Bartlett suggested that Topic No. 1 also include a 'regional' element, to capture water quality issues that cross jurisdictional boundaries.

8. NMSA Research and Technology Transfer (Attachment) (Neprash)

Randy Neprash distributed a NMSA framework for research and technology transfer (attached for reference). The purpose of these guidelines is to direct NMSA's energies. The primary points are:

- Our members should be significantly engaged in identifying and prioritizing research needs
- Our members should be engaged in selecting research directions and projects
- Our members should be knowledgeable about the full range of research being done at all levels
- There should be a robust technology transfer process to translate research results and disseminate them in useful form to local implementers
- Our members need to be notified about what is the good work on specific topics of interest that is worth their time and effort to read and understand (as distinguished from material that is not worth their time)

Lori Gates suggested that Randy reach out to the Cincinnati EPA Office of Research and Development on this topic.

9. Other NMSA Activities

- a. Newsletter – Scott Taylor requested feedback on the newsletter. Geoff Brosseau (CA) responded that it is well done and provides value. Scott thanked Jennifer Watson for

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her assistance in putting it together each quarter.

- b. MS4 Database – Scott noted that this project is on hold pending completion of the WEF MS4 survey. Information from this survey will be useful in moving the Database forward.
- c. WEF Messaging – Scott and Seth indicated that the WEF Messaging project (public messaging) has finished its preliminary stage. WEF is currently formulating the next step. Seth and Scott will keep the membership informed as this important project develops.
- d. Next Call: The next call was determined to be on June 7, at 8am PDT, 11am EDT.



Attachments

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Recommendations to Improve the Stormwater Program in the U.S.

Water Week – April, 2018

WEF Stormwater Institute

National Municipal Stormwater Alliance

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 Agency.

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

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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 to for better stormwater management: Improve stakeholder engagement to invest the wider population in community solutions.

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- Improve information exchange among permittees and promote the “one water” concept among water agencies (see: www.uswateralliance.org/one-water)
- Increase funding and emphasis on urban stormwater research and technology transfer at the federal and state levels.



Draft

Description Paragraph for Report Card

Drainage Infrastructure

From Scott Taylor

Local storm drain systems convey rainwater, called urban runoff, from paved, impervious and landscaped surfaces into streams, rivers, lakes, bays, beaches and the Pacific Ocean. Urban runoff can be one of the largest sources of pollution to lakes, streams, rivers and beaches, since it flows in most cases untreated to our nation's waters. Urban runoff includes rainwater runoff, as well as dry-weather flows from activities such as car washing and over-watering of landscape areas. Urban runoff carries pollutants such as motor oil, grease, animal waste (bacteria), fertilizers, pesticides, yard waste, trash and metals. As of 2017, 42,728 water bodies in the US had concentrations of pollutant(s) above Federal and State water quality limits. Urban runoff that does not meet water quality standards can harm fish and other aquatic organisms, harm plant life and restrict human activities and uses for water such as swimming, fishing, and use for drinking water.

Urban runoff is collected and transferred to streams, rivers, lakes and the ocean via a system of man-made pipes, ditches, canals, channels as well as streets and roads. The condition of these conveyance systems and their capacity to prevent flooding is a component of the report card grade for the Drainage Infrastructure category. Drainage infrastructure is a vital component of the systems that support the quality of life in our urban areas.

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COMPARISON OF EXISTING METRICS & PROPOSED METRICS

State Stormwater Chapters

This document combines proposed grading criteria from Seth Brown of the National Municipal Stormwater Alliance with existing metrics and discussion points already utilized by existing state report card stormwater chapters.

For discussion about a final set of guidance on stormwater infrastructure to be provided to state authors.

INTRODUCTION SECTION

- What is stormwater infrastructure
- Who benefits from stormwater management
- An explanation of how impervious surfaces impact the rate and volume of water.
- How stormwater is managed (local government involvement, how NPDES permits fit into the picture)
- Are demands increasing on municipal stormwater management? Why?

CAPACITY

DOES THE INFRASTRUCTURE'S CAPACITY MEET CURRENT AND FUTURE DEMANDS?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Number of stormwater utilities or districts (compare that to number throughout the U.S. – approximately 500)
- Does existing capacity meet demand in growing urban areas?
- Are local governments assessing the need for increased capacity in addition to evaluating maintenance needs?
- Does existing infrastructure meaningfully address water quality components?
- How will the changing climate impact existing capacity in your state?

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The methodology for scoring the capacity of surface water quality infrastructure is based on two criteria: ability to improve water quality using an analysis of the percentage of both wet and dry weather runoff from developed areas treated, infiltrated, diverted, or captured for harvest/reuse. The sources of this data may be difficult to obtain, and estimates based on land use type and age of infrastructure relative to local stormwater requirements may be used.

The second criteria is the ability of the system to convey urban runoff safely to the receiving water – ensuring that urban flooding does not occur

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Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Capacity	Capacity of Regional, Public & Distributed Facilities	GIS Analysis of % Wet Weather Runoff from Developed Areas Treated, Infiltrated, Diverted, Captured for Harvest/Reuse.		7
		GIS Analysis of % Dry Weather Runoff from Developed Areas Treated, Infiltrated, Diverted, Captured for Harvest/Reuse.		3
		Sub-Total		10

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CONDITION

WHAT IS THE INFRASTRUCTURE'S EXISTING AND NEAR-FUTURE PHYSICAL CONDITION?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- What does stormwater infrastructure consist of?
 - What role does green infrastructure play?
- Local government's ease (or lack of) in maintaining pipes and structures
- How is MS4 permitting changing local government approach to stormwater?
- When in general were the following components of stormwater management infrastructure built?
 - Combined sewer systems
 - Municipal Storm Drain Systems
 - Detention and Retention Ponds
 - Low Impact Development/Green infrastructure
- Is there a difference between older communities and new developments in terms of stormwater management infrastructure requirements?
- How many miles of streams are listed as impaired by violating at least one water quality criteria (such as does not meet designated uses)?
- What percentage of violations for rivers, streams, lakes and reservoirs are a result of stormwater runoff?
 - What percentage of water quality impairments are a result of stormwater?
- Has there been a statewide or regional stormwater study or commission in recent years? What did they find, and did they issue recommendations?

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<#>Green stormwater management infrastructure¶

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The grade in this category is based on the condition (health) of watersheds, receiving waters, and the ability of the drainage system to convey runoff safely, to calculate an overall score for this category. The methodology uses a combination of geographical information system (GIS), asset management and environmental monitoring/water quality data. Sources of the data will vary based on information available through municipalities, the state and EPA.

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Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Condition	Condition of the storm drain infrastructure	Capital Improvement Plan		4
		Infrastructure condition surveys/ Asset Management System data		
		Age of system and materials of construction for the system		
	Condition (health) of Receiving Waters	Water Quality (WQ) Index Score of Wet Weather Chemistry Data using water quality objectives as thresholds.	NPDES Monitoring Data	1
				3
		WQ Index Score of Dry Weather Chemistry Data using water quality objectives as thresholds.	EPA	2
		Number of TMDL water bodies		2
		Other state water quality data		2
	Condition of Stormwater/Non-Stormwater Runoff	WQ Index Score of Wet Weather -Chemistry Data using water quality objectives as thresholds.	MS4 Water Quality Data	2
		WQ Index Score of Dry Weather Chemistry Data using water quality objectives as thresholds.		1
Sub-Total:		13		

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FUNDING

WHAT IS THE CURRENT LEVEL OF FUNDING FROM ALL LEVELS OF GOVERNMENT FOR THE INFRASTRUCTURE CATEGORY AS COMPARED TO THE ESTIMATED FUNDING NEED?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- What is funding needed for?
- Where does funding come from? (E.g. Local government, stormwater utility revenue, private property investment, revolving funds, clean water act grants)
- Are there alternative funding methods in place (e.g. general obligation bonds, development impact fees)?
- Are there user fees or are they an option?
- If there was a recent study or commission on stormwater, did they make recommendations on funding? What were they? (e.g. NH recommended formation of a statewide utility to provide a consistent and dedicated revenue stream for stormwater program. Also made recommendations on fees.)
- CWSRF utilized in your state?
- Any new or pending legislation that would increase funding available for stormwater infrastructure?

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The basis for this criterion is the ability for communities to generate revenue needed to meet the needs of stormwater programs. The metric that drives grading for funding is the gap (or lack thereof) between ability to fund programs and the needs in this program. The methodology to determine a grade for this criterion is likely to be based upon existing and future surveys of communities regarding funding abilities and challenges.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Funding	Programmatic and Hard Costs	Document research	<u>WEF</u> MS4 Needs Survey	4
			Clean Watershed Needs Survey	4
	Current Funding Sources	Document research; survey of states/communities	<u>WEF</u> MS4 Needs Survey; independent surveys	4

* Denotes group discussion item



FUTURE NEED

WHAT IS THE COST TO IMPROVE THE INFRASTRUCTURE? WILL FUTURE FUNDING PROSPECTS ADDRESS THE NEED?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Is population in urban areas increasing? Is funding increasing commensurately?
- Is funding increasing as a result of MS4 permit requirements?
- Total available needs number? (pull from EPA Needs Survey)
 - Total needs for separate sewer and wet-weather issues?
 - Needs number for combined sewer overflow correction?
 - Number for other stormwater management infrastructure?
- Gap in available funding versus what is needed?

PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The grading for this criterion is based upon the projected ability for communities to meet needs in the future. These needs include funding/investment needs as well as workforce and other resources required for stormwater infrastructure and programs. Additionally, this category accounts for needs to adapt for changing climate dynamics. Basically, will future resources be able to keep up with projected needs.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Future Needs	Programmatic Costs	Document research	MS4 Needs Survey, additional surveys/outreach	4
	Hard Cost Needs			4
	Future Funding Sources			4

O&M

WHAT IS THE OWNERS' ABILITY TO OPERATE AND MAINTAIN THE INFRASTRUCTURE PROPERLY? IS THE INFRASTRUCTURE IN COMPLIANCE WITH GOVERNMENT REGULATIONS?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Who is responsible for maintenance?
- How much of the state is covered by MS4 permits?
- Role of private sector owners of stormwater infrastructure
- Miles of storm drains in the state and ownership structure? (Municipalities, counties, or DOT?)

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- Availability of dedicated local funding for maintenance?
- Rate of infrastructure replacement (or estimate)

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The methodology used for scoring operation & maintenance of surface water quality infrastructure should be based on a survey of municipalities. Alternatively, the operation and maintenance score may be based on the projected vs. actual operation and maintenance budget for the system.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Operation & Maintenance	O&M Resources & Capabilities	Sampling of Municipalities, Water/Sanitation Districts, Special Districts (Planned communities).	Survey	12

PUBLIC SAFETY

TO WHAT EXTENT IS THE PUBLIC'S SAFETY JEOPARDIZED BY THE CONDITION OF THE INFRASTRUCTURE AND WHAT COULD BE THE CONSEQUENCES OF FAILURE?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Failing pipes resulting in sinkholes, flash floods, collapsed roadways (specific examples of high profile incidents in state);
- Discussion of flooding

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

The security and safety elements addressed by the report card need to include those physical improvements required to assure asset protection from identifiable threats to the category of infrastructure.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Public Safety	Flooding	Document research; insurance information	ASCE Public Safety Publication	6
	Other			6

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RESILIENCE

WHAT IS THE INFRASTRUCTURE SYSTEM'S CAPABILITY TO PREVENT OR PROTECT AGAINST SIGNIFICANT MULTI-HAZARD THREATS AND INCIDENTS? HOW ABLE IS IT TO QUICKLY RECOVER AND RECONSTITUTE CRITICAL SERVICES WITH MINIMUM CONSEQUENCES FOR PUBLIC SAFETY AND HEALTH, THE ECONOMY, AND NATIONAL SECURITY?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Impact of increasingly severe storms
- Specific examples of strong storms encouraged
- Role of community disaster mitigation plans

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PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

Defined as the ability to maintain and restore drainage infrastructure and surface water quality in the event of natural and man-made incidents, extreme weather events, and climate change. Resiliency should be scored primarily based on the analysis of the number of TMDL watersheds in the area of analysis, percentage of urbanized area, and past performance of stormwater infrastructure.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Resiliency	Storm/Spill/Release Risk	GIS Analysis of % Land Area Tributary to a Basin, Division, or other Surface Water Quality Feature Capable of Mitigating a <u>design or larger storm event</u>	See Capacity Category	2
		GIS Analysis of % Land Area Tributary to a Basin, Division, or other Surface Water Quality Feature Capable of Mitigating a Spill/Release		3

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INNOVATION

WHAT NEW AND INNOVATIVE TECHNIQUES, MATERIALS, TECHNOLOGIES, AND DELIVERY METHODS ARE BEING IMPLEMENTED TO IMPROVE THE INFRASTRUCTURE?

EXISTING STATE REPORT CARD CHAPTER REVIEW OF METRICS/OTHER CONTENT:

- Specific examples of innovative efforts, technologies, materials, etc.

PROPOSED GRADING CRITERIA FROM SETH BROWN/ NATL MUNICIPAL STORMWATER ALLIANCE:

This category was created to provide a means to capture the level of innovation occurring in an infrastructure sector. The grade for this criteria is based on advancements in performance of drainage infrastructure, and the improvement of urban runoff water quality on a year over year basis.

Category	Sub-Category	Analysis Method	Data Source	Max Points Possible
Innovation	Proprietary Products	Sales of products; number of patents	SWEMA, Patent office data base	4
	Research	Survey of research investments	Unsure	4
	Programs	Survey of innovations in programs	MS4 Needs Survey, additional surveys	4

* Denotes group discussion item



NMSA Comments – stormwater & groundwater Draft #2 March 9, 2018

<insert address here>

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”

<insert salutation>

<insert paragraph describing NMSA here>

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 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 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.

If EPA is going to provide further clarification on these topics, 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 are complex and best understood by the local program managers.

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 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 the facts above. 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.

2. Stormwater infiltration

MS4 permittees throughout the United States are constructing and promoting Stormwater Control Measures (SCMs) based on infiltrating stormwater in significant numbers. 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, discharges from 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 these infiltration SCMs contain some pollutants. As listed above, 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.

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 a significant amount of chloride (from road salt and other sources) in urban stormwater. In response to regulatory pressure, many 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 ultimately 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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AGENDA

National Municipal Stormwater Alliance | US Environmental Protection Agency

January 9, 2017 | 2pm to 3pm

USEPA Headquarters

- I. Member Update**
- II. NMSA Activities and Priorities**
- III. WOTUS**
- IV. ASCE Report Card**
- V. MS4 Permitting workshop (CA)**
- VI. Stakeholder Engagement**

* Denotes group discussion item



State of Stormwater Document Template

The purpose of this effort is to collect data from each state in an “apples-to-apples” method on five (5) critical areas in the municipal stormwater sector. The process is for each member to answer the questions below to reflect information for each state represented in NMSA. For states with multiple members, we request that members from each state to work together in completing this information.

We also request any figures or photos that could be useful or have aesthetic appeal and would help to convey information reflected in the answers provided. We are seeking to have a concise collection of information for all states in NMSA in this document. Specifically, we are looking for a maximum of 1,000 words (2 pages) or less for all text to address the five questions below.

1. Regulatory Update(s) Associated with MS4 Sector: (Two sections – Regional issues – involve multiple states, and second, local and statewide issues).

For example: Are there any unusual state regulations being enacted that may receive national attention, any litigation with national significance, permit renewals that have new requirements or TMDL or other regulatory actions of interest.

2. Greatest Need(s) in the MS4 Sector: (this could be regulatory, technical or programmatic in nature)

For example: If you could have anything you wanted to help move your program forward, what would that be? Funding, public support, elected support, revised regulation or other.

3. Greatest Challenge(s) in the MS4 Sector: (this could be regulatory, technical or programmatic in nature)

For example: What is the most difficult issue or element facing you. Conformance with sanitary quality standards, nutrients, aerial deposition, lack of funding, lack of political will, agriculture.

4. Trends in Water Quality: Is water quality in your state: Not Improving / Static / Improving (choose one). Please explain your answer and identify the role of the impacts of the MS4 sector in this context.

We are looking here essentially as an assessment of the current permitting program. Is it working? Are things getting better?

5. State Water Quality Rating (1 – 5) with 1 being lowest and 5 being the highest (best). Please explain your answer and the role played by the MS4 sector in this context.

This is your estimate of the quality of surface waters in your state. ‘1’ being a majority of waters are polluted, ‘5’ being nearly all waters meet water quality standards.

* Denotes group discussion item



NMSA Research and Technology Transfer

Draft

March 13, 2018

This paper provides an overview of NMSA's role in national stormwater research issues.

NMSA's goal is to connect local implementers and MS4 program managers to research efforts, at the national and state levels. This means:

- Our members should be significantly engaged in identifying and prioritizing research needs
- Our members should be engaged in selecting research directions and projects
- Our members should be knowledgeable about the full range of research being done at all levels
- There should be a robust technology transfer process to translate research results and disseminate them in useful form to local implementers
- Our members need to be notified about what is the good work on specific topics of interest that is worth their time and effort to read and understand (as distinguished from material that is not worth their time)

Note that research coordination and technology transfer was a major recommendation from the WEF Rainfall to Results report.

As an example, some of this is currently being done in Minnesota:

- The MCSC has formed the Minnesota Stormwater Research Council to:
 - Facilitate the completion of needed applied research that enables more informed decisions about the use, management and protection of our water resources in urbanized areas.
 - Periodically assess the status of research, identify consensus research priorities, and communicate these to Minnesota's public and private research agencies and organizations.
 - Promote coordination of research goals, objectives and funding among the research agencies and organizations.

<https://www.wrc.umn.edu/msrc>

<https://www.wrc.umn.edu/meeting-minnesota%E2%80%99s-needs-stormwater-research>

- The U of MN Water Resources Center has taken on some research coordination and technology transfer functions for urban stormwater

<https://www.wrc.umn.edu/stormwatermpca>

<https://www.wrc.umn.edu/knowledgetransfer>

- The U of MN has done work with stakeholders to ID and prioritize research needs. A survey has been done and they have draft results. This also builds on earlier work in this area by folks like the MN Stormwater Steering Committee.

<https://www.wrc.umn.edu/stormwaterroadmap>

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