

STORMWATER

QUALITY TECHNICAL WORKSHOP



JULY 19, 2023



MS4 Coalitions – Minnesota, National, and TMDLs

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Minnesota Cities Stormwater Coalition (MCSC)

National Municipal Stormwater Coalition (NMSA)

Neprash Consulting, LLC

The Minnesota Stormwater Manual

- **An amazing resource**
 - **A Wiki – a genuine “living document”**
- **Just Google it**
- **Doing a search for “TMDL” in the Manual yields 271 hits**

TMDLs and MS4 permittees in Minnesota

- We have a lot of TMDLs – at least 206
- We have taken some very interesting and important unique approaches
 - Because the MN Pollution Control Agency (MPCA) is very helpful
 - Because we have funding support
 - Because we have an active state coalition of MS4 permittees – MCSC
- The most important bits...
 - For many pollutants, permittees must make “demonstrated progress” toward meeting their WLAs
 - We have a quantitative pollutant load reduction estimation and reporting process for some pollutants – TSS & Phosphorus
 - For some pollutants (bacteria, chloride, and temperature) we have performance-based (BMPs installed) WLAs
 - The MPCA provides a significant amount of useful information and guidance
 - They have a full-time MS4/TMDL liaison staff person
 - We have some incredibly useful tools (chloride) and new work on load reduction crediting (street sweeping)

Info to MS4 Permittees from the MPCA

- The 2020 Municipal Stormwater Permit TMDL WLAs list includes U.S. Environmental Protection Agency (EPA) approved TMDL WLAs for permitted MS4s. If you are assigned a WLA in a TMDL that was approved by EPA prior to the effective date of the new MS4 permit you are required to meet MS4 permit requirements related to TMDL WLAs. See the TMDL projects page for more information on approved and draft TMDL projects:
<https://www.pca.state.mn.us/water/total-maximum-daily-load-tmdl-projects>.
- The List contains the TMDL project name, waterbody ID, waterbody name, type of WLA (categorical, or individual), numeric WLA, units, flow condition (if applicable), percent reduction (if available or applicable), pollutant (Chloride, Fecal coliform, Escherichia coli (E. coli), Oxygen Demand (Total Oxygen Demand and Nitrogenous Biological Oxygen Demand), Temperature, Total Nitrate, Total Phosphorus (TP), Total Suspended Solids (TSS)), MPCA recommended baseline year, and EPA Approval Date. The List can be filtered by any column using the dropdown boxes. See the MS4 permit and the TMDL pages in the MN Stormwater Manual for more information, guidance, and resources:

Info to MS4 Permittees from the MPCA

Permittee name	MS4 Permit	TMDL project name	Waterbody ID	Waterbody name	WLA type	Numeric W	Units	Flow Condition	Percent Reduction	Pollutant	Annual/Daily	MPCA Recommended Baseline year	TMDL Approval Date
Albertville city of	MS400281	North Fork Crow and Lower Crow Bacteria, Turbidity, and Low DO TMDL	07010204-502	Crow River	Individual	0.100	tons/day	Very Low	Not Available	TSS	Daily	2004	Original TMDL approved 8/20/2013, modification approved 6/5/19
Albertville city of	MS400281	North Fork Crow River WRAPS 2007	07010204-542	Unnamed creek (Regal Cre	Individual	19.200	billions of organisms/day	Very High	1%	E. coli	Daily	2008	4/8/2015
Albertville city of	MS400281	North Fork Crow River WRAPS 2007	07010204-542	Unnamed creek (Regal Cre	Individual	6.700	billions of organisms/day	High	0%	E. coli	Daily	2008	4/8/2015
Albertville city of	MS400281	North Fork Crow River WRAPS 2007	07010204-542	Unnamed creek (Regal Cre	Individual	2.000	billions of organisms/day	Mid	46%	E. coli	Daily	2008	4/8/2015
Albertville city of	MS400281	North Fork Crow River WRAPS 2007	07010204-542	Unnamed creek (Regal Cre	Individual	0.700	billions of organisms/day	Low	83%	E. coli	Daily	2008	4/8/2015
Albertville city of	MS400281	North Fork Crow River WRAPS 2007	07010204-542	Unnamed creek (Regal Cre	Individual	0.400	billions of organisms/day	Very Low	81%	E. coli	Daily	2008	4/8/2015
Albertville city of	MS400281	Upper Mississippi River Bacteria TMDL	07010203-528	Unnamed creek	Categorical	11.200	billions of organisms/day	Very High	66%	E. coli	Daily	2010	Original TMDL approved 11/20/2014, modification approved 6/5/2019
Albertville city of	MS400281	Upper Mississippi River Bacteria TMDL	07010203-528	Unnamed creek	Categorical	3.910	billions of organisms/day	High	54%	E. coli	Daily	2010	Original TMDL approved 11/20/2014, modification approved 6/5/2019
Albertville city of	MS400281	Upper Mississippi River Bacteria TMDL	07010203-528	Unnamed creek	Categorical	1.100	billions of organisms/day	Mid	64%	E. coli	Daily	2010	Original TMDL approved 11/20/2014, modification approved 6/5/2019
Albertville city of	MS400281	Upper Mississippi River Bacteria TMDL	07010203-528	Unnamed creek	Categorical	0.161	billions of organisms/day	Low	Insufficient Data	E. coli	Daily	2010	Original TMDL approved 11/20/2014, modification approved 6/5/2019
Albertville city of	MS400281	Upper Mississippi River Bacteria TMDL	07010203-528	Unnamed creek	Categorical	**	billions of organisms/day	Very Low	Insufficient Data	E. coli	Daily	2010	Original TMDL approved 11/20/2014, modification approved 6/5/2019
Albertville city of	MS400281	South Metro Mississippi TSS TMDL	07040001-531	Mississippi River	Categorical	154.000	lbs/acre/year	Not Applicable	Not Available	TSS	Annual	Not Applicable	4/26/2016
Alexandria city of	MS400264	South Metro Mississippi TSS TMDL	07040001-531	Mississippi River	Categorical	154.000	lbs/acre/year	Not Applicable	0%	TSS	Annual	Not Applicable	4/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	340.160	billions of organisms/day	Very High	39%	E. coli	Daily	2009	9/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	167.480	billions of organisms/day	High	9%	E. coli	Daily	2009	9/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	103.690	billions of organisms/day	Mid	49%	E. coli	Daily	2009	9/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	69.140	billions of organisms/day	Low	34%	E. coli	Daily	2009	9/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	44.670	billions of organisms/day	Very Low	**	E. coli	Daily	2009	9/26/2016
Andover city of	MS400073	Coon Creek Watershed District WRAPS 2010	07010206-530	Coon Creek	Categorical	60.050	lbs/day	Very high	61%	TP	Daily	2009	9/26/2016

This spreadsheet runs from Row 8 to Row 7,670 (7,663 listings)

We also have...

- TMDL reporting as part of our MS4 Permit requirements
 - Annual reporting under the Permit
 - Numbers of BMPs, including mapping
 - Estimated pollutant load reductions
 - A relatively simple pollutant load reduction estimation tool
 - Modeling results if a permittee claims that a WLA has been met
 - Tools for BMPs for the performance-based pollutants – bacteria, chloride, temperature
- Training for permittees
- New work to identify and credit innovative practices – street sweeping

We also have...tools and guidance for permittees

TMDL MS4 permit guidance

- [Guidance for completing the TMDL reporting form](#)
- [Phase I MS4 Guidance for completing the TMDL Annual report form](#)
- [Forms, guidance, and resources for completing the TMDL annual report form](#)
- [Page with link to many TMDL GIS shapefiles](#)
- [Summary of TMDL requirements in stormwater permits](#)
- [Guidance for meeting chloride TMDL MS4 permit requirements](#)
- [Guidance for meeting bacteria TMDL MS4 permit requirements](#)
- [Guidance for meeting dissolved oxygen or oxygen demand TMDL MS4 permit requirements](#)
- [Guidance for meeting temperature TMDL MS4 permit requirements](#)
- [Guidance for categorical TMDLs](#)
- [List of Approved TMDLs with MS4 WLAs](#)
- [Guidance for completing the MS4 Permit TMDL Application Form](#)
- [MS4 webinars and videos](#)
- [Baseline year](#)
- [Interpreting wasteload allocations based on flow/load duration curves](#)
- [Information about the 2019 Legislation and affected MS4s](#)

TMDL guidance and general information

- [Overview of TMDLs](#)
- [Technical guidance used by MPCA to develop guidelines for setting TMDL WLAs for regulated stormwater](#)
- [Guidance on what discharges should be included in the TMDL wasteload allocation for MS4 stormwater](#)
- [Construction activity by county](#)
- [Training modules](#)
 - [Overview of Stormwater Effects on Water Quality - File:Wq-strm7-81.pdf](#)
 - [Construction, Industrial & Municipal Stormwater Permits & SWPPPs - File:Wq-strm7-82.pdf](#)
 - [The TMDL Process as it Relates to Stormwater - File:Wq-strm7-83a.pdf](#)
 - [TMDL Stormwater Language - File:Wq-strm7-84a.pdf](#)
 - [Setting Wasteload Allocations in a TMDL - File:Wq-strm7-84b.pdf](#)
 - [Meeting Requirements of a TMDL - File:Wq-strm7-85a.pdf](#)

Information received from MS4 permittees

- [Summary of data received from permittees on MS4 TMDL permit reporting forms](#)

Links and other resources

- [Visit the MPCA TMDL Project page](#) for information on specific projects across the state
- [Total Suspended Solids \(TSS\)](#)
- [Phosphorus](#)
- [Bacteria in stormwater](#)
- [Protection and restoration of receiving waters](#)

TMDL toolkit for MS4 permit compliance

- [Overview of models used to meet MS4 TMDL permit requirements](#)
- **P8**
 - [Recommendations and guidance for utilizing P8 to meet TMDL permit requirements](#)
 - [Case study for using P8 to meet TMDL permit requirements](#)
 - [U of MN P8 training on the use of the P8 software](#). P8 is a free software package for modeling stormwater pollutant management in urban watersheds. This training will be offered online through zoom in the afternoons of March 2 and March 3, with a short session on February 23 to confirm software installation and access. For more information on this training, [go to this link](#).
- **WINSLamm**
 - [Recommendations and guidance for utilizing WINSLamm to meet TMDL permit requirements](#)
 - [Case study for using WINSLamm to meet TMDL permit requirements](#)
- **MIDS (Minimal Impact Design Standards calculator)**
 - [Recommendations and guidance for utilizing the MIDS calculator to meet TMDL permit requirements](#)
 - [MIDS calculator](#)
 - [Case study for using the MIDS calculator to meet TMDL permit requirements](#)
- **MPCA Simple Estimator**
 - [Recommendations and guidance for utilizing the MPCA Simple Estimator to meet TMDL permit requirements](#)
 - [Guidance and examples for using the MPCA Estimator](#)
 - [Case study for using the MPCA Simple Estimator to meet TMDL permit requirements](#)
 - [MPCA review of submittals using the MPCA Simple Estimator](#)
 - [Default TSS and TP loads for different land use scenarios using the MPCA Simple Estimator](#)
- **Monitoring**
 - [Recommendations and guidance for utilizing monitoring to meet TMDL permit requirements](#)
 - [Recommendations and guidance for utilizing lake monitoring to meet TMDL permit requirements](#)
 - [Recommendations and guidance for utilizing stream monitoring to meet TMDL permit requirements](#)
 - [Recommendations and guidance for utilizing major stormwater outfall monitoring to meet TMDL permit requirements](#)
 - [Recommendations and guidance for utilizing stormwater best management practice monitoring to meet TMDL permit requirements](#)
- [Quick guides for using models to meet MS4 TMDL permit requirements](#)
- [Case studies for monitoring to meet TMDL permit requirements](#)



We also have...crediting for BMPs

By pollutant

- [BMP pollutant removal for phosphorus](#)
- [BMP pollutant removal for bacteria](#)
- [BMP pollutant removal for hydrocarbons](#)
- [BMP pollutant removal for metals](#)
- [BMP pollutant removal for total nitrogen](#)
- [BMP pollutant removal for total suspended solids](#)

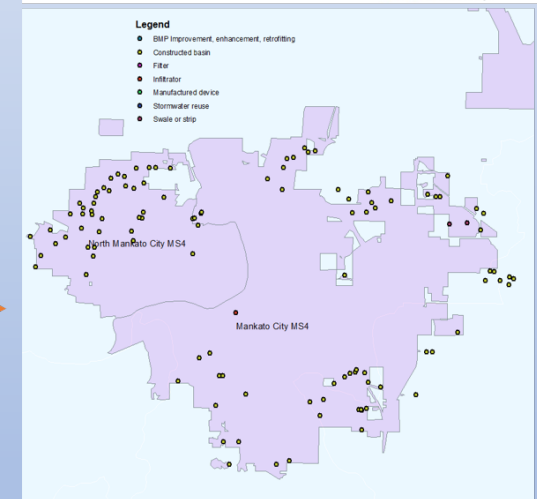
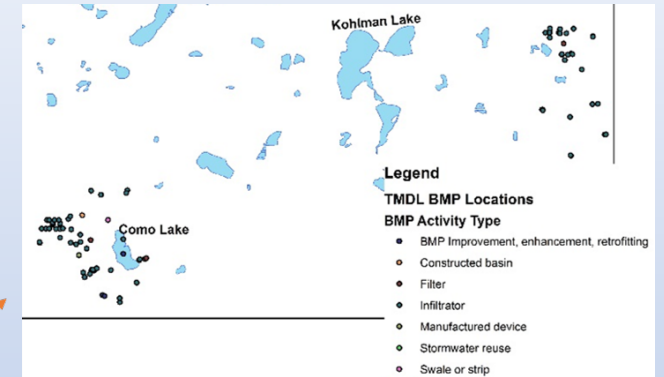
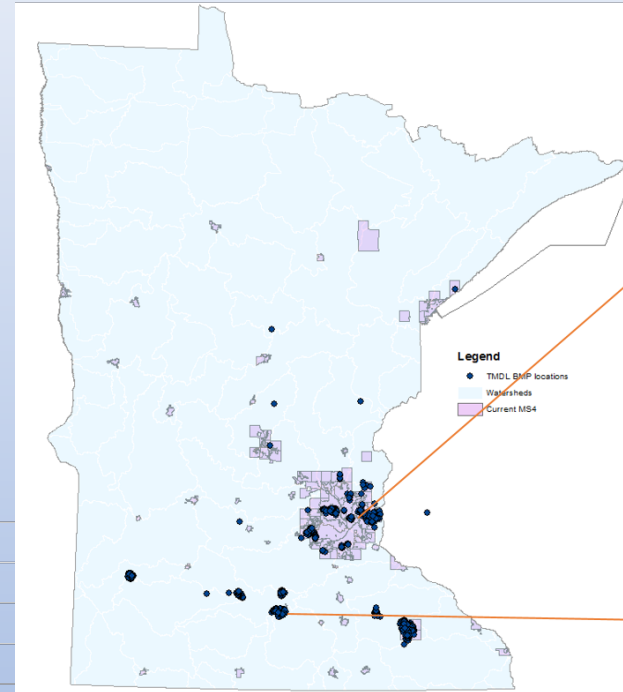
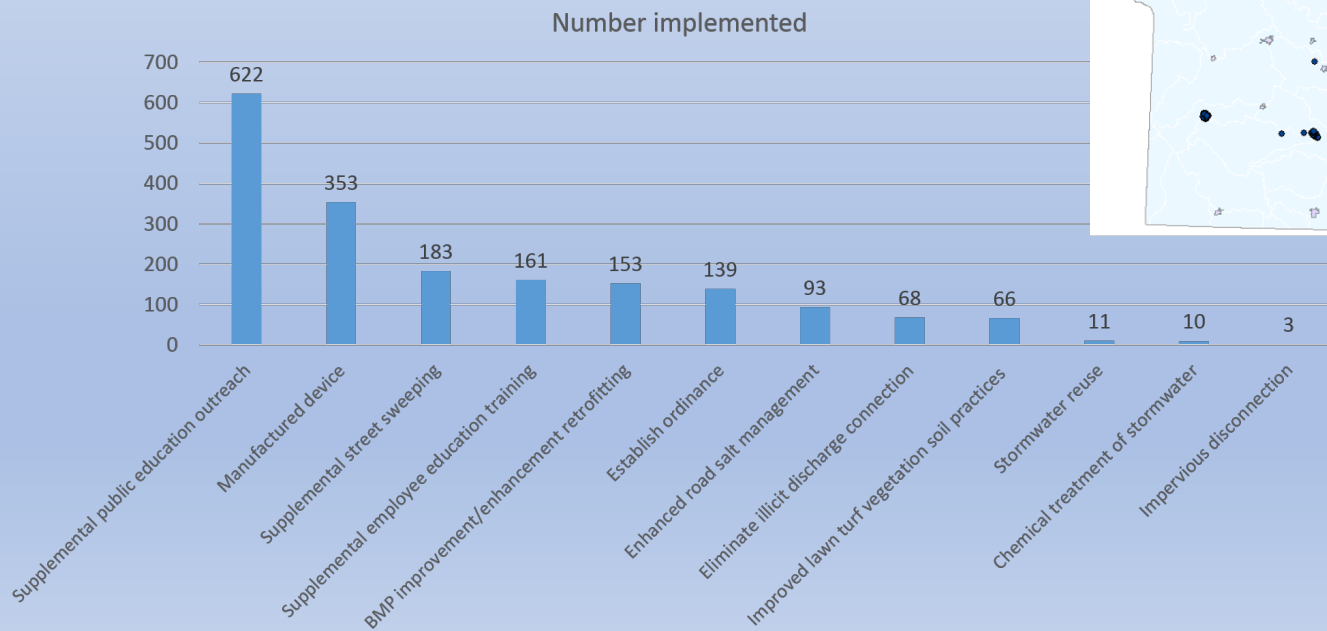
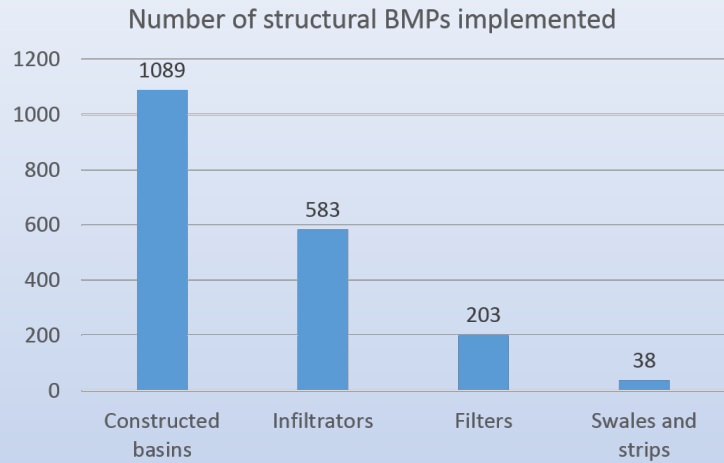
By BMP

- [Median pollutant removal percentages for BMPs](#)
- [Pollutant removal percentages for filtration BMPs](#)
- [Pollutant removal percentages for stormwater pond BMPs](#)
- [Examples of the estimated pollutant load reductions for a stormwater reuse storage system sized for the average storm event runoff volume](#)
- [Summary of pollutant removal efficiencies in wet stormwater ponds/stormwater wetlands](#)
- [Pretreatment](#)
 - [Hydrodynamic separation devices](#)
 - [Screening and straining devices - general information](#)
 - [Above ground and below grade storage and settling](#)
 - [Filtration](#)
 - [Other water quality devices](#)

Links to credit sections in the Minnesota Stormwater Manual

- [Calculating credits for permeable pavement](#)
- [Calculating credits for iron enhanced sand filter](#)
- [Calculating credits for green roofs](#)
- [Calculating credits for tree trenches and tree boxes](#)
- [Calculating credits for bioretention](#)
- [Calculating credits for sand filter](#)
- [Calculating credits for stormwater ponds](#)
- [Calculating credits for stormwater wetlands](#)

We also have...aggregated data for the state - 2015



TMDL Project	Pounds reduced
	Phosphorus
Bald Eagle Lake	1.5
Bass Lake	133.2
Big Elk Lake	10.5
Burandt Lake	109.2
Como Lake	206.6
Crystal Lake	29.1
Eagle Lake	2.328
Fish Lake	41.7
Keller Lake	49.41
Kohlman Lake	16.2
Lake Independence	121.2
Lake Sarah	157
Lake St. Croix	237.73
Long Lake	88.45
Lower Minnesota River DO	7,336.1
Meadow Lake	8.481
Medicine Lake	0.03
Middle Twin Lake	91.8
Miller lake	46.5
North Twin Lake	235.9
Pike Lake	2.328
Pomerleau Lake	43.0
Reitz Lake	43.92
Ryan Lake	7.66
Schmidt Lake	41.3
Silver Lake	152
South Twin Lake	250.9
Spring Lake	35.2
Virginia Lake	4.5
Wasserman Lake	77.4
	Total Suspended Solids
Bluff Creek	3,329,093
Elk River	1,919,408
Hardwood Creek	15

We also have...aggregated data for the state - 2015

Minnesota Cities Stormwater Coalition (MCSC)

- We started in 2002 – the beginning of the Phase II MS4 General Permit
- We were very clever about a few things....
 - We are part of the League of Minnesota Cities
 - They handle all our administrative functions
 - They have a strong political presence in the state and with the Legislature
 - MCSC handles the technical aspects, LMC handles the political aspects
 - Of the 172 permitted cities, about 130 are MCSC members
 - We charge our member cities an annual fee
 - We use the fee to pay for capable (?!) staff – 80-100 hours per month



Minnesota Cities Stormwater Coalition (MCSC)

MCSC Annual Dues Schedule		
City Population Range	2022 Annual Fee	2023 Annual Fee
0 - 3,000	\$420	\$440
3,001 - 6,000	\$530	\$560
6,001 - 10,000	\$640	\$670
10,001 - 20,000	\$780	\$820
20,001 - 30,000	\$1,000	\$1,050
30,001 - 50,000	\$1,280	\$1,340
50,001 - 100,000	\$1,850	\$1,940
Saint Paul	\$4,630	\$4,860
Minneapolis	\$5,660	\$5,940



Minnesota Cities Stormwater Coalition (MCSC)

- We don't do much in the way of sharing educational materials
 - Some other organizations do that
- We address all sorts of issues related to the MS4 Permits
 - Technical, political, administrative, staff-to-staff with the MPCA, legal
 - We participate in state-level stakeholder processes – including permit reissuances and large-scale TMDLs
 - We have a Steering Committee that meets monthly
 - We track state and national issues
 - We have learned and use sophisticated administrative and legal functions and tools
 - Sometimes we are very helpful for the MPCA, sometimes we complicate their lives significantly
- We shape political, administrative, and scientific aspects of stormwater management and regulation in Minnesota
- We have changed the political landscape in MN – establishing permittees as partners instead of just regulated parties – anonymizing questions & challenges
- City stormwater staff talk among themselves and support each other

If a state-level MS4 coalition is a good idea,
perhaps a national coalition is a good idea, too!

National Municipal Stormwater Alliance (NMSA)



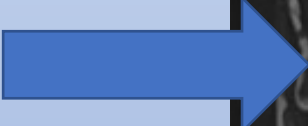
Life at the Kids Table...



Everyone else...



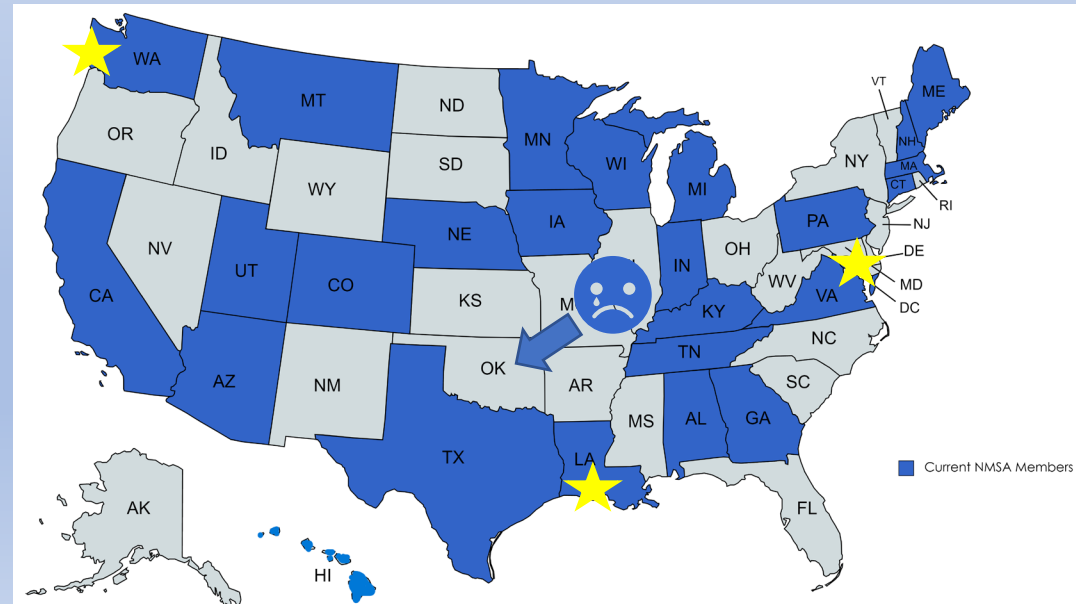
Stormwater



NMSA State of Membership



- **25 state groups currently members of NMSA**
 - Represents approximately 4,400 of the total 7,500 MS4s in the U.S.
 - Represents over half of the urban population in the U.S. subject to MS4 regulations
- **3 MS4s (Washington, DC; Baton Rouge, LA; Thurston County, WA)**
- **Affiliate Members**
 - NMSA Affiliates
 - STEPP Affiliates



NMSA Affiliate Members

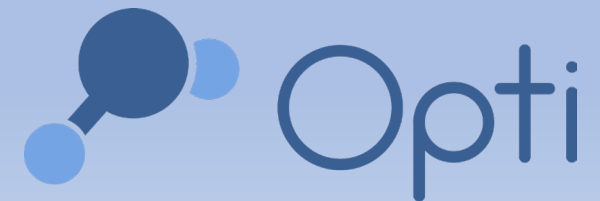


CBI Systems, Ltd.



Civil & Environmental Consultants, Inc.

2ND NATURE



NMSA STEPP Members



Leadership

NMSA Executive Committee

Scott Taylor, NMSA Chair
Water Environment Federation
scott.taylor2@atkinsglobal.com



Randy Neprash, NMSA Vice Chair
Minnesota Cities Stormwater Coalition
randy.neprash@outlook.com

James Moore, NMSA Treasurer
Georgia Association for Water Professionals
jmoore@gawp.org



Laurie Larson-Pugh, NMSA At-Large BOD
Member
Washington Stormwater Center
laurie.larson-pugh@wsu.edu



**National
Municipal
Stormwater
Alliance**



Seth Brown, NMSA Executive Director
seth.brown@nationalstormwateralliance.org

NMSA Governance



- Board of Directors
- Executive Committee
- Voting Members
- Affiliate Members
- Individual MS4 Members
- Emeritus Members

NMSA Board of Directors 2023			
Group	Position	Name	Affiliation
EC/BOD - Ex Officio	Secretary	Seth Brown	NMSA
Executive Committee	Chair	Scott Taylor	Water Environmental Federation Stormwater Institute
Executive Committee	Vice Chair	Randy Neprash	Minnesota Cities Stormwater Coalition*
Executive Committee	Treasurer	James Moore	Georgia Association of Water Professionals
Executive Committee	BOD At-Large	Laurie Pugh-Larson	Washington Stormwater Center
Board of Directors	Voting member	Gian Villarreal	Water Environment Association of Texas
Board of Directors	Voting member	Jessia Schultz	Wisconsin Stormwater Collaborative
Board of Directors	Voting member	Zach Henderson	Maine Water Environment Association
Board of Directors	Voting member	Pat Sauer	Iowa Stormwater Education Partnership
Board of Directors	Voting member	Tom Lawrence	Tennessee Stormwater Association

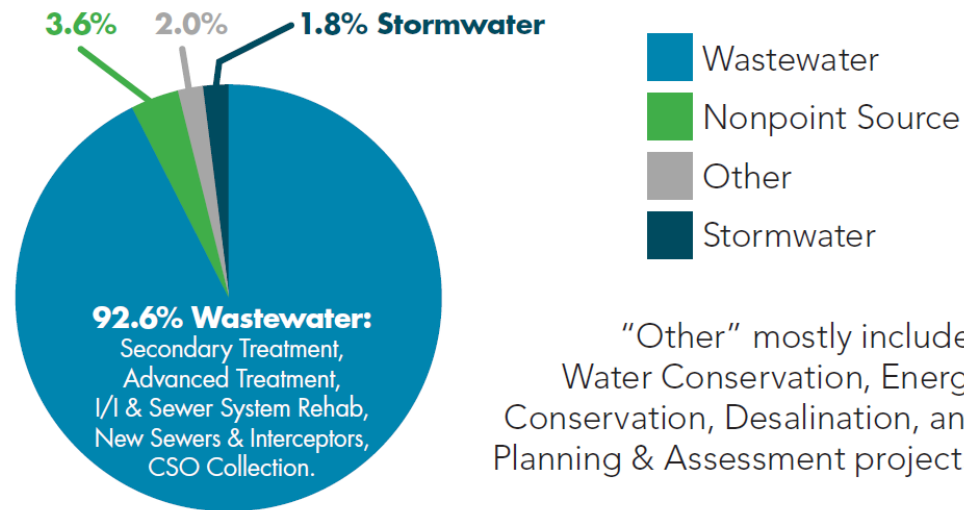
*An affiliate of the National League of Cities

Stormwater: Drivers of Concern

Driver – Funding

Clean Water State Revolving Fund (CWSRF) & Clean Watersheds Need Survey (CWNS)

CWSRF Funding 1988-2020 – Project Types



“Other” mostly includes Water Conservation, Energy Conservation, Desalination, and Planning & Assessment projects.

Slide #22

CWNS 2012 Documented Needs for Stormwater Management by Category and State (January 2012 Dollars in Millions) (continued)

State	Category of need					Total
	VI	VI-A	VI-B	VI-C	VI-D	
Ohio	\$-	\$3	\$886	\$-	\$0 ^a	\$889
Oklahoma	\$-	\$-	\$-	\$-	\$-	\$-
Oregon	\$-	\$348	\$73	\$125	\$7	\$553

Driver – Sufficiency of National MS4 Program

Do you think the overall federal stormwater program is sufficient to meet clean water goals in the long term?

Yes (%)	No (%)	Unsure (%)
30%	41%	29%

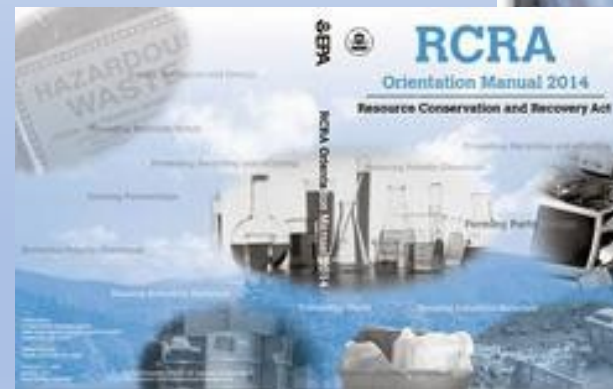
WEF, 2023

“EPA’s current approach to regulating stormwater is unlikely to produce an accurate or complete picture of the extent of the problem, nor is it likely to adequately control stormwater’s contribution to waterbody impairment.”

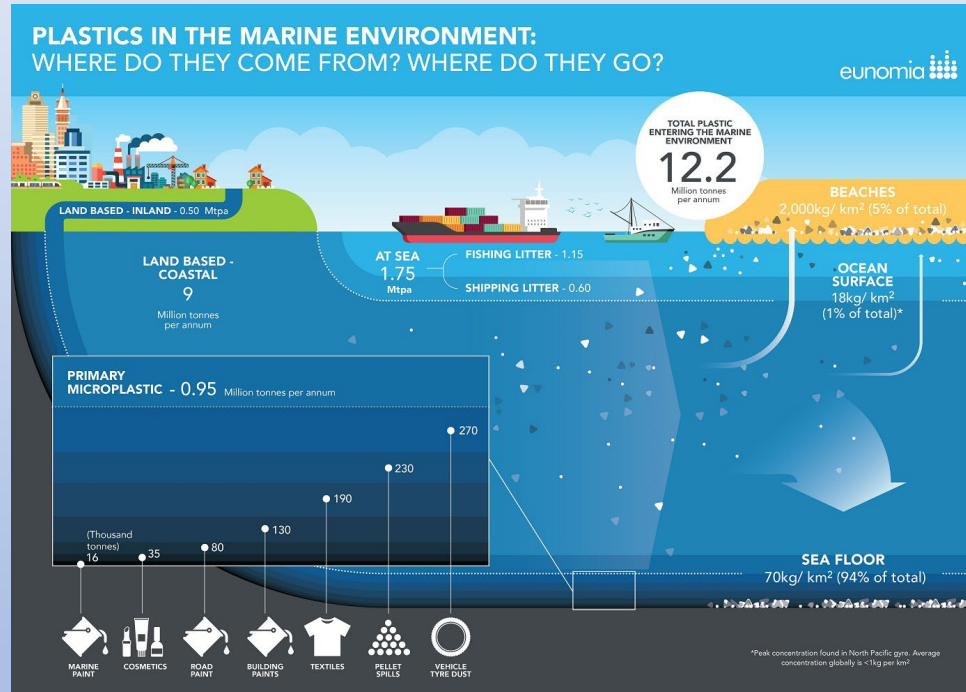
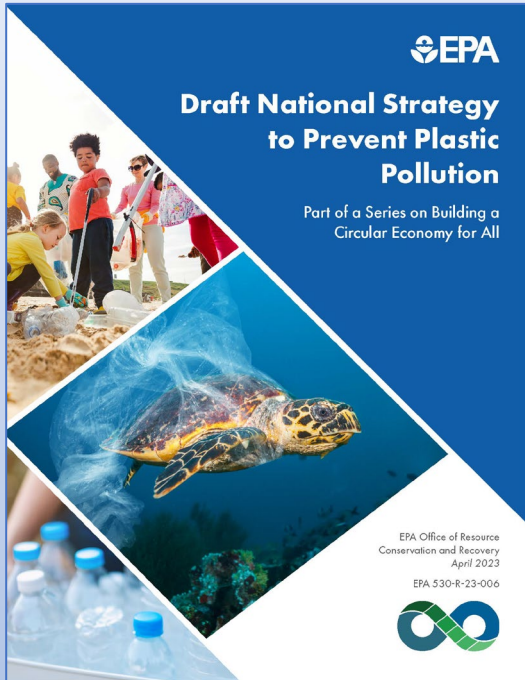
- From “Urban Stormwater Runoff in the United States” by the National Academy of Science, 2009

Driver - Source Control

- **Physical**
 - Trash/litter
- **Chemical**
 - 6PPD
 - PFAS
 - Zinc
- **Regulatory programs**
 - Green Chemistry
 - TOSCA, RCRA



Driver - Stormwater and Trash



Eunomia, 2020

- 80% of ocean plastics are from land-based sources
- Approximately 30% of ocean micro-plastics are from tire tread wear
- MS4s play a critical role

REDUCING AQUATIC TRASH THROUGH STORMWATER AND SOLID WASTE MANAGEMENT: STAKEHOLDER ENGAGEMENT PROJECT SUMMARY REPORT



WRAP Action 3.3

Convene Experts on Urban Stormwater Capture and Use

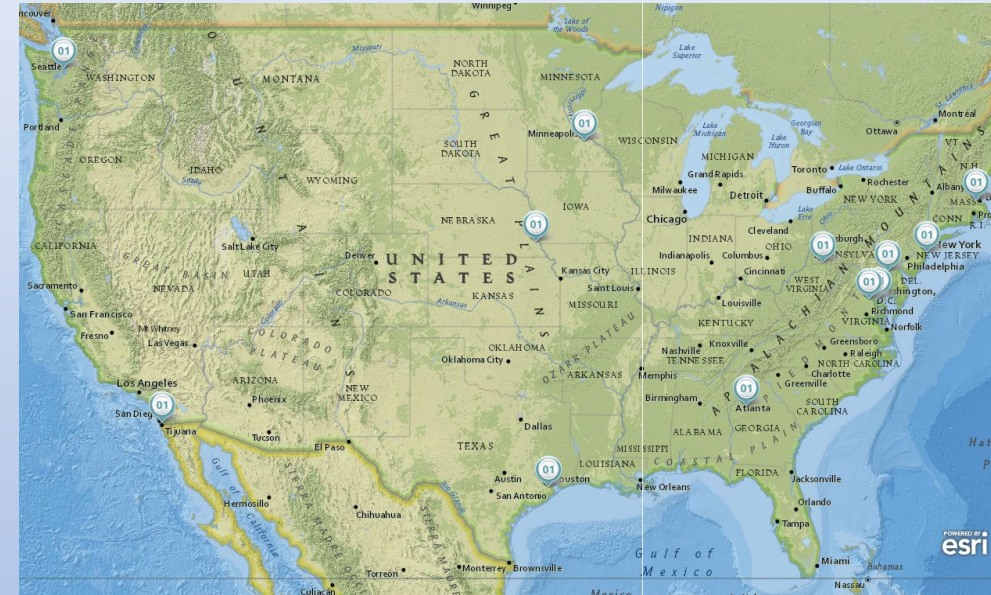
- National Municipal Stormwater Alliance
- WaterReuse Association
- U.S. Environmental Protection Agency
- Re-Inventing the Nation's Urban Water Infrastructure
- Water Environment Federation



Driver - Economic Return on GI

• Economic Input/Output Analysis

- 12 counties in analysis
- The return on \$1 of input for GI investments generated a range of \$1.34 to \$1.74 in economic output, with an overall average value of \$1.55 across the 12 locations
- The number of jobs created per \$1 million of investment in GI range from 8 to 17 with an overall average of 13.



<i>Industry/Sector/Investment Type</i>	<i>Economic Output per \$1 of Input</i>	<i>Total Jobs Created/Supported per \$1M of Input</i>
<i>State Revolving Fund</i>	\$2.95	16
<i>Green Infrastructure</i>	\$1.55	13
<i>Drinking Water, Wastewater, Stormwater</i>	\$2.26	16

NMSA

Current/Recent Activities, Products, and Projects





Impactful Activities and Issues



Focus Areas:

- Sector Support & Information
 - Support MS4-oriented organizations
- Policy/Advocacy
 - Raise awareness on stormwater issues
- Communications and Messaging
 - Disseminate technical information
- Education
 - Federal legislative/regulatory engagement

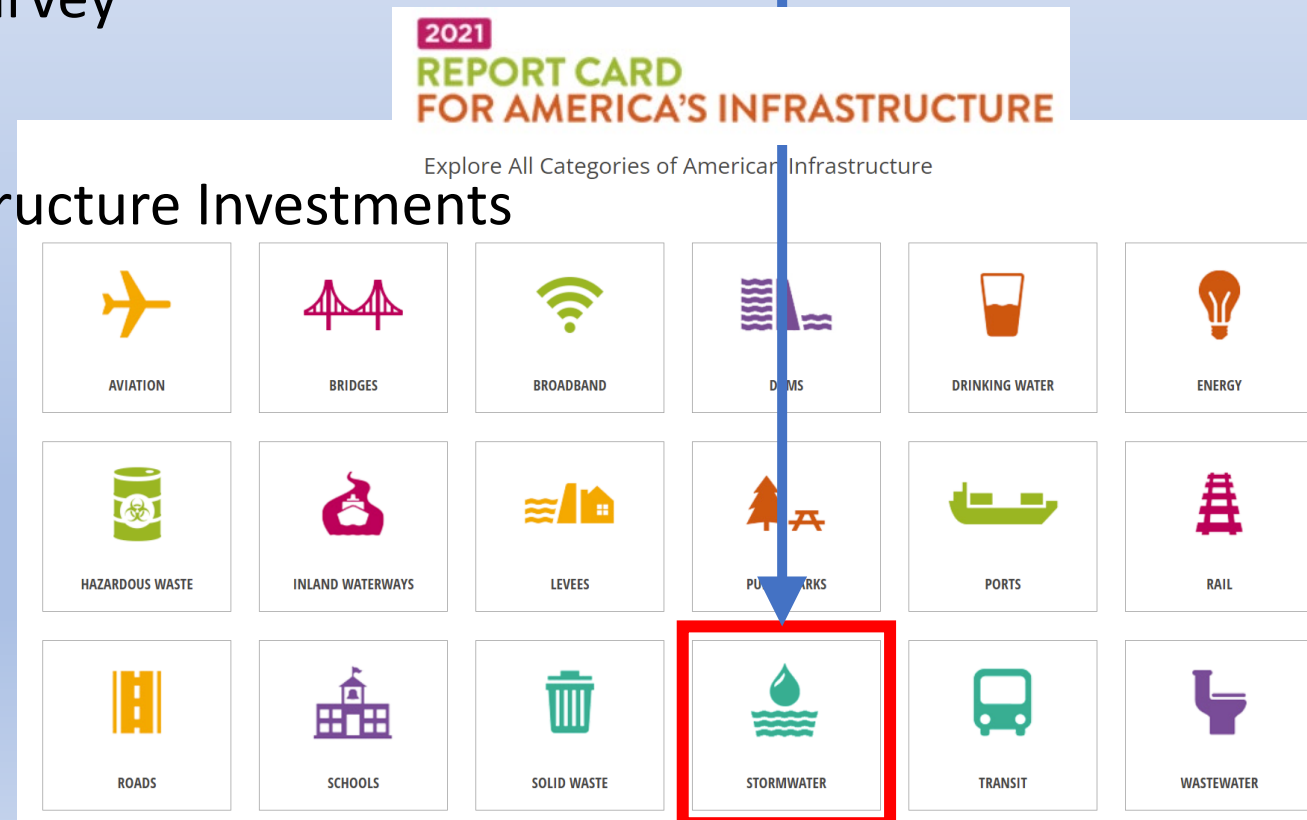
NMSA Action Areas

 SECTOR SUPPORT & INFORMATION <ul style="list-style-type: none">• Pursue projects at a national scope that are of interest to and benefit MS4 permittees.• Transfer information and technology between state and regional MS4 groups.• Communicate with member MS4s about multiple topics using a variety of platforms to disseminate information.• Assist in managing existing or forming new state- and regional-level MS4 organizations.• Coordinate with national organizations that impact the MS4 sector, including WEF's Stormwater Institute and its member associations.	 POLICY & ADVOCACY <ul style="list-style-type: none">• Speak directly with U.S. EPA staff and provide a conduit to federal regulatory and legislative contacts.• Provide strategic support on regulatory and legislative actions at the state and local levels.• Provide formal comments on federal regulatory proposals from the perspective of MS4 permittees.• Provide timely communications on pending and ongoing regulatory and legislative actions impacting the MS4 community.• Provide policy analyses to the MS4 community.• Coordinate and work with other national groups to amplify messages on MS4 issues.
 EDUCATION <ul style="list-style-type: none">• Provide forums for exchanging information, experience, and materials among MS4 permittees.• Create or support the development of technical reports and guidance materials.• Host technical forums and support member activities and conferences.• Support and expand public education for stormwater.	 MESSAGING & COMMUNICATION <ul style="list-style-type: none">• Distribute information about court rulings and new rules and regulations.• Collect, create, and distribute public education materials related to MS4 programs and policies.• Explore national media campaigns and other initiatives to expand and amplify public education for stormwater.

Impactful Activities and Issues

Communications and Messaging

- 2021 ASCE Infrastructure Report Card
- WEF National MS4 Needs Assessment Survey
- WEF Rainfall to Results
- Economic Analysis of Stormwater Infrastructure Investments

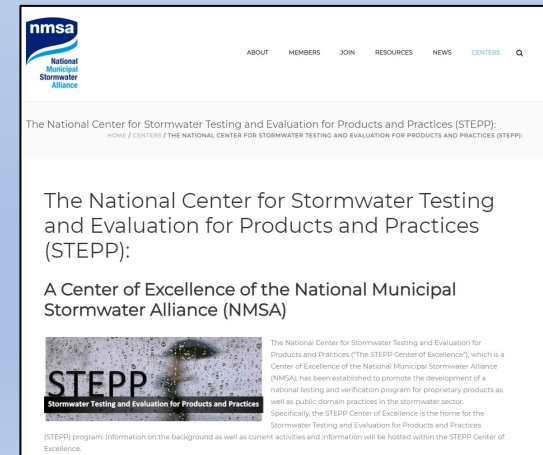


STEPP Center of Excellence



The National Center for Stormwater Testing and Evaluation for Products and Practices (STEPP)

- The home for the STEPP initiative within NMSA
 - Promotes the development of performance testing standards and third-party verification of stormwater products and practices
-
- **Goal:** Develop a national testing/evaluation and verification program for stormwater products **and** practices
 - **Status:**
 - STEPP to focus on trash capture technologies for “soft launch” on July 1!
 - Full lab-based testing verification services by late 2023/early 2024
 - Full field-based testing verification services by mid/late 2025



NMSA, 2023

CBP3 Center of Excellence



The Community-Based Public-Private Partnership (CBP3) Center for Water, Energy and Equitable Economic Resilience

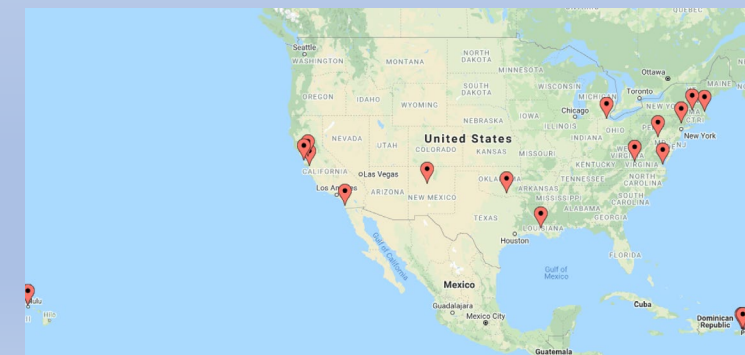
- Promotes the CBP3 program approach through:
 - Direct community technical assistance
 - Development of resources and community support material
 - Administers the CBP3 Professional Certificate
 - <http://nationalstormwateralliance.org/cbp3/>



NMSA, 2023

Ongoing Technical Support for Communities

- Over 100 communities across 12 regions are in current cohort
- <http://nationalstormwateralliance.org/cbp3/techsupport/> for more information



CBP3 Community Support Cohort Regions

Impactful Activities and Issues

Policy/Advocacy

- Legislation
 - **Bipartisan Infrastructure Law (BIL) package***
 - Regular engagement on stormwater issues
- Regulation/Policy
 - WOTUS definition rule
 - CERCLA and PFAS
 - Clean Watersheds Needs Survey
 - E-reporting rule
 - Trash-Free Waters / Stormwater and Trash/Plastics
 - Water Reuse Action Plan / Stormwater Reuse



The screenshot shows the EPA website's news release page for the Bipartisan Infrastructure Law. The page features the EPA logo, a search bar, and navigation links. The main heading is "FACT SHEET: EPA & The Bipartisan Infrastructure Law" dated November 6, 2021. The text describes the historic investment in infrastructure and lists key areas: Safe Drinking Water, Clean Water for Communities, and Protected Regional Waters. A blue arrow points from the "Bipartisan Infrastructure Law (BIL) package*" bullet point in the left column to the "What this means" section under "Safe Drinking Water" in the screenshot.

***Otherwise known as the Infrastructure Investment & Jobs Act**

Infrastructure Investment and Jobs Act (IIJA)

IIJA signed into law by Pres. Biden on Nov 15, 2021!

Stormwater provisions authorized in the IIJA:

- **Total of ~\$3 billion in stormwater funding overall or ~\$600M per year over 5 years authorized**
 - Overflow and Stormwater Grants authorized at \$280M/year for 5 years
 - Healthy Streets program at \$500M, which includes a focus on porous pavements
 - SW planning and implementation grants authorized at \$10M/r for 5 years
 - SW Centers of Excellence at \$5M/yr for 5 years
 - Resiliency grants at \$125M/yr for 5 years
 - Alternative source water pilot program at \$125M/yr for 5 years



Stormwater provision supported with appropriations in FY2023 and beyond

- SW Centers of Excellence at \$3M/yr for 4 years = \$12M overall

Policy Updates



National Stormwater Policy Forum

- Keynote – VA Stormwater “Czar”
- EPA panel
- Panel on resilience and emerging contaminants
- Ask Document overview
- Overview of WEF MS4 Needs Assessment Survey results
- Posted at NMSA Youtube channel
 - <https://www.youtube.com/watch?v=-AZ-i-dJZmo>



Policy Updates



Legislative “Ask” document

- Outlines specific requests to federal Congress members
- Covers following issues:
 - *Advance Stormwater Provisions in the Infrastructure Investment and Jobs Act (IIJA)*
 - *Support Stormwater Infrastructure Funding Tools*
 - *Federal Response to Intense Rainstorms and Localized Flooding*
 - *Support Source Control of Stormwater Pollution*



Impactful Partnerships



Water Environment Federation (WEF) Stormwater Institute's 2022 MS4 Needs Assessment Survey – 3rd survey

- Identified an estimate of current MS4 budgets = \$18-\$24 billion
- Identified an estimated annual funding gap in stormwater sector = \$7.4 billion

<https://wefstormwaterinstitute.org/programs/ms4survey/>



WEF, 2023



Impactful Partnerships

Business Enterprise Partnerships

- Arrangement between private/commercial partners and NMSA to offer services/product to NMSA members at reduced rate
- Examples:
 - Endeavor Business Media / **StormCon** / Stormwater Solutions Magazine
 - Reduced registration fees, free subscriptions, track on national issues at conference
 - ComplianceGo for Learning Management System platform
 - Cost-effective training material on basic training topics

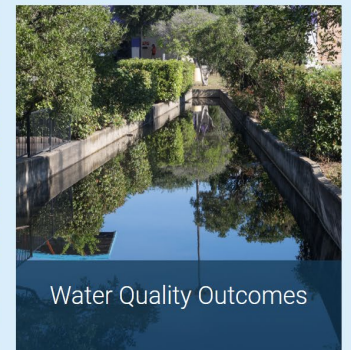
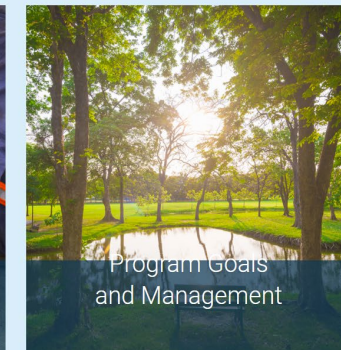
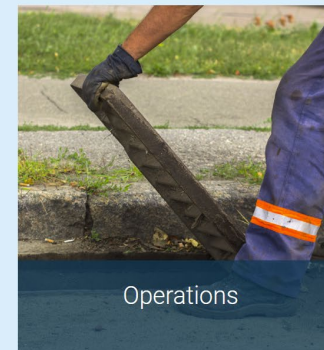
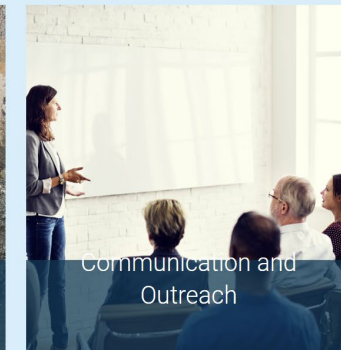
Impactful Activities and Issues

Education

- Online MS4 Resource
- Cost-effective Stormwater Training
- GI Course Delivery at College Level
- NextGen Report on Innovations in the MS4 sector
- Support for Local MS4s



Explore the Guide



Future of NMSA

Looking Ahead



Will Oklahoma join NMSA? We hope so!

- We have demonstrated the value of a national coalition of MS4 permittees
- NMSA is stronger if we represent more states
- OK will benefit from linkage to national activities

NMSA organizational funding

- Dues currently come from state-level organizations
- Dues are comically (tragically?) low – many orgs have no funds
- We have about 6,500 permitted cities – a relatively small amount of money from a large number of permitted cities will provide sufficient support



Questions & Comments – PLEASE

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[Homepage - National Municipal Stormwater Alliance
\(nationalstormwateralliance.org\)](http://nationalstormwateralliance.org)