

# Overview of STEPP Program

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Texas Regional Stormwater Conference  
Seth Brown, PhD, PE | Executive Director  
National Municipal Stormwater Alliance (NMSA)  
— January 22, 2026 —

Scan the QR code or go to  
join NMSA and STEPP:  
<https://ms4nmsa.org/our-memberships/>



# Agenda



- **NMSA Background and Initiatives/Programs**
- **Overview of the STEPP Program**
- **STEPP Status and Updates**
- **Value of STEPP to Texas Communities**
- **Q&A**



# NMSA Background

# Overview of National Municipal Stormwater Alliance (NMSA)



- **Who/What is NMSA?**
  - *A national coalition focusing solely on MS4s*
  - *Members are organizations, not individuals*
- **Motivation for Formation**
  - To represent MS4 permittees at the national level by providing a **unified voice**
  - To lead changes in regulation both **proactively and reactively**
  - To **connect and unite** MS4 programs
  - To promote stormwater as a **resource**
  - To improve the **public image of stormwater**
  - To create opportunities for **multi-benefit and multi-use stormwater projects**
- **Vision for Organization**

# Our Action Areas



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

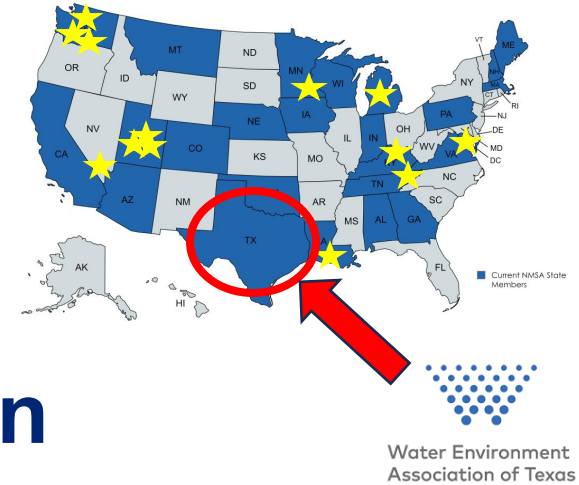


# NMSA State of Membership



- **26 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



- **MS4, Affiliate, and Emeritus Members can join**

- To join NMSA online use this QR code or go to: →

- <https://ms4nmsa.org/our-memberships/>



- To receive more information about NMSA membership →



# NMSA Membership



## All membership types can join online

- MS4 members
  - Phase II and non-traditional MS4s = \$200-\$275 annual fee
    - Join either as an individual MS4 or a group of MS4
  - Phase I and State DOTs = \$500-\$550 annual fee (individual only)
- Affiliate members = \$500 or \$1,500 annual fee
  - \$500 for NGOs and \$1,500 for private entities
- State organization = \$250 or \$500 annual fee
  - For MS4 organizations representing five or more within a region, territory or state
  - Fees depends upon organization gross receipts
- Emeritus members
  - For recently retired/semi-retired to remain active in the stormwater sector and leverage institutional and technical knowledge
  - No annual fee – simply provide required info for review

A screenshot of the NMSA website's membership page. The page is titled "Become a NMSA Member" and includes a navigation bar with links like "About", "Members", "Resources", "Advocacy", "News & Events", "NMSA Centers of Excellence", "Initiatives", and "Enterprise Partnership". Below the title, there is a mission statement and a description of the membership benefits. A section titled "Select your Membership Type" lists various options with their respective annual fees. A blue arrow points from the "State Organization NMSA Membership" option in the list to a QR code located at the bottom of the page. The QR code is a standard black and white square code with the word "bitly" at the bottom right. The membership options and fees are as follows:

Membership Type	Annual Fee
Individual MS4 NMSA Membership	Starting from \$250
Group MS4 NMSA Membership	
Individual MS4 NMSA & STEPP Combined Membership	
Group MS4 NMSA & STEPP Combined Membership	
State Organization NMSA Membership	
Affiliate NMSA Membership	
Free Individual MS4 NMSA Membership	
Emeritus NMSA Membership	

Annual fee is \$550 for Phase I(DOTs OUT OF NMSA state network 2 participants per MS4 member)

Annual fee is \$500 for Phase I(DOTs IN NMSA state network 2 participants per MS4 member)

Annual fee is \$275 for Phase II(Non-Traditionals OUT OF NMSA state network 2 participants per MS4 member)

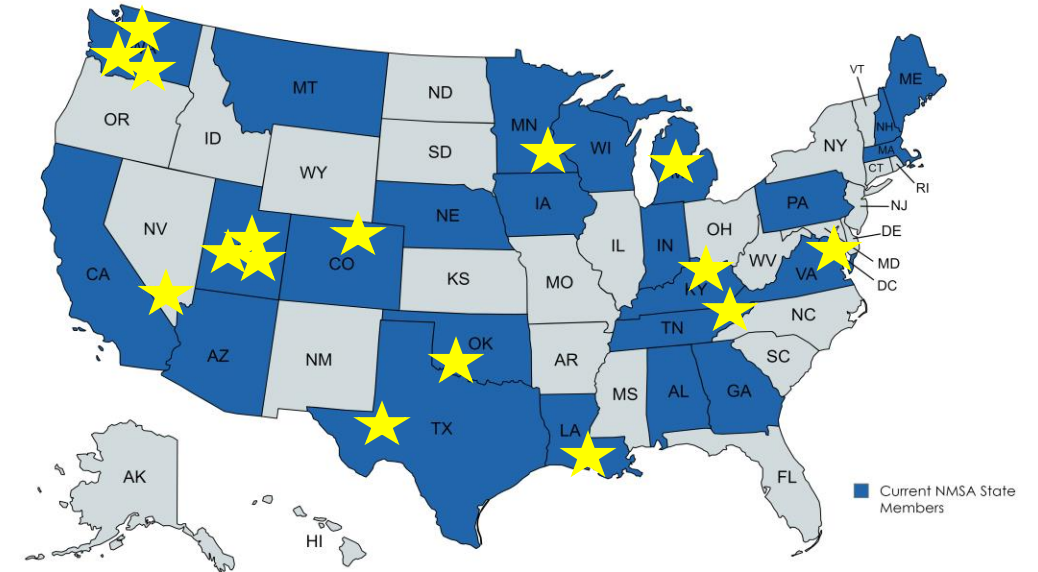
To join NMSA online use this QR code or go to:

<https://ms4nmsa.org/our-memberships/>

# MS4 Membership

## Current MS4 NMSA Members

1. Utah County, UT
2. Clinton, UT
3. Scottsbluff, NE
4. Cedar Hills, UT
5. Salem, UT
6. Battle Ground, WA
7. Centralia, WA
8. Payson City, UT
9. Lindon City, UT
10. Mapleton City, UT
11. Provo City, UT
12. Farr West, UT
13. Springville City, UT
14. Logan City, UT
15. Katysville City, UT
16. Odessa, TX
17. Washington, D.C.
18. Baton Rouge, LA
19. King County, WA
20. Capitol Region Watershed District (St. Paul, MN)
21. Kingsport, TN
22. Kitsap County, WA
23. Altus, OK
24. Greely, CO
25. Thurston County, WA
26. Regional Flood Control District (Clark County, NV)
27. Tri-County Regional Planning Commission (Clinton, Eaton, and Ingham Counties, MI)
28. Sanitation District No. 1



= Current NMSA MS4 Members



# Current State, Affiliate, & STEPP NMSA Members

## State Org Members



Alabama Stormwater Association



CENTRAL MASSACHUSETTS REGIONAL STORMWATER COALITION



Georgia Association of Water Professionals

## STEPP Members



StormTrap®  
MODULAR CONCRETE  
STORMWATER MANAGEMENT



## Affiliate Members



# NMSA MS4 Membership



## MS4s Can Also Join for Free!

- If you work as staff with or otherwise represent an MS4, you can register your MS4 for a free membership by going to:

<https://ms4nmsa.org/our-memberships/>

- Free MS4 Members benefits:
  - NMSA monthly newsletter
  - Attend quarterly member meetings
  - Join an MS4 committee
  - Receive discounts to select products and events
  - Receive access to select NMSA documents and other products
  - Your community will be listed on the NMSA website with other Free MS4 NMSA members

A screenshot of the NMSA website's membership page. The page has a dark blue header with the NMSA logo and navigation links. The main content area is white. The heading "Become a NMSA Member" is in bold. Below it, there's a section titled "NMSA's mission is to represent ALL organizations" and another titled "Many different groups and professionals are engaged in the stormwater sector." Below these, there's a section titled "Select your Membership Type" with a list of membership options. The "Free Individual MS4 NMSA Membership" option is highlighted with a red box. To the right of this option, there's a section titled "Free Individual MS4 NMSA Membership \$0" with a description of the benefits and a "There is no fee for becoming a Free Individual MS4 NMSA Member" message. The page also includes a "My Account" link in the top right corner.



# **NMSA Services, Products, and Initiatives**

# MS4 Online Bulk Training Courses



## Learning Management System (LMS) Content for Basic-Level Training

- IDDE for Municipal Employees, Responders, Investigators, Industrial Facilities 0.5 PDH
- Rights of Way training 1.0 PDH
- Street Sweeping 0.5 PDH
- Fueling and Maintenance 0.5 PDH
- Long Term Stormwater Controls 0.5 PDH
- Landscaping for MS4 Employees 0.5 PDH
- Stormwater Training for Construction Professionals 2.0 PDH
- Stormwater Training for Vertical Construction 0.5 PDH
- General Industrial Training Course 1.0 PDH
- SPCC training 0.5 PDH
- Construction Stormwater Inspector Training 2.0 PDH
- Erosion and Sediment Control Training 2.0 PDH



# MS4 Online Bulk Training



## Communities Currently Receiving MS4 Bulk Training

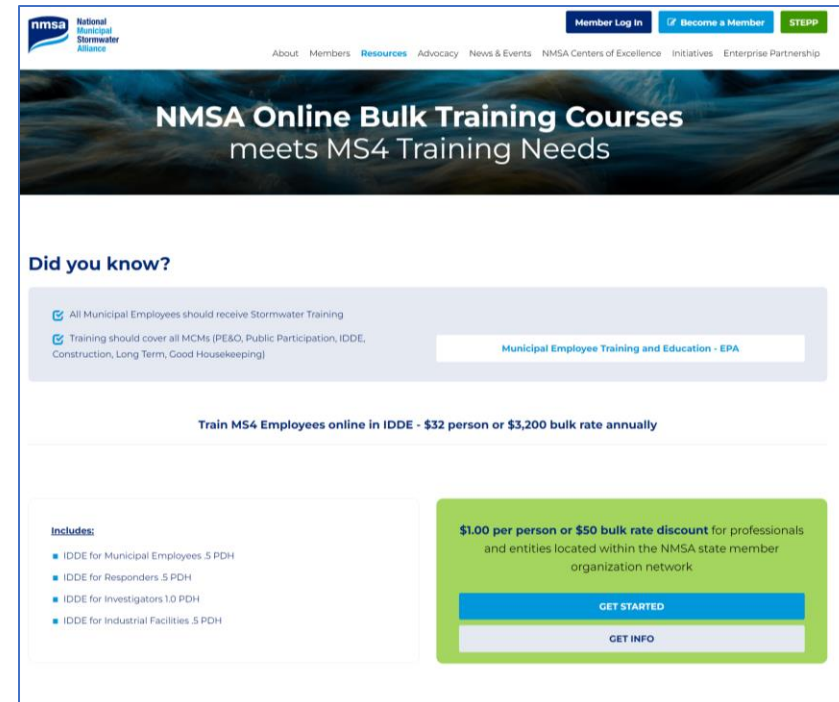
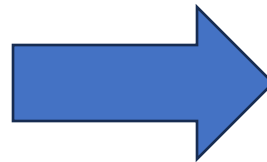
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12. Farr West, UT
13. Springville City, UT
14. Logan City, UT
15. Katysville City, UT
- 16. Odessa, TX**

# MS4 Online Bulk Training



## MS4 Online Bulk Training Packages

- For more information or to sign up, go to:
- <https://ms4nmsa.org/nmsa-online-bulk-training-courses/>



# NMSA Initiatives



- **National Stormwater Policy Forum**
  - 10<sup>th</sup> annual event on April 13, 2026 virtual or in person (Washington, DC)
    - <https://ms4nmsa.org/stormwaterday/policy-forum-2026/>
- **National Stormwater Day**
  - 4<sup>th</sup> annual - November 16, 2026 to increase stormwater awareness
    - <https://stormwater.day/>
- **MS4 Permit Improvements**
  - Nine specific ways to improve MS4 permits - provide your input below!
    - <https://ms4nmsa.org/ms4-permit-improvement-feedback/>
- **National Stormwater Leadership Coalition**
  - Actions to improve funding, programs, policies/regs, and data/information
- **Clean Streets = Clean Waters Initiative**
  - National street sweeping stormwater treatment potential and regulatory crediting



# NMSA Products



- **Webinars and web-based events**
  - Free to the public
    - <https://www.youtube.com/@nationalstormwateralliance>
- **National MS4 Online Resource**
  - EPA-funded guide for MS4 basics and info
    - <https://ms4resource.nationalstormwateralliance.org/>
- **NMSA Stormwater Update - Monthly Newsletters**
  - To join - <http://eepurl.com/hbCOXL>
- **Various Reports on Stormwater Topics**
  - Aquatic trash, economic value of green infrastructure and other topics



# EPA STORMWATER CENTERS OF EXCELLENCE



Four (4) SCE and one (1) national electronic clearinghouse

Conduct research and provide technical assistance to state, tribal, and local governments

*Support stormwater infrastructure to:*



**Protect public health**



**Safeguard environment**



**Increase resilience to extreme events**

# Stormwater Testing and Evaluation for Products and Practices (STEPP)



# **A Simple Question...**

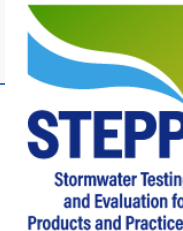
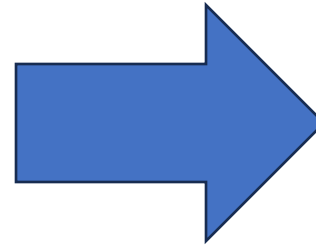
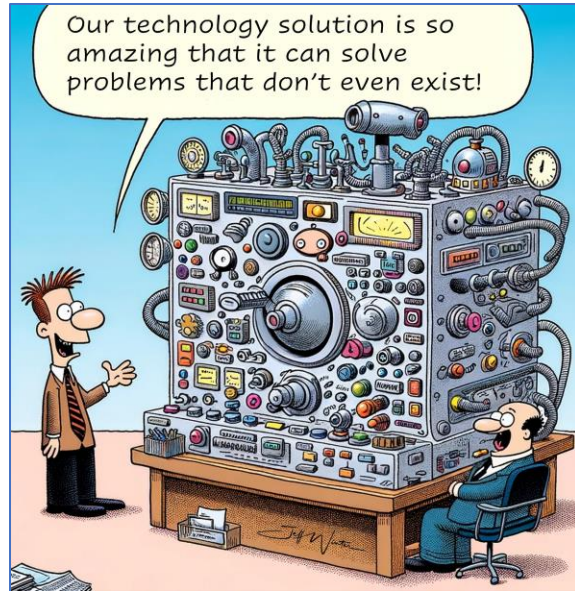
**How well do stormwater products and practices work?**

A large, dark blue curved arrow originates from the left side of the slide, pointing downwards and to the right, connecting the question to the problem statement.

## **Problem Statement**

**There is no national organization that provides consistent, technical/credible and objective testing and verification of stormwater practices and products.**

# Performance Evaluations



"Extraordinary claims require extraordinary evidence" – C. Sagan

**How is "performance" defined?**

**How is performance evaluated?**

**Who is evaluating performance?**

**Who benefits from the evaluation?**

**Who is paying for the evaluation?**

**How often is performance to be evaluated?**

# Stormwater Testing and Evaluation of Products and Practices (STEPP)



**Goal:** Develop a national testing/evaluation and verification program for stormwater products **and** practices

- Increase overall performance and create level/higher playing field
- Leverage respected existing state verification programs
- Provide greater confidence in performance of stormwater systems
- Enhance the value proposition for stormwater investments
- Improve water quality



# STEPP FAQ



## What does STEPP do?

- Promotes the generation of **performance testing standards** for stormwater infrastructure.
- **Oversees evaluation process** of stormwater products and practices following testing standards.
- **Verifies** that testing standards were followed.
- Provides **technical support** to users to enable understanding context of **verified data**.

## What does STEPP NOT do?

- Perform testing

## How is STEPP funded?

- **Seed funding** currently through industry and communities (“STEPP Leadership Group”).
- Ongoing **operational budget** to be funded primarily through public sector (MS4s, etc.) through a pooled funding approach (compared with each MS4/state having their own verification program).
- **Verification services** paid by the technology proponent (i.e., the manufacturer).



# Verification Process

## 4. Approval for use decision provided

### Product or Practice Representative(s)\*

#### 1. Submit application for verification

\*This party pays for verification services

### STEPP Program Services

- Review verification application
- Review Quality Assurance Project Plans (QAPPs)
  - STEPP External Group Review (SERG)
- Review verification reports
  - SERG Review
  - Public Stakeholder Review
- Store/handle testing and verification data
- Develop guidance and other technical/programmatic resources
- Additional services/activities

### State, Locality or Other Interested Party

#### 3. Request for approval for use based upon STEPP results

### Product or Practice Representative(s)

#### 2. Proof of verification to product or practice representative(s)

# STEPP External Review Group (SERG)

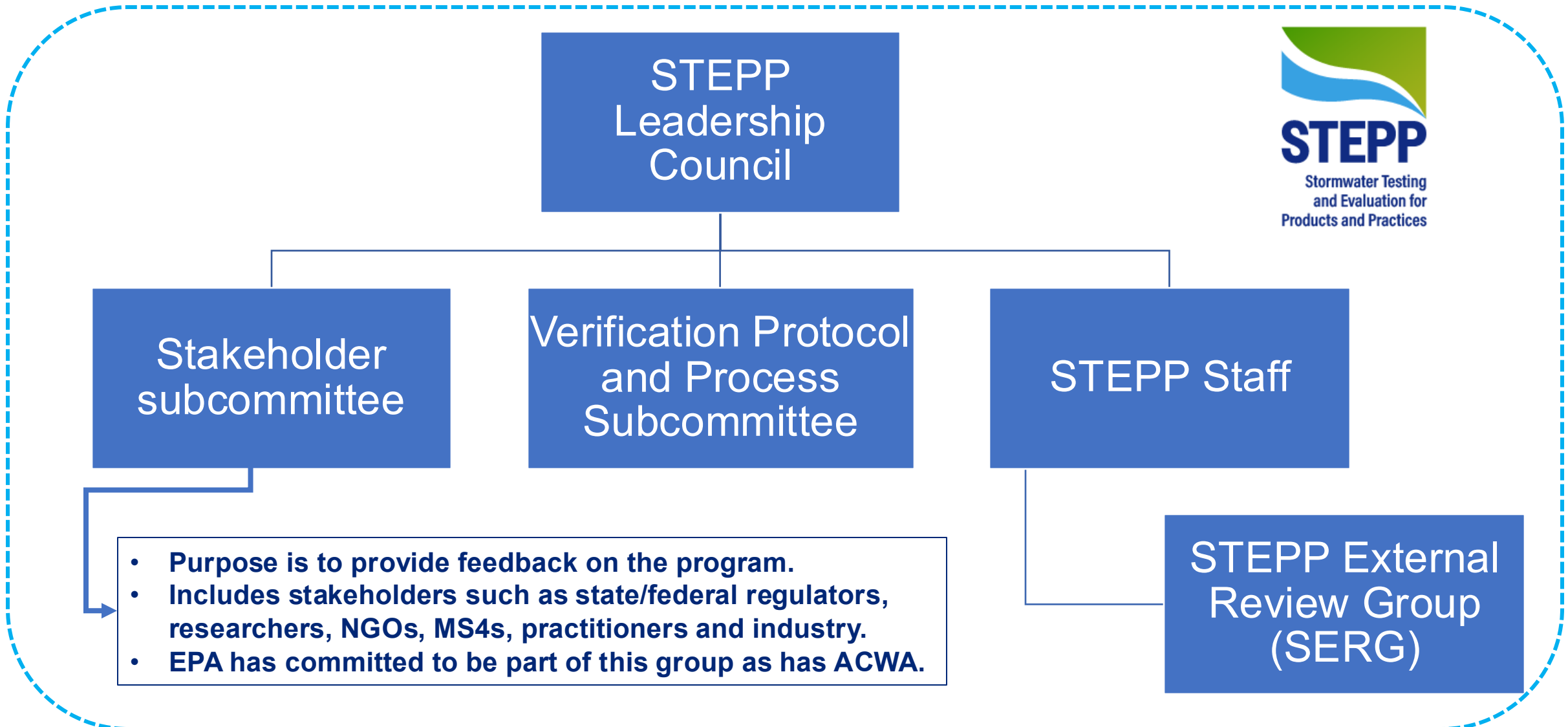


## SERG Members

1. Jim Lenhart, Stormwater Northwest
2. Andy Erickson, PhD, PE (Univ of Minnesota)
3. Celso Ferreira, PhD, PE (George Mason Univ)
4. **Dipen Patel, PhD (Sacramento State Univ)**
5. Jon Hathaway, PhD (Univ of Tennessee)
6. Bruce Thomson, PhD (Univ of New Mexico)
7. **Elizabeth Fassman-Beck, PhD (SCWWRP)**
8. Ryan Winston, PhD (Ohio State Univ)
9. Allen Davis, PhD (Univ of Maryland)
10. David Sample, PhD (Virginia Tech Univ)
11. Jason Vogel, PhD (Univ of Oklahoma)
12. Dwane Jones, PhD (Univ of DC)
13. David Spelman, PhD (Bradley Univ)
14. Sybil Sharvelle, PhD (Colorado State Univ)



# STEPP Governance Framework



# Provide Technical Support

- How to interpret verified performance test data?
- How to integrate this information into my program?
- How does sizing of the product/practice tie in with the verified performance data provided?
- How does performance testing collected in one context translate to my local area/conditions?

# STEPP Stands on the Shoulders of Giants



## Washington TAPE and NJCAT are the basis for the STEPP program



- STEPP program is working with the Washington State TAPE program and other state verification programs to pull these state programs into a national program for the testing and verification of stormwater products and practices.
- Until STEPP is at the point where the program is providing a full suite of lab-based and field-based testing verification services, the TAPE program and other state verification programs will continue to operate.

# ASTM E64 Committee on Stormwater Control Measures

- ASTM E64 Committee on Stormwater Control Measures
  - <https://www.astm.org/get-involved/technical-committees/committee-e64>
- Lab Testing
  - Trash capture standard finalized
  - NJCAT lab-based protocols being standardized
    - Hydrodynamic separators standards finalized
    - Filter systems completion anticipated in next 3-6 months
- Field Testing
  - WA TAPE protocol field-based test methods standards completed

# **Status of the STEPP Program**

# STEPP Status



## Current verification services include:

- Trash capture technologies
- Hydrodynamic separators
- Concurrence reviews/approval
  - STEPP recognizes the verifications produced by other entities if those verifications used performance testing standards consistent with ASTM standards.
- Current concurrences are based upon NJCAT/NJDEP technologies

# STEPP Updates

- Three **trash technologies** currently being verified by STEPP at this time
- Lab-based testing aspect nearly completed
- Field-based testing aspect is currently developing
- Technical guidance in development
- Support now being provided through EPA Stormwater Center of Excellence
- STEPP website has all updated info - <http://stormwatertesting.org>
- **MS4s can now become STEPP Members**



# STEPPing into the Future



## What's Next?

- Development of technical guidance on how to implement STEPP locally
- Better understanding of performance in different climates/contexts
- Public domain practices testing and verification (ponds, bioretention facilities, green roofs, permeable pavements, swales, etc.)
- More technologies (ex: street sweeping), ASTM testing standards, and pollutants (including emerging contaminants)
- Long-term performance (i.e., performance decay) to enhance understanding of O&M efforts/best practices
- Maybe use “synthetic stormwater” in lab and/or field testing?
- Make STEPP international?



# **Value of the STEPP Program**

# STEPP in Texas



- Pathway to gain recognition from Federal and state regulators on compliance.
- Provides trusted data on stormwater products and practices to facilitate informed decisions for MS4s.
- Can increase the toolkit of approved products and practices for stormwater management.
- Receive full access to verification reports and data, technical guidance and white papers, and technical support services.
- Receive NMSA member online account for a minimum of 2 professionals per MS4.

# Conclusion

# Conclusion



- **NMSA is national program focused on MS4s**
- **STEPP is operational and growing**
- **MS4s can join NMSA and STEPP**
- **STEPP provides trusted performance data**
- **STEPP can aid MS4s clarify compliance**
- **Join us to help move the sector forward!**

# Questions?



Visit the NMSA website at [ms4nmsa.org](https://ms4nmsa.org)

Visit the STEPP website at [stormwatertesting.org](https://stormwatertesting.org)

Scan the **QR code** to join NMSA and STEPP program or go directly to <https://ms4nmsa.org/our-memberships/>

Seth Brown, PE, PhD – NMSA, Executive Director; STEPP Center of Excellence, Director  
[seth.brown@nationalstormwateralliance.org](mailto:seth.brown@nationalstormwateralliance.org)