

# Overview of Stormwater Testing and Evaluation for Products and Practices (STEPP) Initiative

Wisconsin Standards Oversight Council

October 10, 2018

Seth Brown, PE



Director of Stormwater Programs  
Water Environment Federation

# Nature of the Problem

- Problem: The current practice of stormwater BMP practice and product approval is a barrier to innovation and competition
  - Piecemeal
  - Costly
  - Time intensive
  - Results:
    - Limited market entry for new technologies (public domain & proprietary)
    - Regional/local monopolies
    - Protects status quo
    - Non-dynamic market



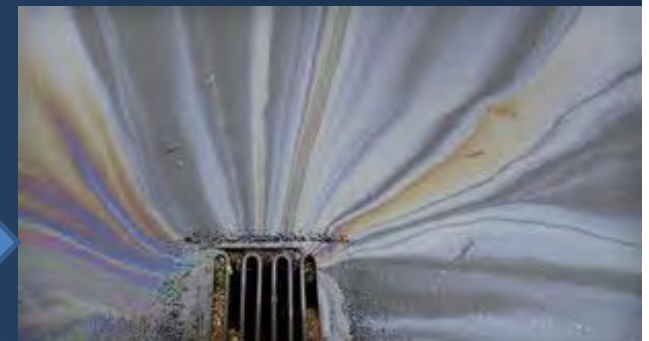
# Nature of the Problem



Depends upon point of view...

- **Manufacturer:** Product/practice approval process is a barrier
  - Can be challenging and a barrier to innovation and competition
- **Consumer:** Lack of independent testing
  - Reduces confidence in product/practice performance/efficacy
- **Regulator:** Uninformed product/practice consumers
  - May lead to under-performing stormwater programs

Ultimately impacts water quality.....



# WEF STEPP Initiative

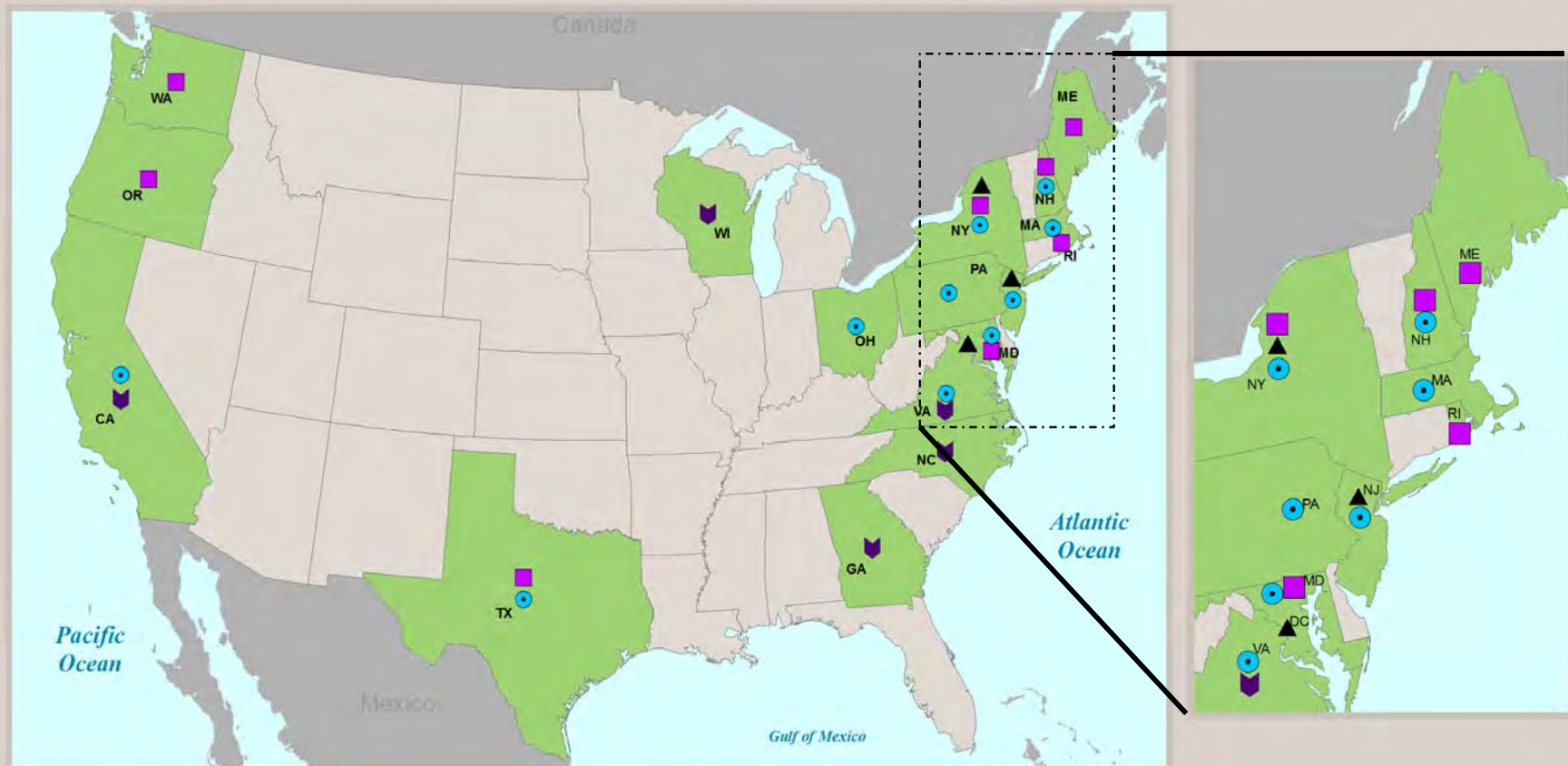


- Background:
  - Initial investigation in 2012
  - Variety of stakeholders engaged
  - Evolved since 2012
- Mission:
  - STEPP seeks to establish a common performance testing protocol, evaluation, and verification process for stormwater BMPs

# Past/Existing Programs

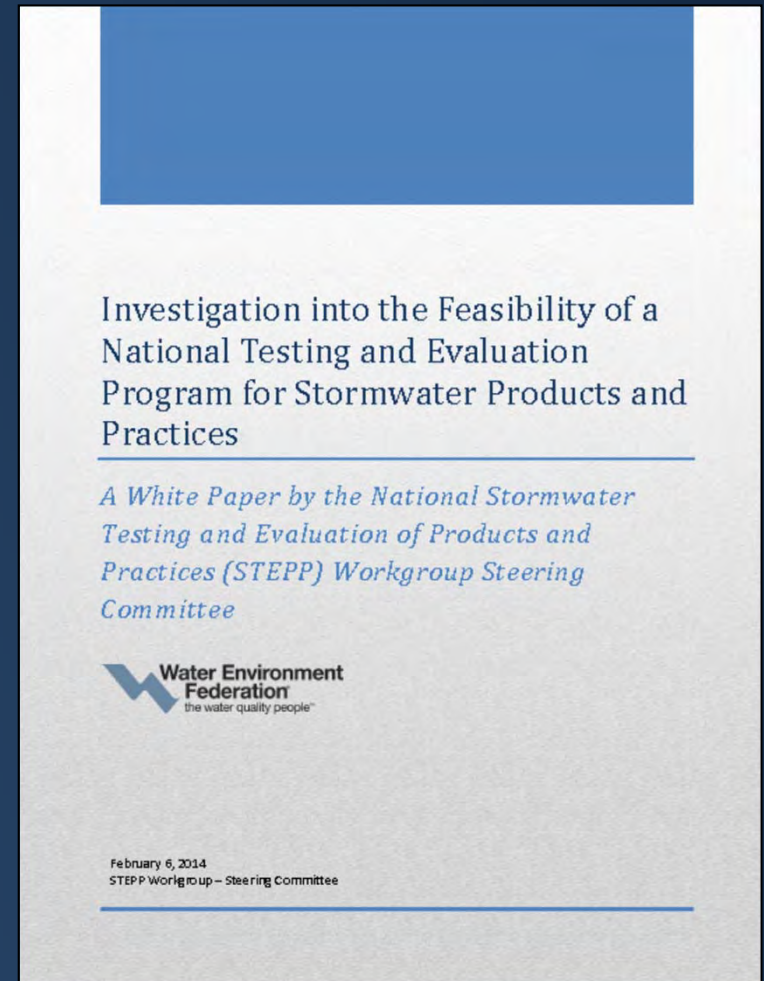
## Distribution of state/regional stormwater testing/evaluation programs

- ▲ NJCAT 2013; Recognizes NJCAT
- Recognizes TAPE; WA TAPE
- 2003 TARP Tier II; Recognize TARP Tier II
- ▼ CALTRANS; GTAP; WI Stormwater Post-Construction Technical Standard 1006; PEP (Preliminary Evaluation Period Program); VTAP (Withdrawn)



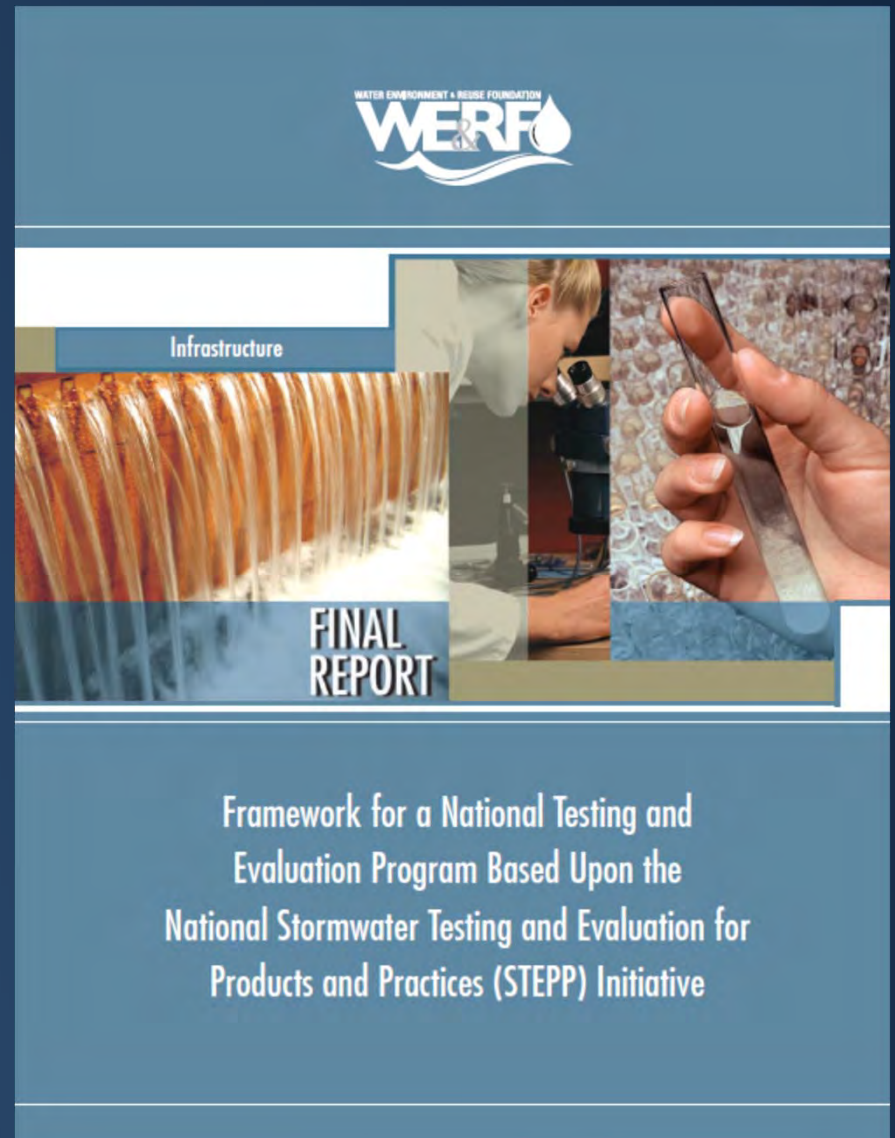
# STEPP White Paper

- Published February 6, 2014
- 24-page document, well-referenced
  - Held webcast on STEPP on March 5, 2014
    - Over 750 registrants
  - Paper and webcast are available for free



# WEF STEPP Initiative

- July 2016 Report
- Establishes a basic framework and a path forward



# National Program Conceptual Design Document

- General Programmatic Area Findings
  - Build upon Washington TAPE and NJCAT
  - Focus on verification not certification
  - Recruitment
    - Need to get states and others on board
  - Equity
    - Public domain & Manufactured Treatment Devices
  - Café Plan Approach
    - Lab and Field options
  - Continual Improvement
    - Program will evolve over time
    - Incorporate new scientific techniques & evaluation tools



# National Program Conceptual Design Document

- General Programmatic Area Findings
  - Potential pathway forward
    - Develop business plan
    - Launch period
    - Transition period
    - Sustainable period
  - Consortium approach
    - Bring together groups focused on stormwater testing/evaluation/verification

# Current

- A work team has been established to guide
- A consortium group has been established to spread the burden/risk and leverage respective strengths

# STEPP Consortium and Affiliates



# STEPP Consortium and Affiliates

GROUP TYPE	GROUP NAME
OTHER TESTING AND EVALUATION PROGRAMS	Great Lakes Stormwater Collaborative (GLSC)
	City of Indianapolis
	Sustainable Technologies Evaluation Program (STEP) – Canada
	Chesapeake Bay Testing Protocol Development
TESTING AND EVALUATION FACILITIES	Oregon Stormwater Technology Testing Center (STTC)
	University of New Hampshire Stormwater Center
INDUSTRY AND NGO GROUPS	American Society of Civil Engineers – Environment and Water Resources Institute (ASCE-EWRI)
	Stormwater Equipment Manufacturers Association (SWEMA)
	National Association of Home Builders (NAHB)
	American Rivers
REGULATORY SECTOR	U.S. Environmental Protection Agency (EPA)
	Association of Clean Water Administrators (ACWA)

# STEPP Consortium Partners/Roles

- WEF
  - Governance and administrative leadership
  - Regulatory engagement
  - Sector and promotional support
- Water Research Foundation (formerly WERF)
  - Data management/platform (BMP Database)
  - Project Management
  - Catalyzing of innovation through Leaders Innovation Forum for Technology (LIFT) Facilities Accelerating the Science and Technology (FAST) in water sector

# STEPP Consortium Partners/Roles

- American Society for Testing Material, Intl. (ASTM)
  - Preliminary standards development
    - Addressing existing stormwater testing standards (TAPE, NJCAT)
  - Ongoing standards development
    - Development of new standards, as needed
- Interstate Technology and Regulatory Council (ITRC)
  - Guidance development
  - Training development & support
  - State regulatory outreach and engagement

# STEPP Consortium Partners/Roles

- Existing State Stormwater Testing Programs
  - Washington State Department of Ecology; Technology Assessment Protocol – Ecology (TAPE)
  - New Jersey Corporation for Advanced Technology / Department of Environmental Protection
- Advantages of TAPE/NJCAT-DEP for STEPP
  - Leveraging of programs through familiarity of programs
  - Utilization of existing testing protocols
  - Capitalize on regulatory support for programs
  - Technical assistance on program/process development

# STEPP Program Consortium Partners

WEF	WRF	ASTM	ITRC	WA-TAPE	NJ-CAT/DEP
<ul style="list-style-type: none"><li>• Governance</li><li>• Administrative Support</li><li>• Leadership</li><li>• Regulatory and Sector Engagement</li><li>• Promotional Support</li></ul>	<ul style="list-style-type: none"><li>• Database Support / Management</li><li>• Innovation Support</li><li>• Project Management</li></ul>	<ul style="list-style-type: none"><li>• Preliminary and Ongoing Technical Standards Development</li></ul>	<ul style="list-style-type: none"><li>• Guidance Development</li><li>• Training Support</li><li>• State Regulatory Outreach and Engagement</li></ul>	<ul style="list-style-type: none"><li>• Provides Basis for Field Testing Protocol</li><li>• Technical Assistance</li><li>• Country-wide Recognition and Acceptance</li></ul>	<ul style="list-style-type: none"><li>• Provides Basis for Lab Testing Protocol</li><li>• Technical Assistance</li><li>• Country-wide Recognition and Acceptance</li></ul>



# Recent Updates

- July 25-26, 2018 Meeting at WEF
  - Work Team, Consortium Group, SWI Subscribers
  - Refine Consortium Group partnerships and roles
  - Identified starting points for MOUs for Consortium Group members
  - Identify near-term action items and schedule
- WEFTEC 2018
  - Work Team meeting to continue work
  - Public meeting to update

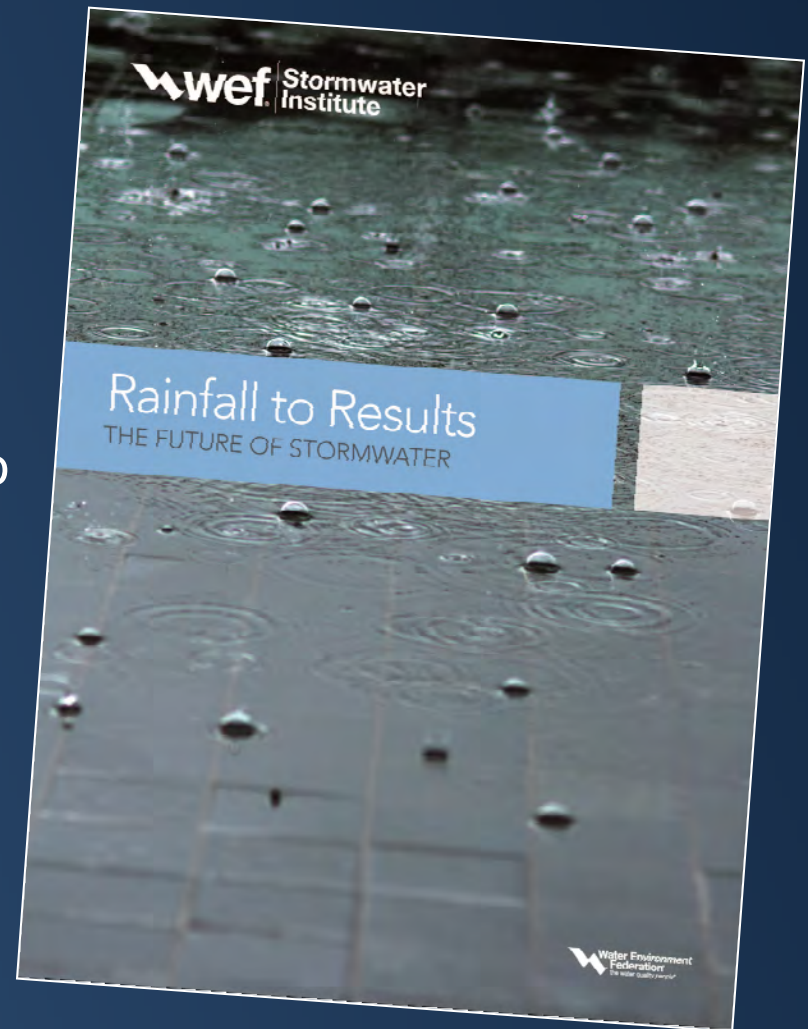
# Next Steps...



- Consortium Group
  - Work closely with each partner to develop MOUs
- Work Team
  - Get state regulatory support from critical mass of states
  - Refine standards development for lab and field testing
  - Develop initial business plan
  - Seek funding for launch/transition phase



- A center of excellence and innovation housed within WEF
- Responds to MS4 professionals for a central hub on stormwater issues, and provides a platform to develop best practices and share better approaches to stormwater management
- Provides new options for collaboration and funding for key initiatives
- <http://wefstormwaterinstitute.org/>



# Objectives for stormwater success

Work at the watershed scale



Manage assets and resources



Transform stormwater governance



Close the funding gap



Engage the community



Support innovation and best practices



## Discussion & Questions?



For more Information on STEPP:

<http://wefstormwaterinstitute.org/programs/stepp/>

For more info on the WEF Stormwater Institute:

<http://wefstormwaterinstitute.org/getinvolved/>

Seth Brown, PE

WEF, Director of Stormwater Programs

[sbrown@wef.org](mailto:sbrown@wef.org)