Executive **Summary**

WATER ENVIRONMENT & REUSE FOUNDATION

Accelerating adoption of stormwater technologies through testing and evaluation

Framework for a National Testing and Evaluation Program Based Upon the National Stormwater Testing and Evaluation for Products and Practices (STEPP) Initiative (INFR2R14)

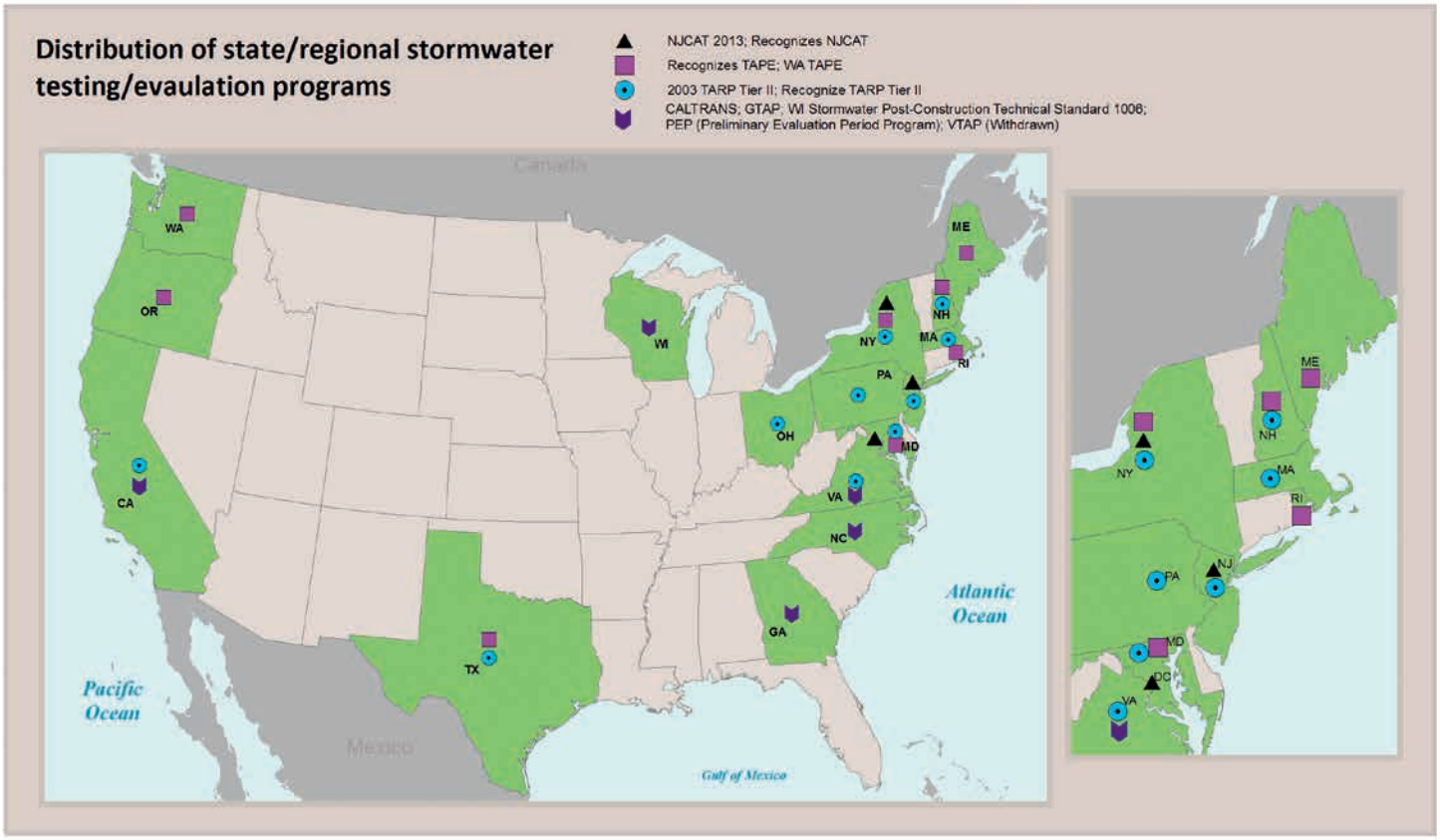
The Central Issue

In 2014, the EPA Environmental Technology Verification (ETV) program was discontinued. The announcement, coupled with a perception that other stormwater technology evaluation programs may not have produced expected results, resulted in the launch of a fresh investigation into testing and verification programs. The goal of this meeting was to determine the need for developing a strategy to help reduce or remove barriers to innovation in the stormwater sector. Meeting participants included approximately 25 officials from EPA, consultants, nongovernmental organizations, and representatives from stormwater manufacturers. This meeting resulted in the genesis of the Stormwater Testing and Evaluation of Products and Practices (STEPP) Workgroup. The meeting participants decided that the development of a national standardized testing and evaluation program for proprietary stormwater products and practices needed consideration.

Context and Background

This project reviewed and evaluated various frameworks for a national testing and verification program for stormwater products and practices based upon the insights and recommendations described in *Investigation into the Feasibility of a National Testing and Evaluation Program for Stormwater Products and Practices*, (WEF, 2014). The review and evaluations focused on program architecture, sustainable funding, protocol development, and administrative roles.

This project analyzed key components of a national stormwater product and practice testing and evaluation program and developed recommendations for future efforts. Information was gathered from potential users and beneficiaries of a national program. Meetings were held with stakeholders to supplement this information and to provide additional comments on program analyses. Information regarding the



Distribution of state and regional stormwater testing/evaluation programs in the U.S. (Updated 2016)

basis of a potential sustainable business plan framework was gathered and analyzed. A limited analogous technology testing and evaluation program analysis was conducted with a keen focus on components that can be readily and effectively adapted for a stormwater program. The universe of existing testing protocols in the stormwater sector was investigated to understand the amount of testing integration viable for the proposed national program. Lastly, recommendations were generated on the program architecture that will guide the successful development and implementation of a national testing/verification program in the stormwater sector.

Findings and Conclusions

This research recommends a three-stage process to establish a National STEPP program. The first stage is the continued operations of the STEPP Advisory Committee. The Second stage is a startup period for a National STEPP Program. The third stage is the operation of the National STEPP program.

Management and Policy Implications

If implemented, the recommended program could accelerate adoption of stormwater technologies through reliable testing, evaluation, and verification services.

Related WE&RF Research

Project Title	Research Focus
International Stormwater BMP Database www.bmpdatabase.org	Provides a mechanism for scientifically based collection and management of data needed to evaluate the effectiveness of stormwater runoff BMPs.
An Evaluation of the Functions and Effectiveness of Urban Riparian Forest Buffers (99WSM4)	Demonstrates the value of urban riparian forest buffers as a best management practice.
Assessment of Technologies for Screening, Floatable Control, and Screenings Handling (00CTS4)	Assesses the current state of wastewater and combined sewer overflow (CSO) screening, floatable control, and screenings handling technology in domestic and international facilities, including existing and proposed regulations.
Tools for Evaluating the Benefits of Green Infrastructure for Urban Water Management: Informational Brief (INFR5SG09b)	Green infrastructure approaches can often be difficult to justify due to a lack of information or understanding of their benefits, or an inability to compare it to traditional approaches using traditional costing methods. This research provides recommendations for making those justifications.
Investigation into the Feasibility of a National Testing and Evaluation Program for Stormwater Products and Practices (WEF, 2014)	Provides insights and recommendations on national testing and verification programs for stormwater products and practices.

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