

## THE NATIONAL STORMWATER TESTING AND EVALUATION FOR PRODUCTS AND PRACTICES (STEPP) INITIATIVE

STEPP seeks to improve water quality by accelerating the implementation and adoption of innovative stormwater management technologies by removing current barriers to innovation, creating regulatory confidence, minimizing duplicative performance evaluation efforts, and establishing a common framework for testing and evaluating both public domain and proprietary stormwater control measures.

As stormwater-related pollution has grown, regulatory programs have been established at the state and federal level to address the effects of stormwater runoff. Various stormwater control measures (SCMs) – proprietary products and public domain practices— have been developed and have evolved to address stormwater runoff. As the diversity and complexity of SCMs has grown, the need to develop a process to test, categorize, review, certify, evaluate, verify, and/or approve stormwater runoff controls became evident. This process ensures that the efficacy of products and practices meets expectations, which often are tied to permit requirements. Some programs to test and evaluate SCMs arose at the state, regional, and national levels, but these have had mixed results.

The STEPP Initiative was triggered, in part, by the end of the only national evaluation program for stormwater technologies, the U.S. Environmental Protection Agency (EPA) Environmental Technology Verification (ETV) program. STEPP developed from a 2012 meeting of interested parties from product manufacturing, consulting, and regulatory sectors. WEF volunteered to investigate the need for a national testing and evaluation program for stormwater products and practices, and formed the STEPP Workgroup. A white paper (2014, WEF) was released that summarized the findings of that effort. The report noted that a national SCM testing and evaluation program would be beneficial to multiple stakeholders (regulators, municipalities, technology providers, consumers, and so on). The result of this 2014 investigation was that agreement exists on the feasibility and the need for a national testing and evaluation program.

With support from EPA to move beyond the investigatory phase, a STEPP Advisory Committee was assembled in 2015. This second phase sought to develop a report to recommend the scale, scope,



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architecture, funding, and leadership for a national program. The Advisory Committee used five stormwater and non-stormwater technology evaluation programs as models for the potential design components to be considered for the National STEPP Program. Additionally, two informal surveys of states and MS4 permitees assessed their needs and how they might use a national program.



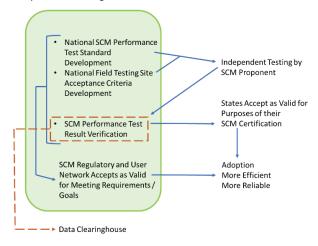




A feasibility report was released in 2016 that laid out potential framework and policy options for the STEPP program (WE&RF, 2016). Findings from this document include:

- Enhance and further implement recruitment strategies through partnerships with stakeholder groups.
   These include individual states, MS4 permittees, EPA, academic researchers, the development community, non-governmental organizations, and others.
- Promote the adoption of a flexible "cafeteria plan" approach
  for a national program that is envisioned to evolve
  continually over time. A cafeteria plan option allows both
  technology proponents and regulatory entities to have
  flexibility in designing a SCM study and determining how
  to meet specific state and local regulatory requirements.

## Proposed STEPP Organization Framework



Individual program features explored include the mission and objectives, program services, organizational relationships, operational structure, governance, funding, stakeholder engagement and transparency, testing purpose and scope, testing setting, and reciprocity. A few of these program aspects are briefly explained below.

 Program Services - The National STEPP Program should provide for both laboratory and field testing, evaluation, and verification of public domain and proprietary SCMs as its core service areas.

- Organizational Relationships The STEPP Advisory Committee believes a "hybrid" National STEPP Program model that draws, at least initially, on the proven experiences of two existing state-level programs - the Washington Technology Assessment Protocol - Ecology (TAPE) and New Jersey Corporation for Advanced Technology (NJCAT) program will accelerate the national advancement of the program, while quickly establishing organizational relationships that can both operate and guide the program development.
- Reciprocity The National STEPP Program should allow for voluntary participation by individual states and municipalities. While a common SCM testing and evaluation process is promoted by STEPP, each regulatory entity will need to consider how to allow for "certification" of SCMs while meeting their unique regulatory requirements.

## **NEXT STEPS**

The STEPP program continues to evolve. In the summer of 2017, WEF hosted a meeting to consider the potential of a multi-organizational partnership to work together by leveraging the respective strengths of each organization to further the goals of the STEPP concept. The result is the STEPP Consortium Group, which is led by WEF and includes:

- American Society for Testing and Materials, International
- Interstate Technology & Regulatory Council
- The Water Research Foundation
- Washington State Department of Ecology, University of Washington - Washington Stormwater Center, Technology Assessment Protocol - Ecology (TAPE)
- New Jersey Corporation for Advanced Technology (NJCAT)
   / NJ Department of Environmental Protection (NJDEP)

In July 2018, WEF hosted a meeting that brought these organizations together, along with the WEF Stormwater Institute STEPP Work Team, to refine the roles each organization could play in the STEPP program, consider more detailed policies, and identify initial coordinating activities between the Consortium Group partners.

Efforts to build momentum, further develop the STEPP program initiative, and solidify partnerships are moving ahead. Stormwater pollution continues to grow in many parts of the country; having tools available to enhance the confidence in treatment options will help us successfully address this problem.

For further information regarding the STEPP Initiative, visit www.wefstormwaterinstitute.org/STEPP or contact Seth Brown, PE, Director, Stormwater Programs, SBrown@wef.org and Rebeca Arvin-Colón, Program Manager, at ravin-colon@wef.org

## REFERENCES

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

www.werf.org/a/ka/search/researchprofile.aspx?reportid=infr2r14

Description: This 176-page report by the Water Environment & Reuse Foundation provides recommendations on potential STEPP program design components to be considered for the national program and addresses both the general programmatic and individual program aspects.

Investigation into the Feasibility of a National Testing and Evaluation Program for Stormwater Products and Practices: A White Paper by the National Stormwater Testing and Evaluation of Products and Practices (STEPP) Workgroup Steering Committee http://wefstormwaterinstitute.org/wp-content/uploads/2016/08/WEF-STEPP-White-Paper\_Final\_02-06-142.pdf

Description: This report by the Water Environment Federation discusses challenges and possible solutions to a national testing and evaluation program for stormwater products and practices. Challenges mentioned include consistency in protocols, programmatic variability, lab versus field testing, sustainable funding, product and practice. categorization, and the need for leadership. The white paper reflects concerns of manufacturers, municipalities, consulting engineers, government, non-governmental organizations, and WEF.

