

# NATIONAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) NEEDS ASSESSMENT SURVEY

The Water Environment Federation's Stormwater Institute is in the early stages of developing a national needs assessment survey of Municipal Separate Storm Sewer Systems (MS4s). This first-of-its-kind survey seeks to understand and quantify the challenges the regulated municipal stormwater community faces so resource solutions can be directed to fill these gaps.

## UNDERSTANDING THE NEEDS OF MS4 COMMUNITIES

With generally less than 20 years of implementation experience, the municipal stormwater sector is highly diverse. In addition to the differences that exist between Phase I and II permits, stormwater permitting programs, for the most part, are left to states, territories, and tribal entities. The individual regulatory requirements of these delegated authorities vary greatly. As a result, little uniformity exists in the implementation of municipal stormwater programs throughout the U.S.

Many urban communities are striving to meet water quality requirements and restoration goals for rivers, streams, and other water bodies. These goals can be established by voluntary watershed management plans and/or a regulatory-based total maximum daily load (TMDL) conservation plan. For example, a TMDL establishes a "pollution diet" in a watershed where pollution limits are established to meet applicable water quality standards.

Funding and financing is also a significant concern in the stormwater sector. As the MS4 program began, additional funding sources were unavailable to implement new permit requirements. The costs of implementing stormwater programs largely has been shouldered by municipality general budget funding and/or stormwater utility fee programs.

## BACKGROUND INFORMATION

Stormwater management programs in the U.S. are relatively young compared to the drinking water and wastewater sectors. The U.S. Environmental Protection Agency (EPA) began the first MS4 permitting program, known as Phase I MS4s, in 1990. It focused on large and medium size communities with populations of 100,000 and greater. In 1999, the MS4 Phase II regulation was established and expanded stormwater permit requirements to communities of less than 100,000 that are located in urbanized areas, as determined by the U.S. Census Bureau. The Phase II MS4 regulation also includes non-traditional permittees, such as universities, state and local transportation departments, and other similar facilities. According to EPA, there are more than 7500 MS4 permits throughout the U.S. territories; the majority are in Phase II communities.



## DEVELOPING SOLUTIONS

Given this situation, the WEF Stormwater Institute (SWI) is implementing a first-of-its-kind national MS4 needs assessment survey to better understand both the challenges and possibilities the regulated sector are subject to. The national survey will determine where potential program theme gaps may occur, identify opportunities to share lessons among peers, and provide a catalyst for developing new programs to meet the stormwater challenge.

WEF has assembled an MS4 survey work team under the umbrella of the SWI to provide sector expertise and help guide the development of the needs assessment. This work team will also review survey responses and contribute to the survey conclusions.

The MS4 survey will be conducted in early 2018 and completed by mid-2018. The SWI will work with partners to implement indicated improvements to both enhance existing programs and develop new tools to help the municipal sector meet their permit requirements and community water quality goals.

For further information regarding the national MS4 needs assessment survey, contact Chris French, Director of Stormwater Programs, at [cfrench@wef.org](mailto:cfrench@wef.org) and Rebeca Arvin-Colón, Technical Programs Manager, at [rarvin-colon@wef.org](mailto:rarvin-colon@wef.org).

## REFERENCES:

### Stormwater Discharges from Municipal Sources

<https://www.epa.gov/npdes/stormwater-discharges-municipal-sources>

This U.S. Environmental Protection Agency website provides information about the MS4 permitting program and provides links to multiple permit focused resources, including fact sheets, guidance and rule documents, funding sources and resource materials, and training and webcasts.

### Rainfall to Results: The Future of Stormwater

<http://wefstormwaterinstitute.org/rainfall-to-results/>

This SWI report presents a vision for the future of stormwater sustainability and identifies six overarching objectives that will help achieve this vision. This report resulted from a WEF convened meeting of national stormwater professionals whose discussions captured current trends and conditions, as well as opportunities and pathways toward a sustainable and financially sound stormwater sector.

### User-Fee-Funded Stormwater Programs

[www.e-wef.org/Default.aspx?tabid=251&ProductId=28818404](http://www.e-wef.org/Default.aspx?tabid=251&ProductId=28818404)

This WEF publication serves as a resource for municipalities and public works departments to establish stormwater utility fee programs. It identifies drivers for forming user fees, explores how to develop a fee program, and includes considerations on program costs and implementation processes. The publication features 11 case studies.