

Water Environment Federation (WEF)

Stormwater Runoff in the United States Built Environment Position Statement

BACKGROUND

Stormwater runoff from point sources and non-point sources is a growing source of water pollution in many watersheds across the country, contributing nutrients, microorganisms, and sediment. This pollution is adversely impacting our drinking water supplies, recreational activities and fish, shellfish and wildlife. Stormwater management requires more advanced evaluations to create resilient, affordable, and multiple benefit solutions. Applying decades old evaluation tools is no longer effective when considering complex urban drainage systems that include surface, pipe, channel flow, detention, retention, and water quality treatment. These dynamic systems are being overwhelmed by changing rainfall patterns resulting in poor water quality, flash flooding, and loss of life and property. Stormwater management practices have historically been siloed and have failed to recognize the interconnection between water quantity and quality. Stormwater management practices have also failed to effectively and affordably utilize stormwater to help address current and future local and atmospheric conditions.

Furthermore, the existing stormwater infrastructure is aging and severely underfunded for maintenance and retrofitting in an increased regulatory environment. Stormwater management is currently addressed through protection and water quality improvement strategies developed by utilities, local government, state governments, and federal agencies. However, the nation lacks a comprehensive plan of action at the federal level to cohesively, economically and effectively implement more resilient stormwater systems that can provide multiple benefits to water quality, water supply, flood mitigation, and other community enhancements. Research, data, and funding are needed to improve stormwater management which will require extensive stormwater system evaluations, new technologies, improved asset management systems, and life cycle analysis tools.

ALIGNMENT WITH WEF'S STRATEGIC PLAN

Since 1928, WEF and its members have protected public health and the environment. As a global water sector leader, our mission is to inspire the water community in pursuit of human and environmental well-being to create a life free of water challenges. The Stormwater Position Statement aligns with WEF's support for the following WEF Strategic Goals:

- Goal 2: Cultivate a purpose-driven community to sustainably solve water challenges for all.
- Goal 3: Lead the transformation to the Circular Water Economy
 - *Strategy 4: Eliminate barriers to Circular Water Economy*

POSITION:

As the Water Environment Federation (WEF), we are dedicated to addressing stormwater challenges that impact our communities, from flood risks to water quality issues. Our mission is to serve our communities, nation, and planet by providing cutting-edge technical expertise to tackle these challenges, whether they are complex or routine. In this role, we advocate for the following:

- **Support Government Funding:** Advocate for reliable, affordable, and robust funding for local, state, and federal agencies, community infrastructure improvements, research, and programs addressing stormwater runoff. Support local initiatives like utility formation.
- **Legislative Advocacy:** Advocate before Congress and federal agencies for legislation and regulatory policies that advance stormwater policy priorities and strategic goals.
- **Integrated Approaches:** Promote integrated approaches for water quality and quantity, including new pollutant load trading, regulation schemes, and watershed-wide tools for compliance planning and design, integrated with other utility systems like transportation.
- **Adoption of Management Measures:** Support the adoption of stormwater management measures, such as green infrastructure, nature-based solutions, and stormwater capture practices such as aquifer recharge and onsite reuse within a Circular Water Economy approach, considering stormwater's potential contribution to water supply resilience in their selection and promotion.
- **Multi-Benefit Approach:** Ensure stormwater management measures incorporate a multi-benefit approach, as they are often integrated into transportation, community planning, and other infrastructure, becoming long-term community investments and amenities.
- **Science and Technology:** Promote the use of current and best available science and technology for stormwater management, including data collection, hydrology, hydraulics, precipitation frequency, water chemistry, environmental sciences, monitoring, modeling, design, construction techniques, Artificial Intelligence, operation and maintenance, and instrumentation and control.
- **Community Engagement:** Engage policymakers, legislators, community leaders, students, and the general community to provide expertise useful for stormwater management decisions.

Expiration Date: