

## WEF Input to EPA on SSO Rulemaking and Peak Flows

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The Water Environment Federation (WEF)<sup>1</sup> fully endorses EPA's decision to collect information and views in support of developing a comprehensive program addressing sanitary sewer overflows (SSOs) and peak flows. These critical environmental management issues must be effectively addressed in order to improve both the quality of our nation's waters and the health and safety of local communities. WEF stands ready, as always, to technically support EPA in these efforts.

WEF supports environmentally sound and cost effective management of wet weather flows<sup>2</sup>

In order to assist municipal utilities and NPDES permitting authorities accomplish their missions in an economical and environmentally responsible manner, WEF believes that EPA must develop a comprehensive strategy and provide practical guidance that allow municipalities to manage wet weather flows in a holistic manner for both the collection system and the wastewater treatment plant.

EPA's SSO rulemaking needs to recognize that in most cases comprehensive wet weather solutions are accomplished over a periods of years and may require peak wet weather treatment facilities as collection system core attribute programs or capacity, management, and operations and management programs (CMOMs) are being implemented. Peak wet weather treatment facilities at a publicly-owned treatment works (POTW) can provide needed relief to collections systems and reduce SSOs as program improvements are being implemented in collection systems.

Whenever possible, managing wet weather flows should be approached on a watershed basis considering all water pollution problems, sources and priorities. Environmental and financial sustainability must be carefully weighed. A watershed wet weather management strategy should support the best use of available resources to cost-effectively address the most pressing water quality problems first, then proceeding at a sustainable pace to address remaining problems. The wet weather management strategy should provide flexibility and time to apply tools that focus on sustainable

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<sup>1</sup> Formed in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. WEF and its Member Associations proudly work to achieve our mission of preserving and enhancing the global water environment.

<sup>2</sup> See: "Management of Wet Weather Flows by Municipal Utilities", WEF Position Statement adopted by BOT on April 30, 2010, [http://www.wef.org/GovernmentAffairs/page\\_vb.aspx?id=126](http://www.wef.org/GovernmentAffairs/page_vb.aspx?id=126)

practices, green infrastructure and pollution prevention in concert with more traditional approaches.

EPA's comprehensive strategy and guidance should be based upon the wet weather management principles and guidance practices described in the following management tools:

- WEF's "Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems"<sup>3</sup>.
- WEF/NACWA's "Core Attributes of Effectively Managed Collection Systems"<sup>4</sup>

### WEF Comments on Specific EPA Questions in the FR Notice

1. Should EPA clarify its standard permit conditions for SSO reporting, recordkeeping, and public notification?

Yes. There should be nationally consistent, accurate and timely reporting, recordkeeping and public notification

In order to specify such reporting and recordkeeping, EPA must provide a clear definition of SSOs. The definition should be limited to discharges covered by the CWA, which includes only discharges to the waters of the US. Reporting of basement backups should be limited to reporting associated with evaluation of collection system performance (i.e., CMOM reporting/auditing process).

Public notice should be handled on a case by case basis with clearly defined guidelines. Over-notification of minor overflows will result in a desensitization of the general populace when more significant events warranting their attention occur.

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<sup>3</sup> Developed in 2006, the Guide was made possible by a Water Quality Cooperative Agreement between EPA and WEF. The Guide outlines an approach for analysis of wastewater flow collection and treatment during wet weather conditions, development of sound and effective practices for municipal facility planning, and design and operation for optimum management of wet weather flows. The Guide provides a risk-based method for WWTPs to be more proactive in planning for wet weather flows and describes a process that can be used to build support for real-world solutions that effectively use resources to improve water quality.

<sup>4</sup> In the absence of clear federal guidance, the Partner Organizations WEF and the National Association of Clean Water Agencies (NACWA) with technical reviews by the American Public Works Association (APWA) and the American Society of Civil Engineers (ASCE) have developed these baseline attributes as fundamental elements in the effective management of sanitary sewer collection systems. These core attributes are intended to provide guidance for wastewater agency collection system managers to evaluate their existing programs and confirm they are performing in both dry and wet weather conditions according to industry-established best management practices, or have practices that are lacking and need enhancement.

2. Should EPA develop a standard permit condition with requirements for capacity, management, and operations & maintenance programs based on asset management principles?

Yes. A general permit condition should cover the principles of a CMOM program.

Specific details should be addressed in EPA guidance. The EPA guidance should reflect the WEF/NACWA “Core Attributes of Effectively Managed Collection Systems” and WEF’s “Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems”

3. Should EPA require permit coverage for municipal satellite collection systems?

Yes. Satellite collection systems must be held accountable for managing, operating and maintaining their collection system to minimize the risk of SSO’s for their customers and the POTW receiving flows from the satellite collection system.

All satellite collection systems should adopt the Core Attributes of Effectively Managed Wastewater Collection Systems as part of their required asset management program. This should be a general permit condition for satellite collection systems.

4. What is the appropriate role of NPDES permits in addressing unauthorized SSOs that are caused by exceptional circumstances?

WEF hopes that EPA will continue to recognize that exceptional circumstances can cause unavoidable failures of real world systems. NPDES permit systems should reflect such recognition of exception circumstances beyond the control of POTWs or owners of collection systems. Such failures in the collection system should be treated consistently with treatment system failures, where affirmative defenses are available. EPA should develop a regulation for collection system failures, which would support a standard permit condition, to provide an affirmative defense for exceptional circumstances or conditions beyond the control of the utility, provided that the utility has adopted and continues to implement the Core Attributes of Effectively Managed Wastewater Collection Systems.

5. How should EPA address peak flows at POTW treatment plants?

EPA must develop a comprehensive strategy and provide practical guidance that allows municipalities to manage wet weather flows in a holistic manner to reduce SSOs while at the same time addressing peak flows at the POTW.

Given the now-conflicting interpretations of the historic term “blending”, WEF strongly recommends that this term no longer be used in any context. Rather, EPA must focus on developing appropriate new regulatory language providing for peak wet weather treatment and not rely on existing bypass provisions to regulate peak wet weather treatment.

WEF’s “Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems” outlines an approach for analysis of wastewater flow collection and treatment during wet weather conditions, development of sound and effective practices for municipal facility planning, and design and operation for optimum management of wet weather flows. The Guide provides a risk-based method for WWTPs to be more proactive in planning for wet weather flows and describes a process that can be used to build support for real-world solutions that effectively use resources to improve water quality.

EPA should adjust the existing regulation and policy framework to reflect the difficult decisions municipalities face in controlling episodic, variable, and largely unpredictable wet weather sources<sup>5</sup>.

6. What are the costs and benefits of capacity, management, and operations & maintenance programs and asset management of sanitary sewers?

See the attached presentation that summarizes data and information from studies done by selected utilities in North and South Carolina [sewermaintenance.ppt].<sup>6</sup>

7. Other considerations: How should municipalities balance all of the needs to meet water quality requirements?

A critical concern in planning and implementing municipal peak wet weather management programs has been the use of enforcement actions as the main driver. When local projects are driven by the demands of enforcement actions, their ability to cost-effectively achieve meaningful improvements in water quality from the investment of scarce rate payer resources may be compromised. Municipalities may not be able to

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<sup>5</sup> For example, in many WWTPs, the plants are designed with additional capacity in a peak flow treatment facility, to accommodate peak flows to the plant. When the plant flow to the secondary treatment facilities (which have almost always been biological units) is increased to the maximum capacity that retains biological stability, additional flow is routed to auxiliary treatment systems and then recombined with flows that have gone through the other treatment trains. This practice has been referred to as “blending.” The long-accepted sound engineering practice of providing additional peak flow treatment has been followed at WWTPs around the country and needs to be addressed in the NPDES permitting process by EPA

<sup>6</sup> Cost figures, which are for 1998, could be updated using standard inflation factors to reflect current costs.

use reasonable planning criteria for projects resulting in lower water quality benefits for the resources expended.

As we noted in the introduction to these comments, whenever possible, managing wet weather flows should be approached on a watershed basis considering all water pollution problems, sources and priorities. Environmental and financial sustainability must be carefully weighed. A watershed wet weather management strategy should support the best use of available resources to cost-effectively address the most pressing water quality problems first, then proceeding at a sustainable pace to address remaining problems. The wet weather management strategy should provide flexibility and time to apply tools that focus on sustainable practices, green infrastructure and pollution prevention in concert with more traditional approaches.

EPA should advance the watershed planning concept by ensuring that municipalities can truly approach peak wet weather flow management on a watershed basis. Neither enforcement nor permitting is the sole solution. If EPA unilaterally enforces individual components of the Clean Water Act without regard to other water quality issues in a watershed, municipalities may expend too many resources for too little benefit in water quality. EPA should not interpret the requirements of the Clean Water Act to require municipal programs and projects that will have little, if any, impact on water quality. EPA should direct its permitting and enforcement resources towards permitting tools and enforcement priorities that help municipalities focus on improving water quality.

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