
Support the Wet Weather Community Sustainability Act

Background

The Clean Water Act (CWA) has proven effective for managing municipal wastewater flows under most weather conditions. However, during heavy precipitation events wastewater flows to publicly owned treatment works (POTWs) can overload the system, overwhelm treatment plant processes, and lead to sewer overflows. Affordable treatment and management techniques are available to help municipalities affordably and cost-effectively manage wet weather-related flows while ensuring the protection of the environment and public health. Many communities have used these techniques for decades with approval from the Environmental Protection Agency (EPA) and supported with federal and state funding. But recent EPA policy changes are limiting communities' ability to continue using these proven cost-effective and environmentally responsible management options, thus imposing unnecessary expenses on local ratepayers with no commensurate benefit. NACWA estimates that if communities are no longer able to use these effective treatment methods, they could face between \$90 billion to \$190 billion in additional, avoidable costs.

Wet Weather Community Sustainability Act

The *Wet Weather Community Sustainability Act* offers both a technology-based and water quality-based approach to help municipalities manage peak wet weather events in a cost-effective manner that is protective of the environment and public health and consistent with CWA requirements.

The proposed legislation would:

- Authorize EPA to modify secondary treatment standards to allow POTWs to use alternative peak wet weather treatment technologies and management approaches during peak wet weather events based on an approved wet weather management plan;
- Authorize EPA to issue information and guidelines for alternative technologies and management approaches, including alternative treatment methods, collection system operation and maintenance programs, and monitoring and reporting systems;
- Clarify States' authority to develop wet weather water quality standards; and,
- Authorize EPA to issue guidance for State development of wet weather water quality standards.

Peak Excess Flow Management and Technology Approaches

POTWs and municipal collection systems utilize many management approaches and treatment techniques to improve the performance of their systems during peak wet weather events to avoid the occurrence of sewer overflows:

- Reducing Infiltration and Inflow (I/I): Reducing the occurrence of wet weather entering collection systems through broken pipes or defective pipe joints (infiltration) or through inappropriate connections (inflow) is a key first strategy in managing wet weather.

- **Peak Excess Flow Treatment at the POTW:** In order to avoid overwhelming the biological treatment process and shutting down treatment altogether during peak wet weather events, many POTWs divert a portion of their flow around the main secondary treatment unit and proceed with physical-chemical treatment of diverted flows or simply combine the diverted flow back into the secondary treatment effluent and then use disinfection.
- **Peak Excess Flow Treatment Facilities (PEFTF) in the collection system:** There are many technologies suitable for intermittent use, capable of treating primary effluent strength wastewater and attaining water quality standards. Many of these technologies are used within a POTW, but these technologies can also be used remotely in the collection system. When constructed outside of the POTW, these facilities are known as Peak Excess Flow Treatment Facilities. The effluent treated at PEFTFs will also often be disinfected using chlorine or chloramines and then de-chlorinated prior to discharge.
- **Examples of relatively small footprint treatment technologies capable of handling peak flows which can be put online quickly in response to intermittent peak storm events at the POTW or at PEFTFs include:**
 - **Ballasted Flocculation:** “Ballast” such as sand and other coagulation agents are added during high speed mixing to promote coagulation and settling of particles. Some types of ballasted flocculation processes incorporate a biological solids contact basin in front of the ballasted flocculation process for additional treatment.
 - **Vortex Separators:** A hydraulic pressure differential process that creates centripetal force and inertia to send heavier solids to the center and bottom of the swirling flow.
 - **Compressed Media Filters:** A high-rate, passively-operated, filter that requires no mechanical devices or chemicals to filter wastewater. The filter operates using the differential hydraulic pressure created by the wet weather flow, resulting in high solids removals.

The *Wet Weather Community Sustainability Act* would provide cost effective tools to incentivize better planning for heavy precipitation events, enable alternative treatment and management techniques to be utilized that protect the environment and public health, and provide for better overall cost-effective management of wet weather flows.

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