



## Member Spotlight (Article)

The Detroit Water and Sewerage Department (DWSD) is leading a green revolution with its Green Stormwater Infrastructure (GSI) program, transforming the city's approach to water management. Focusing on the Upper Rouge Tributary Area (URT), DWSD's efforts go beyond its prior efforts to managed combined sewer overflows with gray infrastructure by strategically utilizing nature-based solutions to deliver multiple benefits for Detroiters, from improving neighborhood aesthetics to keeping water rates affordable.

A primary driver of the GSI program is the urgent need to control combined sewer overflow (CSO) discharges and significantly reduce basement backups and street flooding. By constructing and promoting GSI projects—like the large-scale Far West Detroit Stormwater Improvement Project currently under construction—DWSD is intercepting stormwater runoff before it overwhelms the sewer system. This is becoming increasingly critical as Detroit and the Great Lakes region face more intense rainfall events due to climate change. The GSI practices are designed to capture, slow, and absorb this intense runoff, providing a crucial buffer against the kind of catastrophic flooding the city has experienced in the past.

The financial benefit to residents is perhaps the most compelling story. By reducing the volume of stormwater entering the combined sewer system, DWSD avoids the need for extensive, and enormously expensive, traditional "gray" infrastructure upgrades, such as building massive new tunnels and treatment facilities. This proactive, lower-cost approach directly helps to keep water and drainage rates affordable for residents and businesses. In fact, DWSD has already met and exceeded its NPDES permit expenditure requirement of \$50 million, shifting its investment focus to large-scale, cost-effective neighborhood projects that align with the regional utility provider, the Great Lakes Water Authority's Wastewater Master Plan.

DWSD's work is a collaborative effort. They are enforcing the amended Post-Construction Stormwater Management Ordinance (PCSWMO) to ensure new developments manage their runoff, and they actively incentivize private property owners to implement GSI through the Drainage Charge Credit System. Projects like the upcoming Brightmoor Stormwater Improvement project and East Side Stormwater Resiliency and ongoing coordination with the City's Demolition Program further illustrate this comprehensive strategy to reduce impervious surfaces citywide.

The DWSD Stormwater program is a model for 21st-century urban water management—one that leverages natural processes to guard against the effects of intensifying weather, prevent basement flooding, and secure a financially sustainable future for Detroit's water system.

# DETROIT WATER AND SEWERAGE DEPARTMENT, MI Green Stormwater Management Program

NEAA26 COMMUNITY LEADERSHIP



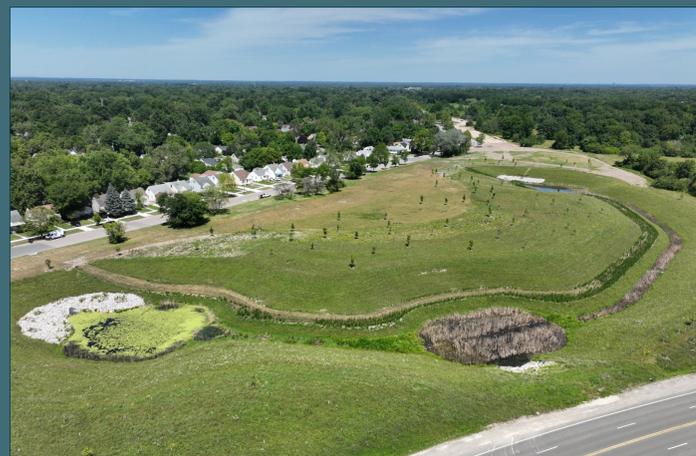
National Environmental  
Achievement  
AWARDS

## Building Resiliency

- DWSD launched its Stormwater Management Program to improve water quality, reduce flooding, and build sewer resiliency.
- The program integrates traditional infrastructure renewal with innovative green infrastructure stormwater (GSI) solutions that detain and treat stormwater before entering the combined sewer system or conveying it to rivers where feasible.
- Over the past decade, DWSD has strategically invested more than \$63 million in GSI projects which reduce basement backups and street flooding.

## Managing Stormwater at the Neighborhood Scale

- DWSD has constructed 20 stormwater projects managing more than 167 million gallons of runoff annually, with several more projects in planning and design.
- These projects have reduced combined sewer overflow volumes, improved water quality, and strengthened flood resiliency, while also providing social benefits.



## Policy Leadership and Sustainable Innovation

- DWSD's Stormwater Management Ordinance requires developments larger than ½ acre to implement stormwater controls, reducing flows to the combined sewer system and minimizing flooding.
- DWSD's Drainage Charge Credit Program lets property owners reduce drainage fees by installing stormwater control measures like rain gardens or detention basins.



## Advancing Environmental and Climate Justice

- Projects address chronic infrastructure inequities while establishing infrastructure to support redevelopment.
- Reuse of vacant land for stormwater management also reduces blight, supports urban greening, and enhances quality of life.
- Local designers, contractors, and maintenance crews are engaged to build and maintain GSI assets.

