

Green Infrastructure Program

Community Partner Profiles

2011 Partners

REGION 2: Onondaga County, New York

Community Background

Onondaga County is an 800 square mile county near the finger lake region of central New York. The county is home to about 465,000 residents, nearly one-third of whom live on the southern shore of Onondaga Lake in the city of Syracuse. The county, the City of Syracuse, and the Onondaga Nation comprise the community partners in EPA Region 2.

EPA Contact

Jeff Gratz
US EPA Region 2
290 Broadway
New York, NY 10007

Onondaga Lake has a long history of water quality issues and environmental degradation. Syracuse's combined sewer system is designed to discharge excess flows during wet weather events into local waterways that are connected to Lake Onondaga. The frequency of combined sewer overflows (CSOs) along with increasing industrialization and associated wastewater discharges resulted in a swimming ban in Lake Onondaga in 1940, followed by a fishing ban in 1972. In 1994, Lake Onondaga was added to the Federal Superfund National Priorities List due to the combination of industrial contaminants and stormwater pollution.

Drivers for Green Infrastructure

In 1998, Onondaga County was placed under an Amended Consent Judgment (ACJ) order to reduce and eliminate the occurrences of CSOs. Onondaga County originally sought to solve its CSO issues with a single-purpose "gray infrastructure" approach. The initial solution developed by the City of Syracuse consisted of a sewer separation program, the addition of detention tanks, and the construction of four regional treatment facilities (RTFs) to store and treat increased flows during wet weather events. These RTFs were opposed by city residents due to their proposed locations in economically sensitive communities as well as the high costs of construction and maintenance. To date, the county has spent \$300 million on gray infrastructure improvements, \$79 million of which funded the construction of the first RTF.

In response to the opposition in the community, Onondaga County Executive Joanne Mahoney and local stakeholder groups proposed that some of the gray infrastructure be replaced with green infrastructure to reduce the influx of stormwater into the combined sewer system. In 2009, the ACJ

was amended to include a strategy that included both green and gray approaches. Instead of building more RTFs, the County will build two storage units to receive peak wet weather flows and invest in green infrastructure projects throughout the city to reduce runoff volumes and peak flows. The county plans to invest \$78 million in green infrastructure projects to manage stormwater from 470 acres of developed land and capture 6.3% of annual CSO volume (250 million gallons). Taken together, the county's green and gray infrastructure investments are expected to capture 95% of rainfall volume by 2018.

Green Strategies and Programs

Following the new amendment to the Consent Judgment in 2009, the "Save the Rain" initiative was launched to coordinate the county's green infrastructure investments. "Save the Rain" has successfully established programs to distribute free rain barrels to homeowners and to foster urban forestry. To spur green development on private, non-residential properties the county also established the Green Improvement Fund (GIF). The fund provides up to \$200,000 per applicant for a single green improvement project located in a district that is serviced by a combined sewer system. Grants are awarded based on factors such as the projected amount of captured precipitation. These funds have been used for a variety of green development projects, such as the installation of porous pavement, construction of green medians, and the construction of green roofs.

In early 2011, the "Save the Rain" program announced the "Project 50" initiative, which pledges the construction of 50 unique green infrastructure projects in 2011 alone. One such undertaking is the construction of a 60,000 square foot green roof on the Onondaga County Convention Center, making Syracuse home to one of the largest green roofs in the Northeast, which will capture over one million gallons of rainfall each year. [A full list of projects can be seen here.](#) The "Save the Rain" website also offers information on various green development options and contains links to external sites for guides on implementing green infrastructure at home.

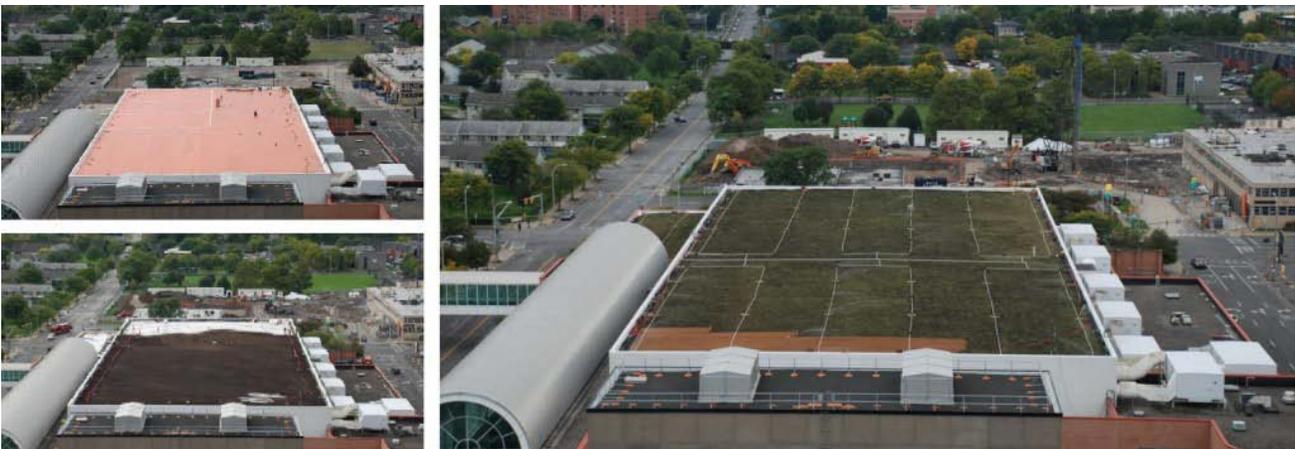


Figure 1: Completed in September 2011, the Onondaga County Convention Center's green roof span one and a half acres and is expected to absorb 1 million gallons of rainwater each year. Photo courtesy of [Save The Rain](#).

For more information: [Onondaga Lake Superfund Site – Cleanup History](#), [The Save the Rain program](#), [Project 50 Initiative](#)