

## At Work

## New Jersey Technical Assistance Program for Combined Sewer Overflow (CSO) Communities

The New Jersey Technical Assistance Program for Combined Sewer Overflow (CSO) Communities helps residents and local leaders understand the benefits of green infrastructure technologies and financing options to construct green infrastructure projects that reduce the occurrence of CSOs. CSOs continue to be a water resources and human health issue in New Jersey. They are a significant source of pollution that is directly discharged into a local water body that affects hundreds of thousands of New Jersey residents. According to the New Jersey Department of Environmental Protection, an average of 23 billion gallons of stormwater and wastewater discharge from the 210 CSO outfalls in 21 of New Jersey's urban communities annually. Through the use of green infrastructure, stormwater runoff from impervious surfaces can be cost effectively and sustainably managed to minimize flooding, improve water quality, and reduce the occurrence of CSOs.

The purpose of the program is to provide guidance, technical assistance, and resources to effectively





implement and expand green infrastructure practices across New Jersey. Resources are dedicated to establish municipal action teams and develop green infrastructure feasibility plans across the 21 CSO communities in New Jersey. Municipal action teams bring together local governments, utility authorities, residents, and community organizations to serve as advocates for green infrastructure in their respective cities. As a facilitator, the Rutgers Cooperative Extension (RCE) Water Resources Program staff coordinate meetings with individual partners that have a vested interest in the environment, water resources, or neighborhood beautification. Individuals are then invited to attend a larger meeting to establish a municipal action team. Together, the RCE Water Resources Program and partners develop an agenda for a community-based green infrastructure initiative that fosters collaboration and collective action for the municipality. As municipal action teams are established, the RCE Water Resources Program assist in preparing green infrastructure feasibility plans.

To develop the plan, the RCE Water Resources Program staff work with local partners to identify flooding issues, vacant lots, and private and public properties that have a high probability to manage stormwater. The green infrastructure feasibility plan is developed in collaboration with municipal action team partners and provides a platform to train representatives on identifying potential green infrastructure opportunities. The program has successfully established eight (8) municipal action teams which include Camden, Newark, Perth Amboy, Paterson, Jersey City, Trenton, Gloucester City, and Harrison. The technical assistance program also includes support from the RCE Water Resources Program to provide expertise for policy and municipal ordinances that promote the use of green infrastructure as a stormwater best management practice while complying with stormwater regulations. Through the municipal action teams, the RCE Water Resources Program has been able to increase awareness of the benefits of green infrastructure, assist in identifying funding opportunities for the implementation or green

infrastructure project and programs, secure funding for the implementation of green infrastructure projects, and reduce stormwater runoff from entering into CSOs.

As of 2017, a total of 2.3 million dollars has been leveraged with funding provided by the Surdna Foundation, the New Jersey Department of Environmental Protection, Passaic Valley Sewerage Commission, and the Camden County Municipal Utility Authority. Partners include residents, grassroots organizations, neighborhood associations, regional and county organizations, academic institutions, municipal government, and state and federal agencies.

From 2013-2017, the RCE Water Resources Program published the Green Infrastructure Guidance Manual for New Jersey, assisted in the design of 15 large-scale green infrastructure projects totaling 5.9 million dollars, completed the development of 14 municipal-wide green infrastructure plans for Bayonne, Camden, East Newark, Gloucester City, Harrison, Jersey City, Newark, North Bergen, Paterson, Perth Amboy, Trenton, Union City, Weehawken, and West New York. Eight municipal action teams were also established, and the RCE Water Resources Program provided technical assistance with designing and implementing over 25 small-scale community-based green infrastructure projects and assisted partners in submitting 8.2 million dollars in grant proposals to further support outreach and implementation of green infrastructure projects.

Participants that have engaged in the New Jersey Technical Assistance Program for CSO Communities have increased their knowledge and awareness about the benefits of green infrastructure practices. Through the program, green infrastructure feasibility plans, the green infrastructure guidance manual, and online learning tools provide municipal action teams with the ability to advocate for green infrastructure implementation in CSO communities.

Although the program focuses on providing technical support for CSO communities which are typically in the urban core, municipal action teams are applicable to other communities that wish to establish a green

infrastructure initiative. To begin work, an organization needs to establish itself as the backbone to organize and coordinate the municipal action team activities. Extension professionals lead efforts to provide the technical support for the municipal action team which requires building trust, building grassroots organizational capacity, and completing small successes that the team can rally around. These successes can vary between implementation of projects, public meetings that engage residents, and/or gaining support from the municipal government to establish a green infrastructure initiative.









## Christopher C. Obropta, Ph.D., P.E.

Associate Extension Specialist in Water Resources Rutgers Cooperative Extension Water Resources Program Rutgers, The State University of New Jersey 14 College Farm Road New Brunswick, NJ 08901 908-229-0210 www.water.rutgers.edu

obropta@envsci.rutgers.edu

