# Green Infrastructure Spreads and Scales

## In the past decade, Green Infrastructure (GI) has gone from an innovative urban design concept to a practice many communities are now embracing.

*Partners for Places invests in the equitable distribution of GI benefits, GI education, and the spreading of best stormwater management practices in Bridgeport CT, Buffalo NY, and Burlington VT. Learn about these projects, as well as a GI learning network instigated by USDN members.*

Green Infrastructure in Low-Income Neighborhoods in Bridgeport CT.

This 2016 Partners for Places project engages residents in developing a plan to create more tree canopy, open spaces, and stormwater solutions that will reduce flooding in a low-income area of the city. The goal of this project is to advance the city of Bridgeport's BGreen 2020 sustainability plan, which aims to incorporate nature-based solutions into all aspects of the city. Specifically, the project is designed to ensure that the East Side neighborhood, which faces a variety of social and ecological challenges, has the tools, resources, and support to grow and become a more sustainable and vibrant community.

The collaboration between the city of Bridgeport, the Emily Hall Tremaine Foundation, Partners for Places, and the Nature Conservancy in Connecticut is facilitating a process in which residents take a leadership role in determining how the environmental landscape should look, feel and function. Through a series of community meetings, culminating in a design charrette, the project team is facilitating the creation of a neighborhood Deep Greening plan. This plan will guide two initial tree plantings, totaling 150 trees – one in the fall of 2016 and the other in the spring of 2017 – as well as the site selection and design of a green stormwater infrastructure project.

Design of the green stormwater infrastructure project will be completed during the grant period. Additional funding will be sought to construct the project with community support in 2018.

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Stormwater and Green Infrastructure Education in Buffalo NY.

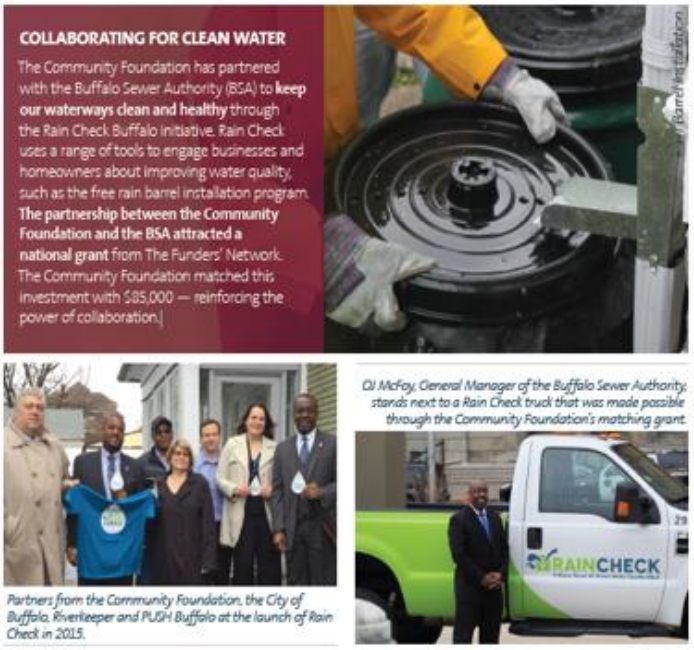


*Image Source: Grantee Report*

In 2014, Partners for Places – with matching support from the Community Foundation for Greater Buffalo - funded a community engagement campaign about stormwater management and green infrastructure. To engage residents in stormwater management, this project included research and planning to create and mount a resident engagement program addressing the need for a unified, consistent campaign with solid benchmarks designed to educate and impact long-term behaviors around water quality and green infrastructure. Goals were to: (1) work with residents to shape effective stormwater management messaging; (2) mount a multi-faceted education campaign about overflow issues; (3) motivate residents to act (from rain barrels to rain gardens); and (4) establish/report on community-wide performance measures and impacts.

The program resulted in 2,417 residential property inspections and 1,279 rain barrels installed, bringing total storage capacity to over 168,800 gallons of stormwater that will not enter the combined sewer system. The team collaboratively produced the Rain Check website, and developed brand recognition and community awareness through education efforts and marketing items. The work was highlighted in a donor tour of projects related to the region's critical location on the shores of Lake Erie, the Buffalo River, and the Niagara River. Approximately one fifth of the world's fresh water flows by the Buffalo community, and this work promotes proactive protection of this resource as a shared responsibility.

Stormwater Management in Burlington VT.

In 2016, Partners for Places funded a project with a matching grant from the Lintilhac Foundation to improve the water quality in Lake Champlain by developing pilot stormwater management projects on public schoolyards. This project is designed to enhance the City of Burlington's city-wide integrated water quality management planning (Integrated Plan) efforts by providing specific funding for a more detailed look at stormwater management opportunities on public property. Most importantly, a significant portion of the project is focused on the implementation of two to three pilot efforts on public property, including

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Burlington School District properties. The project supports the City's larger sustainability and downtown master plans and their attention to Lake Champlain protection and public health.

The goal of this effort is to enhance the city-wide integrated plan with a specific focus on storm water management on public spaces. Public properties (including Burlington's nine public schools) are being prioritized for assessment and stormwater master plans developed for the high priority properties.

Opportunities for stormwater management on these properties are also being prioritized according to the criteria developed as part of the larger Integrated Plan, and 2-3 high priority green infrastructure pilot projects will be implemented. Another key aim of this work is generating community buy-in regarding the importance and relevance of green infrastructure projects, leading to the spread of green infrastructure to address lake pollution. This support will be critical for the future investments that will be needed to support water quality improvements in Burlington.

This Foundation-City-University partnership, in addition to the expansion of the stormwater management plan, is engaging UVM students to work with Burlington public school children in pilot design. Burlington, a refugee resettlement community with 53 languages spoken in public schools (and home to the nation's first public sustainability magnet school) sees this as an opportunity to train the next generation of environmental researchers, engineers and planners, particularly those for whom English is a second language.

GI Resources and Tools.

The Green Infrastructure Exchange started as a USDN Peer Learning Exchange. Now a strong, staffed network of GI practitioners, it supports communities seeking to grow green stormwater infrastructure programs. The GI Exchange accelerates green infrastructure implementation through peer learning, innovation, partnerships and advocacy. The Exchange develops, hosts, and shares resources to advance the benefits and viability of green infrastructure. Contact Paula Conolly to learn more about accessing this community and becoming a GI Exchange member.