



## GREEN STREETS | GREEN JOBS | GREEN TOWNS INITIATIVE

The Green Streets, Green Jobs, Green Towns Partnership (G3) aims to stimulate the green jobs market and enable families to work where they live and play. Small to mid-sized communities can boost their local economies and protect water resources through the use of watershed planning, design and construction of stormwater best management practices.



### Redevelopment Authority of Cumberland County: The Carlisle Urban Stormwater Park Project

The Borough of Carlisle, Pennsylvania is underway with a major revitalization of distressed neighborhoods in the borough's northwest quadrant after the closure of three of Carlisle's longest-standing manufacturing employers within just two years.

#### Estimated Project Metrics

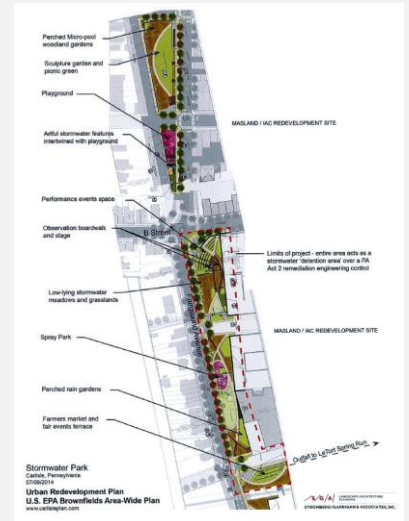
-  6,000,000 gallons of rainwater treated annually
-  Rain gardens
-  Native plants
-  Tree plantings
-  Impervious surface removal
-  Supports 124 Green Jobs
-  75 Partners with multiple educational opportunities

The Carlisle Urban Stormwater Park (CUSP) project will feature recreational and aesthetic components designed as a fully integrated stormwater management facility, including rain gardens, underground storage, and various bio-retention swales/micro-pools to capture and treat runoff during storm events.

This phase would provide a portion of the needed stormwater detention capacity to serve run-off from the southern portion of the adjacent Phase I redevelopment at the former IAC/Masland manufacturing plant site, south of A Street.

A central tenet of how the EPA Area-Wide Plan (AWP) proposes to approach stormwater management is through decentralization of the stormwater management system via a wide palette of stormwater elements that can capture and treat runoff at different scales. Rather than rely solely on "upsizing" pipes or pumps to deal with additional flow,

the goal is to remove as much stormwater as possible from the system before it reaches the conveyance lines. This includes the use of bio-retention, permeable pavements, and other pre-treatment strategies that will address Total Maximum Daily Load (TMDL) requirements within the proposed stormwater park. Also tied into this particular strategy of decentralization is maximizing open space and reducing impervious surface coverage wherever possible.



# PROJECT ELEMENTS

- **Impervious pavement removal** – Rain hits impervious surfaces such as parking lots and roads, and because it cannot soak through, it instead runs off into storm drains or directly local waterways. The new Salvation Army Harrisburg site contains 5.5 acres of impervious surfaces that drain directly into the adjacent Spring Creek. The unnecessary area of this parking lot will be removed and planted with native vegetation.
- **Native Trees**– In urban areas a single tree can intercept from 500 to 4,000 gallons per year. Trees not only treat stormwater, they provide a host of other benefits, including energy cost reduction in both summer (shade) and winter (proper placement can result in the reduction of energy use by 20-50%), aesthetics, property value enhancement, business traffic enhancement, and health benefits.
- **Conservation Landscaping**– Native plants and shrubs require less maintenance and absorb rainwater, hold soils in place, and provide food and habitat for birds, pollinators, and other wildlife.
- **Rain Gardens**– These features filter and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system
- **Educational Signage** – Signage will educate visitors about the various stormwater practices and features at the facility.
- **Rainwater Cisterns**- Cisterns will be hooked up to buildings in selected spots to collect and store rainwater for non-potable uses.
- **Green Jobs and Engagement of local businesses** – Local management firms, construction firms, and suppliers were used to complete the project, supporting local jobs. In addition, the site will be used to train young people seeking jobs in the green infrastructure .

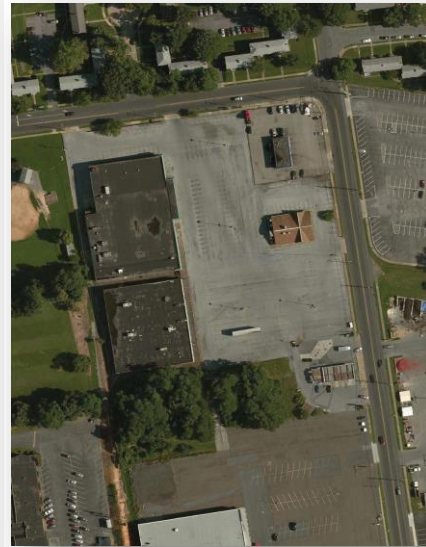


## SUSTAINABILITY & GROWTH: ADDITIONAL GREEN ACTIVITIES

Carlisle Urban Redevelopment Plan is a central component of the AWP for the redevelopment of the northwest quadrant in Carlisle. Page I.V of the Executive Summary of the AWP2 advocates for an incorporation of blue/green technologies within the proposed redevelopment and transportation projects in order to provide the maximum potential to pre-treatment and detained stormwater runoff from improved streets to meet permitting regulations and to aid in elevating chronic flooding problems in the Borough. The plan specifically identifies CUSP among three priorities for stormwater management in the northwest quadrant; Creating a Stormwater Authority, Promoting the Aggressive use of BMPs for Transportation and Land Development Projects, and Implementing the Carlisle Urban Stormwater Park on Fairground Ave.

G3 Grant Awarded:	\$30,000
Total Project Cost:	\$11,000,000
Status:	Awarded

### Current site conditions



Project Partners: Capital Region Water  
Chesapeake Bay Trust, U.S. Environmental  
Protection Agency

For additional information: visit [www.epa.gov](http://www.epa.gov) and [www.cbtrust.org](http://www.cbtrust.org).