



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.




TOWN OF NORTH EAST


Green Streets, Green Jobs, Green Towns/Stormwater Management Plan for Downtown North East, MD


This project was the first step of a project to incorporate existing gray infrastructure and new, innovative green BMPs to address stormwater management issues in the northern part of the town of North East, Maryland. The project area encompassed approximately 6 acres of mostly impervious surface (buildings, sidewalks and streets); all connected by a network of street drains to an outfall that releases the untreated water to the North East Creek. During heavy rainfalls, rainwater collects in low areas; runoff in the ditch contributes to bank erosion and water turbidity in the creek. Green stormwater management practices outlined in the Conceptual Plan will help alleviate these problems, resulting in reduced volumes of water reaching the creek during rain events, and cleaner, filtered rainwater being released to the creek. The Conceptual Plan reflected a professional analysis of the most appropriate BMPs to be constructed in a future implementation phase.

Additional features will include reforestation and native plantings. The Conceptual Plan also addressed increasing the opportunity for townspeople and visitors to walk in a natural area with historical significance have access to the North East Creek. Currently there is no pedestrian access to NE Creek in town on the south side of creek. The Conceptual Plan incorporated an ADA-accessible walkway through the project area, which also encompasses a historic millrace that once carried water to the Mill. The Conceptual Plan also included recommendations for incorporating this area as a green street feature through public access and interpretive education.

 1 conceptual plan created

 12,700 sq. ft. bioretention area to be installed

 167,200 sq. ft. of impervious surface to be treated

 8 local green jobs supported



PROJECT ELEMENTS

- **Conceptual plan** – The conceptual plan detailed recommendations regarding the implementation of living shorelines and general stream restoration, bioretention areas, pervious pavement, green street, and reduction of the invasive species *Phragmites australis*.
- **Bioretention area** – These features filter, store, and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system.
- **Pervious paving** – This alternative to traditional black top allows surface water to flow into the ground where the volume can be held, infiltrate into the lower soil or conveyed through a stormwater system. Porous paving is a good application for areas that require a hardscape surface and have no viable options for stormwater management. There are various applications and styles making porous asphalt a good aesthetic option as well as functional.
- **Green street**– Green streets minimize the impact on the surrounding area through a natural system approach that incorporates a variety of water quality, energy-efficiency, and other environmental best practices.

SUSTAINABILITY & GROWTH

As of project completion, the town had already engaged in several green stormwater BMPs both in-town, at the town park located on the south end of town, and at all of the public schools (elementary, middle, and secondary). BMPs have included four bioretention structures, two stream restorations, two submerged gravel wetlands, and three rain gardens. This project expanded these community efforts to a part of town that did not have green infrastructure.

In addition to protecting water quality, the town's Comprehensive Plan also supports the project goal of increasing natural areas, preserving areas of historical significance and increasing public access to both.

The town of North East was issued an MS4 permit requiring it to mitigate the amount of untreated stormwater that the municipality discharges into local waters. Implementation of the project developed in the Conceptual Plan would help the town meet its prescribed untreated stormwater reduction requirement. In addition, the project will increase community livability through Green Street features by increasing pedestrian access through a natural area with historical significance and will enhance the view of the creek as seen from Main Street.

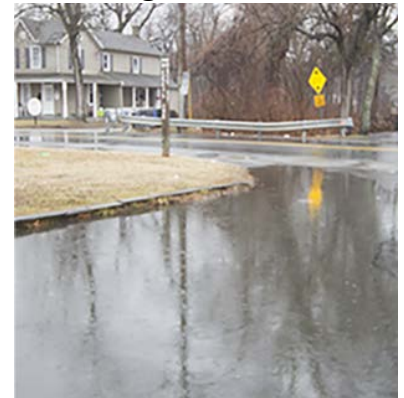
The project to be implemented from the Concept Plan is multifaceted: in addition to addressing stormwater management issues, it will act as a greenway to enlarge and enhance the forested and natural environment within the central downtown area, and provide pedestrian access along a historic mill race to the banks of the North East Creek.

Year Awarded: 2018

Award Amount: \$13,400



Flooding



Other project areas



Project Partners: Chesapeake Bay Trust,
KCI, Town of North East, U.S.
Environmental Protection Agency