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.

Marietta Borough - Front Street Green Street Design and Engineering

For engineered designs for green infrastructure improvements on Front Street in Marietta, Pennsylvania.

The Marietta Borough, a historic river town at the confluence of the Susquehanna and Evans Run in Lancaster County, has been dealing with stormwater issues for many years. A plan to implement green infrastructure projects within the borough is at the forefront of reducing water quantity and improving water quality entering the adjacent Susquehanna River.

A Green Stormwater Infrastructure Strategies plan, the second phase of the Green Streets, Green Jobs, Green Towns series of three grants that Marietta worked on, was developed to identify green street stormwater infrastructure strategies for streets within the urban areas of the Borough.

Front Street represents a vibrant location within the Borough; the best area to provide water quality improvement to stormwater runoff closest to the outfalls into the Susquehanna; the missing link of the popular Northwest River Trail; and a home to many of the bars and restaurants frequented by visitors and trail users.

The focus is on the streets and stormwater outfalls where the most conflict between vehicle, pedestrian and stormwater infrastructure exists. Input from local residents, business owners and River Trail users from the previous grant project contributed to developing the overall plan, which will integrate the green infrastructure into a total and complete green street with multifunctional uses for all parties.

The design shows the proposed stormwater management facilities, including required infiltration and water quality best management practices (BMPs), conveyance, and detention.

Project Metrics

- 1 concept plan for green infrastructure improvements
- 100 ft of riparian buffer plantings
- 10 streets to be transformed into green streets
- 19 streets to be treated with porous pavement
- 27 green jobs supported
PROJECT ELEMENTS

- **Concept Plan** – The concept plans developed include recommendations for enhanced trail construction, redesign of roads to replace impervious paving with porous paving, bio-retention areas and rain gardens, and tree plantings.
- **Rain Gardens** – These features filter and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system.
- **Bio-Retention Areas** – These features filter, store, and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system.
- **Porous 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.
- **Green Jobs and Engagement of local businesses** – Local management firms, construction firms, and suppliers were used to complete the project, supporting local jobs.

**SUSTAINABILITY & GROWTH: ADDITIONAL GREEN ACTIVITIES**

Continued improvements along Front Street are anticipated to create a connected trail and add additional green infrastructure. This is incorporated into the Comprehensive Recreation, Park and Open Space Plan that YSM is working on with the Borough. This project will be further enhanced by connecting and improving public spaces throughout the Borough and specifically a number of parcels along Front Street that would ultimately be connected with the proposed bicycle path and integration of green infrastructure to improve water quality. The Borough will seek additional grant funding sources to assist with the design and implementation of these activities, and will continue to partner with the consultants already invested in the project area.