

Green Infrastructure - Overview

Green infrastructure is defined as a means by which to help better manage storm-water run-off while delivering a variety of environmental and social benefits. Green infrastructure, such as, bioswales and rain gardens strategically seek engineering approaches to help alleviate surface water runoff, enhance water quality, increase habitat value (i.e. pollinator species), and function as aesthetically pleasing alternatives to storm-water management. Said strategies help manage storm-water runoff and reduce pooling in order to ensure proper function of storm water systems, and increase overall community environmental health.

Bioswales and Rain Gardens are two different types of green infrastructure techniques whereby the variation in the selected method is centered on the design approach and function of the system. Typically bioswales are deliberately planned to best manage run-off associated with a large area. In addition, rain gardens traditionally focus on the ability to treat and collect roof run-off through down-spout impervious disconnections.

What rain gardens and bioswales have in common is the ability to collect, treat, and manage run-off from roofs, roads and other hardened surfaces, as it can carry with it damaging pollutants (trash, contaminants, etc.) before it reaches nearby waterways. Green infrastructure such as, rain gardens and bioswales use plants found in the local ecosystem in conjunction with innovative engineering solutions to help capture and treat storm-water run-off before it enters our natural landscapes. Instead of conventional pipes green infrastructure helps to filter the water before it reaches waterways

What makes the Woodbridge Township green infrastructure team's approach to traditional techniques unique is a partnership with Rutgers Cooperative Extension Water Resources Program on all rain gardens and bioswales. Local knowledge provided by the Township GI team coupled with Rutgers advanced understanding of these systems aids the innovation of the design and technical construction of functional projects.

Completed Green Infrastructure Goals

Where can you find Green Infrastructure NOW ~ Fiscal Year 2018?

Description	By when
Health Center, located next to the Main Library and Woodbridge High School in the Woodbridge Proper section of the Township, was the first municipal rain garden project. In addition to storm water management the project also serves as an educational complement to the library and high school.	Complete; June 2009

Kennedy Park, located in the Iselin section of the Township is now home to three bioswales which mitigate non-point source pollution, enhance aesthetics, promote native plants and pollinating insects (like butterflies) and help to relieve ponding and/ or drainage issues.	Complete; October 2017
Henry Inman Branch Library located in the Colonia section of the Township (details within Reduction Action Plan). The project seeks to combat fluvial flooding and stormwater runoff from the adjacent library. The project will serve as an educational complement to the library.	Complete; May 2018
Fords Branch Library, located in the Fords section of the Township, is home to two raingardens; one each located in the front and rear of the building. In addition to storm water management the project will also serve as an educational complement to the library.	Complete; June 2018

Anticipated Green Infrastructure Goals

Description	By when
Sewaren Public Library located in the Sewaren section of the Township (details within Reduction Action Plan). In addition to storm water management the project will also serve as an educational complement to the library.	Fiscal Year 2019
Iselin Branch Library located in the Iselin section of the Township (details within Reduction Action Plan). In addition to storm water management the project will also serve as an educational complement to the library, and enhance hummingbird habitat.	Fiscal Year 2019
Woodbridge Branch Library located in the Woodbridge Proper section of the Township (details within Reduction	Fiscal Year 2019

Action Plan). In addition to storm water management the project will also serve as an educational complement to the library and adjacent school.	
Colonia High School located in the Colonia section of the Township. In addition to storm water management the project will also serve as an educational complement to the adjacent school.	Fiscal Year 2019
Woodbridge Town Hall, located in the Woodbridge Proper section of the Township, is scheduled to be home to a raingarden in the municipal parking lot once the parking lot is scheduled to be resurfaced. The rain garden will be a demonstration project for all visitors to Town Hall.	Fiscal Year 2019

Cumulative Impacts: The short-term goal is to treat storm-water runoff from 20 acres in Woodbridge Township. The long-term goal is to treat storm-water runoff from 80 acres.