RUTGERS
New Jersey Agricultural Experiment Station

June 2018

WATER PAGES eNEWSLETTER

What's happening in Woodbridge?

The Henry Inman Branch and the Fords Branch of the Woodbridge Public Library are now treating rainwater runoff differently, thanks to newly installed rain gardens and bioswales. These public demonstration projects are a part of a series of green stormwater infrastructure projects planned across Woodbridge Township in partnership with the Rutgers Cooperative Extension (RCE) Water Resources Program.

Rain gardens are designed to capture stormwater runoff and allow groundwater infiltration, promoting healthy streams and rivers. In addition to having a positive aesthetic landscape value, the native plants found in rain gardens also provide habitat for local wildlife and can support critical pollinator species. These projects demonstrate best management practices (BMPs) for stormwater management, can reduce localized flooding, and help promote improved water quality in Woodbridge.

Planting day at the Fords Branch Library, led by Woodbridge Township Eagle Scout candidate.

Planting day at the Henry Inman Branch Library, Water Resources Program undergraduate student interns

In the spring of 2018, the RCE Water Resources Program and Woodbridge Township designed rain gardens and bioswales to better manage rooftop stormwater runoff in the landscape. Existing downspouts surrounding the libraries were rerouted into the shallow landscaped depressions lined with river stone for erosion control and planted with flowering

native perennials and shrubs. A Woodbridge Township Eagle Scout candidate lead a dozen Scouts and volunteers in the planting of the rain garden at the Fords Branch Library.

These projects were completed with the generous efforts of the Woodbridge Township Department of Public Works and funded in part by a 319(h) grant from the New Jersey Department of Environmental Protection.

Green infrastructure implementation projects currently underway in the Raritan River Watershed

Spotswood Memorial Middle School rain garden construction

In the spring of 2018, the Rutgers Cooperative Extension (RCE) Water Resources Program completed several rain garden projects with local partners across the Raritan River Watershed. A total of five rain gardens were designed by the RCE Water Resources Program to manage stormwater runoff from impervious surfaces.

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Rain gardens were installed at the following locations:

- Greater Brunswick Charter School, New Brunswick
- Spotswood Memorial Middle School, Spotswood
- Millpond Park, Milltown
- Henry Inman Branch Library, Woodbridge

• Bridgewater Raritan Middle School

These rain gardens could not have been completed without the support of our local partners including Greater Brunswick Charter School, Spotswood Memorial Middle School, Milltown Environmental Commission, Woodbridge Township Department of Public Works, and the students and teachers of Bridgewater Raritan Middle School. This project, "Implementation of the Raritan River Total Maximum Daily Load (TMDL)," is funded by a 319(h) grant from the New Jersey Department of Environmental Protection.

Planting day at Greater Brunswick Charter School with RCE staff and interns, master gardeners, and school staff

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Guess where one of the largest rain gardens in New Jersey has just been installed?

Rain garden installation at the Cumberland Insurance Group in Bridgeton, NJ

A rain garden was constructed at the Cumberland Insurance Group in Bridgeton, NJ and planted on June 16th. The existing area was constantly saturated and had standing water due to a large volume of stormwater discharged to the area from the parking lot. Rain gardens were designed to allow proper capture and infiltration of this water while also providing aesthetic value to the property. The garden is about 4,000 square feet, easily one of the largest in the state! The project was completed through a collaboration with American Littoral Society who had funding available through a grant and asked for us to help by providing engineering designs and overseeing construction. Several employees from the Cumberland Insurance Group also volunteered their time to help with planting the garden. We are happy to see yet another successful project come together that the employees will be able to enjoy as well as make a positive environmental impact!

2018 Camden Environmental Summit

The 2108 Camden Environmental Summit was held at the Rutgers Camden campus on Wednesday, June 6th. The 2018 Summit was the Camden Collaborative Initiative's largest event with 275 participants from Camden and the region coming together to learn about Camden's many environmental initiatives. The 2018 Summit included recognition of Camden's 2018 Environmental Heroes, environmental displays, as well as presentations and discussions on infrastructure, flooding, energy, and health. Event sponsorship was led by New Jersey American Water. For more information on the efforts underway to transform Camden's environment, visit **www.camdencollaborative.com**.

Check out the NJTV News story at:
https://www.youtube.com/watch?v=7XMaX31XVeI

Welcome Summer 2018 Undergraduate Student Interns!

Our hard working summer undergraduate student interns, Kahourie, Ryan, Miranda, Gerardo, Jill, Andrea, Zack, Maithreyi, and Sahar

This summer we have nine undergraduate student interns with different educational backgrounds, including one landscape architect student, six engineering students, one environmental science student, and one biology student. The student interns are learning how to assess sites for possible green infrastructure projects. They are learning how to use geographic information systems (GIS) to map municipal boundaries and identify sites. They are designing site plans in AutoCAD (a design software) and modeling stormwater in HydroCAD to properly size green infrastructure implementation projects. Our student interns have already completed three design plans, six impervious cover assessments (ICAs), and four impervious cover reduction action plans (RAPs). They have assessed ten municipalities for green infrastructure opportunities as well as maintained existing rain gardens and installed five new ones. We are off to a great start, and we are excited to see how much more we can accomplish this summer!

Municipal Action Teams' Green Infrastructure Initiative Updates

Camden SMART (Stormwater Management and Resource Training) partners and the Camden Collaborative Initiative hosted the annual Camden Environmental Summit at Rutgers-Camden Campus Center on June 6th. This month, a new team of Camden PowerCorps members are beginning their six-month service,and the Camden SMART partners are continuing to provide training and leadership to these young residents of the City. The next Camden SMART partner

Municipal action teams have been formed to foster collaboration and collective action that helps the municipality speak with a common voice and achieve a common goal while advocating for green

meeting is scheduled for June 26th at the offices of Camden County Municipal Utilities Authority.

Gloucester City Green Team continues to meet monthly. Partners are pursuing green infrastructure and tree planting projects in the City. The next monthly meeting is scheduled for July 11th.

Harrison TIDE (Transforming, Infrastructure and Defending our Environment) met at City Hall on June 24th. Rutgers and PVSC are leading the design of a right-of-way stormwater planter along South 7th Street adjacent to the Harrison Fire Headquarters. Members are also working to collaborate with the local schools and are planning to meet with the PTA at Washington Middle School for a potential rain garden project. Regular meetings are to resume in September, but the team will continue to meet about specific projects as needed.

Jersey City START (Stormwater Treatment and Resiliency Team) partners met on June 14th. For more information, please contact Kate Lawrence at **KLawrence@jcnj.org**.

Newark DIG (Doing Infrastructure Green) partners are scheduled to meet on Tuesday, June 26th. The members are reviewing and discussing several reports prepared by the Long Term Control Plan consultants that will be submitted to NJDEP by July 1.

Paterson SMART (Stormwater Management and Resource Training) partners are scheduled to meet on June 27th. Partners worked with the public schools to clean up and plant rain gardens installed last summer and will be installing three cisterns at community gardens in the near future.

Perth Amboy SWIM (Stormwater Infrastructure Management) has continued their efforts toward promoting green infrastructure throughout the city of Perth Amboy. On June 21st, the group met to discuss a report recently completed by the NY/ NJ Harbor Estuary Program. In an effort to understand the stormwater benefits of green infrastructure, the report outlines the hydrologic modelling of two neighborhoods in Perth Amboy to see how green infrastructure can reduce combined sewer overflows. For the past few months, the group continues to discuss the new Long Term Control Plan regulations and the potential for green infrastructure as part of this process. The partners continue to meet regularly on the 3rd Thursday of the month.

Trenton Green Infrastructure Partners are scheduled to meet again June 28th at Trenton City Hall.

infrastructure. Updates on the various municipal action teams across the stated are listed in this newsletter.

Technical assistance provided to these municipal action teams by the RCE Water Resources Program is funded in part by the Surdna Foundation, the Passaic Valley Sewerage Commission with support from the New Jersey Department of Environmental Protection (NJDEP) and our local partners.

Camden SMART

Gloucester City Green Team

Harrison TIDE

Jersey City START

Newark DIG

Paterson SMART

Perth Amboy SWIM

Trenton Green Infrastructure Partners

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SUSTAINABLE JERSEY
CERTIFIED
A Better Tomorrow, One Community at a Time

Green Infrastructure Planning and Implementation
Come and Find Out How to Get Your Points

This course will review the Sustainable Jersey green infrastructure actions. If your municipality is struggling with localized flooding or unhealthy waterways, this workshop is for you! (more details on the back)

Two Workshop Locations Offered

Wednesday, September 19
8:30am – Noon
Duke Farms – Farm Barn/Orientation Center
1112 Dukes Parkway West
Hillsborough, NJ 08844
Register: http://bit.ly/GINFRA19Register

OR

Wednesday, September 26
8:30am – Noon
Wheaten Art Center – Event Center
1000 Village Drive
Millville, NJ 08332
Register: http://bit.ly/MillvilleRegister




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Come and Find Out How to Get Your Points

This course will review the Sustainable Jersey green infrastructure actions. If your municipality is struggling with localized flooding or unhealthy waterways, this workshop is for you! There are 35 points available for green infrastructure planning and another 45 points available for green infrastructure implementation. The Rutgers Cooperative Extension Water Resources Program has already completed green infrastructure plans for over 140 Sustainable Jersey municipalities. Come find out if you are one of them and how you can adopt these plans for Sustainable Jersey points. If a plan is not already developed for your municipality, we will share with you how to get one done.

Dates and Locations

Wednesday, September 19
8:30am Noon
Duke Farms Farm Barn/Orientation Center
1112 Dukes Parkway West
Hillsborough, NJ 08844
Register: http://bit.ly/GINFRA19Register

OR

Wednesday, September 26
8:30am Noon
Wheaten Art Center Event Center
1000 Village Drive
Millville, NJ 08332
Register: http://bit.ly/MillvilleRegister

Agenda

8:30 am Registration and continental breakfast
9:00 am Welcome by Sustainable Jersey
9:15 am What is a green infrastructure plan?
9:45 am How to develop a plan?
10:15 am How to set realistic green infrastructure targets for your community?
10:30 am Break
10:45 am How to use a green infrastructure plan?
11:00 am How to implement green infrastructure projects to achieve your goal?
11:45 am Wrap up
12:00 pm Adjourn

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Connect with us