RUTGERS
New Jersey Agricultural Experiment Station

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WATER PAGES eNEWSLETTER

May every day of the new year inspire you to grow!
Happy New Year !
~Rutgers Cooperative Extension Water Resources Program~

Empowering communities: The success story of the Green Infrastructure Champions and their impact on New Jersey

The Rutgers Cooperative Extension (RCE) Water Resources Program hosted the fifth session of the Green Infrastructure Champions Training Program from January to May 2023. With 313 newly trained Green Infrastructure Champions from the 2023 session, the total number of certified Green Infrastructure Champions is now 606! After the 2023 training program concluded, we were able to assist and empower several trainees with green infrastructure initiatives in overburdened communities. We assisted ten green infrastructure champions by providing project coordination, technical support, and construction management for their green infrastructure projects. Our support included the design of green infrastructure and stormwater best management practices such as rain gardens and bioswales. We also organized construction by procuring project materials, hiring contractors, and coordinating with local public works staff to install green infrastructure projects. While we worked diligently to manage the physical success of the project, it was critical for the Green Infrastructure Champion to take the lead on outreach and engagement, including communication with municipalities and stakeholders, volunteer coordination, and maintenance planning to ensure the long-term viability of the projects.

In total, the RCE Water Resources Program designed ten green infrastructure projects for Green Infrastructure Champions in overburdened communities. Nine of the ten designs were installed and include:

- Long Pond Elementary School Rain Garden, Newton, Sussex County, NJ
- Hackettstown High School Rain Garden, Hackettstown, Warren County, NJ
- Thomas Edison Elementary School Rain Garden, Haddon, Camden County, NJ
- Vineland Historical Society Rain Garden, Vineland, Cumberland County, NJ
- John F Kennedy Center Bioswale, Willingboro, Burlington County, NJ
- Heart of Camden Bioswale, Camden, Camden County, NJ

- Oceanport Shoreline Restoration Project, Oceanport, Monmouth County, NJ
- Spotswood Library Rain Garden, Spotswood, Middlesex County, NJ
- South River High School Rain Garden, South River, Middlesex County, NJ

These nine green stormwater infrastructure projects highlighted below total 4,970 square feet in size and manage a total volume of 689,242 gallons of stormwater annually. A total drainage area of 38,106 square feet is managed, including 34,346 square feet of impervious surfaces including building rooftops and pavement. In addition to water quantity, these green infrastructure practices remove pollution from runoff, including 0.35 pounds total phosphorus (TP), 1.81 pounds total nitrogen, and 92.36 pounds total suspended solids (TSS).

Funding for *Green Infrastructure Implementation in New Jersey's Overburdened Communities* has been provided by the **New Jersey Sea Grant Consortium** (NJSGC) under NJSGC project number 6227-007 (8/1/2022 -1/31/2023) and project number 6237-007 (2/1/2023-1/31/2024).

The 1,210 square foot rain garden installed at the Long Pond Elementary School in Andover, NJ was the largest Green Infrastructure Champion project installed in 2023. Green Infrastructure Champion, Kristine Rogers, a Watershed Education and Outreach Specialist with the Wallkill River Watershed Management Group, was contacted by a Long Pond teacher about expanding and enhancing an older rain garden already at the school. The project was constructed with help from the Andover Township Department of Public Works and planted by several classes of Long Pond Elementary School students.

Rain garden installed at Long Pond Elementary School in Andover, NJ

School administrator and Green Infrastructure Champion, Wendy Flynn, received NJ Department of Education funding for a rain garden project at Hackettstown Middle School. Wendy connected us with Carl Johnson, School District Director of Facilities,

and together we assessed the Board of Education properties for green infrastructure opportunities. We ultimately designed rain gardens for Hackettstown Middle School and High School and installed three with the help of a local contractor and Hackettstown students.

Rain garden installed at Hackettstown High School in Hackettstown, NJ

Newton Creek Watershed Association Member and Green Infrastructure Champion, Lorraine Prince, was inspired to install a rain garden at her local community school, Thomas Edison Elementary School in Haddon Township, NJ. The 125-square foot rain garden was designed and built by the RCE Water Resources Program. Community volunteers helped plant 60 native perennials and shrubs in the rain garden to enhance pollinator habitat in the courtyard space.

Rain garden construction at Thomas Edison Elementary School in Haddon Township, NJ

Rain garden installed at Thomas Edison Elementary School in Haddon Township, NJ

At the Vineland Historical Society building, a 675-square foot rain garden was installed by a local contractor and RCE Water Resources Program staff in the late fall of 2023. The project was planted by a wide range of volunteers, the Association of New Jersey Environmental Commissions (ANJEC), and members of the Vineland Environmental Commission, all invited by the local Green Infrastructure Champions, Diane Amico and Lisa Fleming.

Rain garden installed at Vineland Historical Society in Vineland, NJ

In fall of 2023, a parking lot island at the Willingboro Township Kennedy Center was converted to a 625 square foot bioswale by the Township. This project was initiated by Green Infrastructure Champion, Patricia Lindsay-Harvey, and installed with assistance from the Willingboro Township Department of Public Works. The bioswale is designed to divert stormwater runoff from the catch basin and to filter stormwater runoff through native perennials and grasses.

Bioswale planted with native plants at John F. Kennedy Community Center in Willingboro, NJ

A parking lot swale was converted to a 765-square foot bioswale at Heart of Camden, in Camden, NJ. Initiated by NJDEP AmeriCorps Watershed Ambassador (WMA 18), Mason Kramer, and with assistance from Green Infrastructure Champion, Crystal Wessel, of the New Jersey Tree Foundation, the project was completed in early December by a local contractor.

Completed bioswale at Heart of Camden in Camden, NJ

In Oceanport, NJ, a coir log and 300 native grasses and perennials were added to create a buffer and prevent erosion along a streambank habitat. This project was inspired by and completed with the assistance of Green Infrastructure Champion, Bradley Sherman.

Native planting and coir log installation in Oceanport, NJ

The landscaping at the Spotswood Township Public Library was enhanced for stormwater management and improved biodiversity by the completion of a 465-square foot rain garden. This project was initiated by Green Infrastructure Champion,

Doriann Kerber, and Library Director, Karin Finnegan, and was constructed by a contractor. Over 120 native perennials and shrubs were planted by volunteers from the Edison Green Team, Edison-Metuchen Scout Troop, and SEWA USA.

Rain garden planting at Spotswood Public Library in Spotswood, NJ

After surviving several delays, a final project fell into place at South River High School. Initiated by Green Infrastructure Champion, Doriann Kerber, and with support from the South River Environmental Commission, South River Board of Education, and the South River Department of Public Works, a contractor installed the 825-square foot rain garden on the cusp of winter.

Rain garden construction at South River High School in South River, NJ

The 2024 Green Infrastructure Champions Training Program is off to a great start!

The 2024 Green Infrastructure Champions Training Program kicked off on January 12 with 173 program attendees! This round of champions has quite the reach with registrants from New Jersey, New York, Pennsylvania, Maine, Kansas, Massachusetts, Ohio, Connecticut, Missouri, Puerto Rico, and even India, Kenya, and Scotland! Registrants come from a variety of organizations and include people that are simply interested in green infrastructure, self-employed, that work for non-profits, private firms, government agencies, academia, green teams/environmental commissions, and/or municipal positions. We hope to engage and empower all those taking the classes over the next several months!

DID YOU REGISTER YET?
What are you waiting for?
Become a leader, become a Green Infrastructure Champion in 2024!

There is still time to sign up for the remaining nine (9) classes! Please remember you need to register for and attend a minimum of five (5) classes to be considered a green infrastructure champion!

Here is the link to sign up:

https://rutgers.zoom.us/webinar/register/WN_nuaE-xe4T8e080uhQ-l6vg#/registration.

All sessions for the 2024 training program will be offered via an online format from 10AM to 12NOON every other Friday.

Generous support from our funders is allowing us to offer this year's training for free.

Here is what we can offer as part of the program:

- Training on green infrastructure planning and implementation
- Technical support to develop a design for a green infrastructure demonstration project
- Networking opportunities with other Green Infrastructure Champions for mutual support
- Assistance with grant writing

2024 Training Program Class Schedule:

1. How to identify green infrastructure projects in your town (January 12)
2. Moving from planning to implementation of green infrastructure (January 26)
3. Maintaining green infrastructure practices/projects (February 9)
4. Stormwater management regulations, policies, and ordinances (February 23)
5. Green infrastructure planning and implementation for Sustainable Jersey points (March 8)
6. Green infrastructure projects for schools (March 22)
7. How to design and build a rain garden (April 5)
8. Retrofitting traditional detention basins with green infrastructure (April 19)
9. Developing green infrastructure master plans for an entire site or neighborhood (May 3)
10. Using green infrastructure to promote climate resiliency (May 17)

Registration is required.
Attendance at a minimum of **five (5) classes** is **needed for certification**.

This program is partially funded by the **New Jersey Agricultural Experiment Station**, **Geraldine R. Dodge Foundation**, **William Penn Foundation**, and **New**

Jersey Sea Grant Consortium and is a collaboration of the **Rutgers Cooperative Extension Water Resources Program** and the Green Infrastructure Subcommittee of **Jersey Water Works**.

Contact **Hollie DiMuro (hollie.dimuro@rutgers.edu)** if you are interested in becoming a Green Infrastructure Champion.

Upcoming Webinars

New Jersey Future: Stormwater Retrofit Webinar

Tuesday, January 23, 2024, 12 NOON -1PM.

Register at: **https://us02web.zoom.us/meeting/register/tZAodu2rrzMpGtbZp-ALJFdpU_vS5_F_wecp#/registration**

Stormwater Best Management Practices (BMPs), including detention basins, infiltration basins, bioswales, and rain gardens, are implemented to manage stormwater and improve water quality. Most existing stormwater BMPs are considered outdated and not designed to manage current and future storm events, leaving communities vulnerable to flooding and New Jersey falling short of its water quality goals. The New Jersey Stormwater Retrofit Best Management Practices Guide was created to provide municipalities, counties, developers, and property owners the tools to identify opportunities to retrofit existing stormwater BMPs and install new stormwater BMPs in New Jersey's highly built-out environment.

Sustainable Jersey: Using the Enhanced Stormwater Control Ordinance Action to Meet New DEP Requirements

Tuesday, February 6, 2024, 12 NOON -1PM

Register at: **https://register.gotowebinar.com/register/512854439410483802**

Learn how municipalities can update their stormwater control ordinances (SCOs) to meet the requirements of NJDEP's newly effective Inland Flood Protection Rule while simultaneously gaining Sustainable Jersey points. The session will highlight two examples of "enhanced" ordinances developed by the Watershed Institute and New Jersey Future to better manage stormwater.

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Rutgers Cooperative Extension Water Resources Program
water@envsci.rutgers.edu
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