



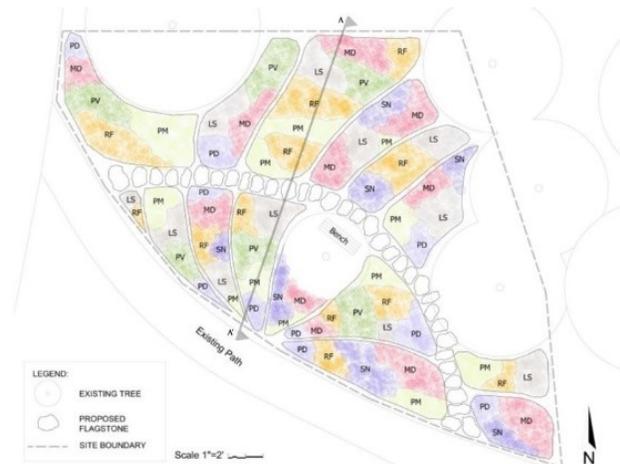
SEPTEMBER 2021

WATER PAGES eNEWSLETTER

Bucleuch Park Gets a New Pollinator Garden

Almost three years of drawings, meetings, planning, and dedicated coordination, Bucleuch Park (pronounced *book-loo*), located in New Brunswick, NJ, finally has a newly installed pollinator garden. The Rutgers University Landscape Architecture (RULA) undergraduate club took the opportunity back in 2018 to help redesign the original pollinator garden installed in previous years. Due to vegetation overgrowth and neglect, RULA club

executive board members met with the New Brunswick Environmental Commission (NBEC) and decided that the existing pollinator garden needed to be relocated. After finalizing the new location with the Commission members and the City's Parks & Shade Tree Division, student club members began to come up with sketches and concept designs of the new pollinator garden. Concepts varied from various arrangements within pollinator planted beds to different walkways and footpaths to explore through certain types of pollinator plantings.



Aliya Williams (Class of RULA 2020) came up with the pollinator garden to replicate a colorful butterfly wing with separated plant beds to show off the different plant colors. The RULA undergraduate club president, Alex Ciorlian (Water Resources Program), presented the design to the NBEC and received approval to build the garden in the summer of 2019. Unfortunately, due to funding complications, the project could not continue on to installation in 2019.

In May 2021, the NBEC received a small grant from the Association of New Jersey Environmental Commissions (ANJEC) to

help install a pollinator garden in Buccleuch Park with the help of former NBEC member, Johnny Malpica (Rutgers MCRP 2021). In June 2021, Anne Swerdloff (NBEC) led and prepared the project site by laying down a cover crop to amend the harsh New Brunswick shale soil, water the cover crop, and cut it down before planting the pollinator garden.

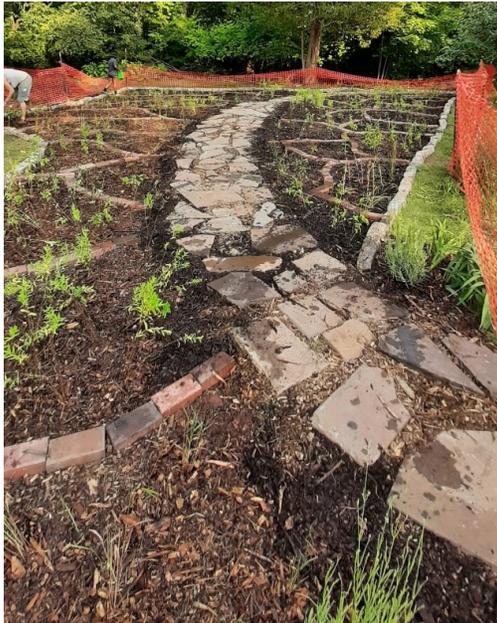


The weekend of September 11 and 12, 2021 consisted of almost 50 volunteers, varying in all ages, coming to help install the garden. The volunteers started with removing the weeds, prepping the soil, laying down the stone pathway, planting pollinator plants, mulching, and finally watering the completed garden. Over 1,000 native pollinator plants separated by brick in individual beds to represent the veins of the butterfly wing were planted.



Volunteers varied from the students in the RULA Department, the Rutgers Master Gardeners Program, NBEC members, parishioners of Emanuel Lutheran Church, sorority sisters of the Rutgers University Eta Chapter of Kappa Phi Lambda, local businesses, community members, and residents to make this project a huge success. The best thing

about pollinator gardens is that everyone can come together and help no matter what the age or expertise is. These volunteers helped make a small part of New Brunswick an environmentally focused city.



Knee-deep in Nature at Highland Park High School



Over 125 Highland Park High School (HPHS) science students got hands-on experience identifying native and invasive plants in their school's own green stormwater management projects on September 21, 2021. For several years, HPHS has been creating an environmentally sensitive campus that provides educational opportunities to both students and the public who use its popular schoolyard. There is an active environmental club that monitors

different aspects of the outdoor campus including tree growth and health, and there is a well maintained vegetable garden, where students are passionate about one day supplementing the cafeteria's food supply.

The Water Resources Program provided the design and oversaw the construction of a rain garden in 2016, as part of a National Fish and Wildlife Foundation (NFWF) grant to support water quality in the Raritan River watershed. In 2019 and 2021, the Water Resources Program utilized a New Jersey Department of Environmental Protection (NJDEP) 319(h) water quality grant to design and install a retrofitting project for an existing detention basin shared by HPHS and Highland Park Middle School. Over 50 species of flowering perennials and grasses were planted by students, faculty, and Water Resources Program staff. Dozens of trees were also planted on campus by the New Jersey Tree Foundation through an NJDEP Community Forestry Grant. Close coordination with HPHS facilities staff ensured that the project boundaries were fenced and that the plantings were watered during the first season.

The meadow planting in the detention basin requires close monitoring for invasive species, which can quickly outcompete immature native plants. HPHS science teachers brought their students out on September 21, 2021 to learn how to identify native plants and remove invasive plants in the rain garden and detention basin. Students found Monarch caterpillars feeding on milkweed plants (*Asclepias incarta*) and witnessed a living example of the ecological value these projects have brought to their backyard. This was the first day planned of many at HPHS dedicated to outdoor classroom science instruction, and gauging by the positive comments overhead from the students and teachers about having class outside on a beautiful September morning, it likely won't be the last!



New England Asters & Blue Mist Flowers



Sneezeweed

50 Rain Gardens for the 50th Anniversary of Earth Day - Featured Rain Gardens for September 2021

The Water Resources Program worked with our partners to install over 50 rain gardens in 2020, while following social distancing guidelines, as part of our *50 Rain Gardens for the*

#22

Warren Township Library 42 Mountain Boulevard, Warren, NJ

On July 31, 2020, the installation of a rain garden at the Warren Township Library was completed. The Water Resources Program was awarded a 319(h) grant from the New Jersey Department of Environmental Protection to implement green infrastructure projects in the Raritan River watershed that provided funding for the design and installation of this rain garden. The Warren Township Department of Public Works excavated the rain garden area. The Water Resources Program installed an underdrain, added bioretention media, and spread a three inch layer of mulch. The Warren Township Green Team assisted with planting. The managed drainage area of the rain garden is 2,705 square feet. The rain garden is 540 square feet in size, and will enhance the aesthetics at the library while attracting and nurturing pollinators. The rain garden will capture, treat, and infiltrate approximately 46,820 gallons of stormwater runoff per year.



Warren Township Library rain garden, July 2020

#28 & #29

Salem High School 219 Walnut Street, Salem City, NJ

On August 28, 2020, the Water Resources Program completed the installation of two rain gardens at Salem High School in collaboration with the Partnership for the Delaware Estuary, Salem High School faculty, and Davis Lawns and Landscapes. The Water Resources Program designed these gardens through an on-going project funded by the William Penn Foundation to address stormwater runoff and water quality in the Kirkwood-Cohansey aquifer. The managed drainage area for the two rain gardens combined is 10,358 square feet, with one rain garden at 1,425 square feet and the other at 215 square feet. Sand and compost were added to the gardens to increase infiltration and

provide nutrients for the native plants used. The gardens will serve as a demonstration project for residents and an educational tool for teachers. The rain gardens will capture, treat, and infiltrate approximately 187,930 gallons of stormwater runoff per year.



It took strong partnerships and teamwork to get these rain gardens installed!

Municipal Action Team Green Infrastructure Initiative Updates

Gloucester City Green Team

The Gloucester City Green Team meeting scheduled for September 8 was cancelled. The next regular meeting will be on October 13 at 1:30PM via Zoom.

Jersey City START

There was no meeting held in September. The next meeting is scheduled for October 21 at 2PM via Zoom. Contact lsigmund@jcnj.org to be added to the email list.

Newark DIG

Newark DIG met on August 24 to discuss upcoming activities and initiatives of Newark DIG partners. Newark Department of Water and Sewer is reviewing qualifications received through the RFQ for Green Infrastructure Program Management that would expedite and provide the support necessary to implement public green infrastructure projects throughout Newark. Newark Office of Sustainability promoted several ongoing programs and initiatives including the Resilient NJ 'Game of Extremes,' a resource for community organizations to role play climate change through risk assessment and adaptation planning. Also discussed were milestones

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

Technical assistance provided to these municipal action teams by the RCE Water Resources Program is currently funded in part by the Rutgers New Jersey Agricultural Experiment Station (NJAES) and the Passaic Valley Sewerage Commission with support from the New Jersey

reached in Newark's replacement program for lead drinking water service lines and the recent NJDEP request for Federal superfund site designation for 23 miles of the Lower Hackensack River, from Oradell Dam to Newark Bay. Stay tuned to the Office of Sustainability for a public opportunity to canoe the Passaic River on October 16! New Jersey Tree Foundation is hosting tree plantings on 10/1 on Fairmount Avenue, 10/16 on Sanford Place, and on 10/20 in Branch Brook Park. Newark DIG Zoom meetings are on the fourth Tuesday of the month at 11AM. Please contact newarkdig@gmail.com to attend and for more information about any of the listed events.

Paterson Green Team

Green team members did not hold a meeting in September, however there was the First Annual Green Fair that members held at Pennington Park on September 18. Many vendors were present to provide resources and education to the community, and residents were able to engage in eco-friendly activities such as building your own pinecone bird-feeder, picking up a new recycling bin, and dropping off donations to the green-drop truck. Members are also continuing to distribute Adopt-A-Catch-Basin kits to residents who sign up to adopt a catch basin in their neighborhood. To join the green team mailing list please contact marthaaren333@yahoo.com.

Perth Amboy SWIM

Perth Amboy SWIM members met virtually again this month in conjunction with the Perth Amboy Green Team on Tuesday, September 21 at 6PM. The green team will be hosting monthly clean ups around the city, which will be on the second Saturday of each month. Members also discussed how to prioritize completing Sustainable Jersey actions and how that will be part of the new committee structure of the green team. At the next meeting the group will decide where to plant small trees which were secured from a grant by members of the Royal Garden Club and encourage members of the general public to join as part of that conversation. The trees will be delivered in mid to late October. The next meeting will be on October 19 at 6PM. Please contact epyshnik@envsci.rutgers.edu to be added to the email list.

Trenton Green Infrastructure Partners

Trenton GIP met virtually on Tuesday, September 21 at 3PM and finalized plans and materials for the upcoming Open House that will be held virtually on Wednesday, September 29. Members also discussed the possibility of a new green street project on West Lafayette Street and are working on developing designs. There is a new Land Development Ordinance which will be presented and discussed at the planning board meeting on Thursday, September 23; please join to learn more and make a

Department of
Environmental Protection
(NJDEP) and our local
partners.

Camden Collaborative
Initiative Water

Gloucester City Green Team

Jersey City START

Newark DIG

Paterson Green Team

Perth Amboy SWIM

Trenton Green Infrastructure
Partners

comment! The next meeting will be on October 19 at 3PM via Zoom; please contact atabas@njfuture.org to be added to the mailing list for the group.



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Rutgers Cooperative Extension Water Resources Program
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