

COMMUNITY GRANTS PROGRAM



CASE STUDY

Pollution Prevention Solutions: Youth Empowerment and Rain Gardens

Horizons at Warner is a six-week, full-day summer enrichment program on the University of Rochester Campus. Horizons' primary focus is to engage K-8 Rochester City School District students in meaningful and authentic learning experiences in a non-traditional school setting. The close relationships developed between families and Horizons staff, along with engaging instructional approaches, help lead city students in the program to reach their fullest potential.

Grassroots, a University of Rochester Environmental group, will work with the Horizons team to empower youth in the Rochester community to learn about pollution prevention strategies, and design innovative solutions to the problems they face.

CHALLENGE

The Rain Gardens for Youth Empowerment and Pollution Prevention project addressed issues related to water pollution due to significant rain-water runoff in the area. There are significant amounts of water running into storm drains and to the Genesee River, thereby increasing pollution from nutrients including phosphorous and nitrogen, as well as particulate and solid-waste. This project will aim to reduce these pollutants as well as reduce erosion along banks, recharge local groundwater stores, and create a habitat for wild animal species. Through the partnership between Horizons and Grassroots, this project will challenge Rochester City school children to come up with additional solutions to these pollution issues.

SOLUTION

Horizons, with the support of Grassroots, planned, designed and built a rain garden. The rain garden will be maintained by Horizons students and teachers. Water testing will be done to monitor its effectiveness. Native plants including ferns, grasses, and shrubs were placed in the garden.

The rain garden also serves as an education and empowerment tool for K-8 Rochester City School District (RCSD) students who attend the Horizons program at the University of Rochester campus every summer. This garden will act as an extension of their program. RCSD students, alongside University of Rochester Grassroots students, are directly involved in the maintenance of the garden, as well as learning about various pollution prevention efforts and the importance of the native plant species.

RESULTS

RCSD students worked with University of Rochester students to research and develop the site plan for the garden. The rain garden was installed, which will filter pollutants from rainwater runoff and slow the rate of overall runoff into storm drains and the Genesee River. The rain garden was used, through a newly developed curriculum, as an educational empowerment tool for 135 kindergarten through 8th grade students. The lessons were taught to 135 children, and students were asked to explore a pollution prevention project of their own choosing at the end of the year. At the end of the summer, they

CHALLENGE

- Grassroots, a University of Rochester Environmental group, along with Horizons, a children's summer enrichment program at the University of Rochester campus is looking to solve issues related to water pollution due to water running into storm drains to the Genesee River

SOLUTION

- Design and build a rain garden to minimize rain-water runoff and serve as an educational tool for the students attending Horizons

RESULTS

- The rain garden was installed, which filtered pollutants from rainwater runoff and slowed the overall runoff in to storm drains and the Genesee River
- 135 kindergarten through 8th grade students learned about pollution prevention through the rain garden
- A sign was installed at the edge of the garden with a QR code that linked to a new educational video "What is a Rain Garden" to further educate the public about pollution prevention and ways to improve the local environment

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presented their projects at the Pollution Solution Convention.

A sign was installed at the edge of the garden; with a QR code that is linked to a newly developed educational video "What is a Rain Garden". The video showcases the students work and explains how rain gardens can prevent pollution and improve the local environment.



(Photo Credit: University of Rochester)
Students presenting at the Pollution Solution Convention

RESOURCES

[Video - What is a Rain Garden?](#)

[Press - Horizons Program](#)

ONLINE MEDIA

[Website](#)

[Facebook](#)

[Twitter](#)



TESTIMONIAL

"This project created a rain garden that will reduce the amount of stormwater drainage to the Genesee River for years to come, resulting in prevention of pollution as well as erosion reduction. Through the support of P2I's Community Grants Program, we were able to complete this project, while simultaneously engaging and educating 135 local youth in the process. This learning is so valuable to future generations, it's priceless."

-Lynn Gatto, Executive Director
Horizons Program at Warner School

NYSP2I PARTNERS



New York Manufacturing Extension Partnership

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