



Pennsylvania Horticultural Society Creates Green Job Training Program for Philadelphia

Cities are covered by hard surfaces like parking lots and rooftops that redirect rainwater from wet weather events, also known as stormwater runoff. This can result in rapid flooding, riverbank damage, and poor water quality. Green infrastructure (GI) projects use natural components, like plants and soil, to absorb rainwater and prevent flooding of streams and communities. Many cities are turning to GI to help manage stormwater runoff. The Pennsylvania Horticultural Society uses education and training programs to provide knowledge on how to reduce stormwater runoff and how to install and maintain GI projects. GI systems require frequent maintenance and therefore create an opportunity for jobs.

ABOVE: Students from PHS's green infrastructure training program learn how to measure the rate at which land next to a green stormwater management system is able to absorb water.

In August 2012, the *Pennsylvania Horticultural Society* (PHS) was awarded a \$58,000 grant from the U.S. Environmental Protection Agency (EPA) through the *Urban Waters Small Grant program* to provide a job training and education program for residents of the Tookany/Tacony–Frankford Watershed in Philadelphia. PHS is contributing \$10,500 towards the project. Collaborating with PHS on this project are the Tookany/Tacony-Frankford Watershed Partnership assisting with site selection and community engagement as well as Green Treks, producer of project-based video production.

Project Highlights

PHS will create:

- A hands-on training program that will support green projects for controlling stormwater pollution entering Philadelphia's waterways.
- Education and outreach in GI techniques, including development of a training curriculum, on-line resources, and an economic development video

PHS is a nonprofit organization with a long history of bringing people together to make urban neighborhoods in Pennsylvania more environmentally friendly. Established in 1827, PHS inspires people to improve their quality of life and to create a sense of community through horticulture. Over the years, PHS has grown to offer many exciting events and programs rooted in gardening, greening, and learning.

PHS Expands Successful Job Training Program to Improve Philadelphia's Waterways

PHS's goal is to ultimately improve the health of the Tookany/Tacony Creek through GI-focused education and training. PHS hopes that by educating the community and potential workforce on the benefits of GI, it will increase investment in green projects across the city. PHS will train participants of its Roots to Re-Entry program on how to identify and maintain GI projects. The

Roots to Re-Entry program provides job skills and a pathway to employment for inmates of the Philadelphia Prison System. Support from EPA's Urban Waters Program allowed PHS to expand the program curriculum to include a stormwater GI component. The training program will provide former inmates with unique skills needed to identify and maintain GI projects with a goal of obtaining local jobs. Philadelphia Parks and Recreation staff will also participate in the GI training program.

In May 2013, PHS launched the six-part GI training program. Each lesson has a classroom and hands-on component, where trainees can practice the lessons learned. PHS will host a second round of training in spring 2014. Those who complete the course leave with the knowledge needed to build and maintain many GI projects and the opportunity to apply for jobs across Philadelphia.

Measuring the Success of the Green Jobs Training Program

PHS will evaluate the effectiveness of the GI training program by:

- Measuring classroom attendance.
- Evaluating involvement; active discussion and trainee participation shows that students are learning from the course.
- Conducting surveys; surveys will be conducted prior to and after the training to gauge increased knowledge and awareness of stormwater GI concepts.
- Talking to employers; employers can account for a trainee's increased knowledge and performance.

Forging Effective Partnerships to Achieve a Lasting Effect

By recognizing the strengths of other local organizations, PHS has strategically built partnerships to expand its network and maximize the training program's impact.

 PHS values the connection the Tookany/Tacony Frankford Watershed Partnership (TTF) has with communities. TTF provided community organizing expertise, allowing PHS to enhance the educational and environmental components

- of the training program. Through this partnership, PHS was connected to a local school to repair a poorly maintained GI unit. The school will serve as an educational tool for the training program and students will be engaged to learn more about GI and why it is important.
- The Green City, Clean Waters Program is the Philadelphia Water Department's 25-year plan to improve and protect the City's watersheds by managing stormwater with green infrastructure. Through Green City, Clean Waters, more than 15 Gl projects have already been installed across Philadelphia. By partnering with the city, PHS is able to conduct trainings on existing Gl projects that support the city's need to formulate a long-term workforce plan and also train city staff such as Parks and Recreation employees on how to care for the growing number of Gl projects in Philadelphia. Sharing similar goals with a major community improvement program also helps PHS gain support from local residents.
- GreenTreks Network, Inc., a local nonprofit communications organization, will develop a video that shows the key points of each training lesson and promote the potential for economic development and job creation through green infrastructure. Other communities with similar urban water issues can learn from the video and adapt the program to improve their own local waterways. The video will be posted on the popular StormwaterPA.org website in spring 2014, and will help PHS reach a large audience, gain recognition, establish new partnerships, and secure funding to continue improving communities.

BELOW: Students receive instruction on what a watershed is and how Philadelphia's built environment has created the need for storm water management.

