

Changing Lawn to Garden at the Shaler Municipal Building September 12, 2011

Starting in the next few weeks, visitors to the Shaler Municipal Building will notice big changes to the front lawn as part of it is converted to a rain garden demonstration project. Rain gardens are similar to typical gardens except that they are designed to capture rainwater running off hard surfaces like roofs, sidewalks, or parking lots. This excess water, called stormwater runoff, can carry pollutants to waterways and increase the risk of flooding. By directing the stormwater into a rain garden, the water is used on site where many pollutants can be filtered out by the soil and plants will transpire and evaporate it back into the atmosphere. Rain gardens provide other benefits, too. They are important habitat for wildlife and add interest and beauty to the landscape.

What will the Shaler Rain Garden look like?

When finished, the Shaler Rain Garden will be a nearly 1,500 square foot garden with the capacity to capture and use stormwater from about 25% of the municipal building's roof. This means that as much as 38,000 gallons of water can be captured in the rain garden during an average rainfall!

The garden will be created by disconnecting one of building's downspouts from the storm sewer and redirecting the water to the low area near the property's entrance from Wetzel Road. This low area will be excavated and regraded to form the garden. Some dirt will have to be removed from the site, but the topsoil will be saved and combined with other soils and layered over a gravel bed to produce a site that will drain within two days, eliminating the risk of breeding mosquitos. The garden will be planted with a combination of native trees, shrubs, wildflowers, and grasses that are tolerant of wet conditions. These plants will provide color and interest throughout the season and will support birds, insects, and small animals.

During excavation, one tree will be removed. While it is always a difficult decision to remove a tree during an environmental improvement project, the Norway maple slated for removal would not survive the wet conditions that the rain garden is designed to support. Instead, River birch, a tree species tolerant of wet soils, will be planted in the garden to ensure that there is not a net loss of trees on the site.

Who is paying for this?

Funding for the Shaler Rain Garden came from the PA Department of Environmental Protection through Section 319 of the Federal Clean Water Act administered by the US Environmental Protection Agency. The Pennsylvania Environmental Council (www.pecpa.org), a non-profit environmental organization, received the grant and partnered with Shaler Township to install the garden on their property as part of an on-going initiative to improve water quality and reduce the impact of flooding in the Pine Creek watershed.

Why is a rain garden demonstration project important?

Communities in the North Hills are familiar with the problems and excess cost of managing stormwater. However, the cumulative impact of holding back stormwater can have a huge impact on our downstream neighbors. Rain gardens are a low cost way of managing stormwater on site compared to some traditional engineered methods. Because rain gardens can fit in most landscapes, they can work at the home, institutional, or commercial level. They can be installed in new developments or retrofitted into existing sites. While it is best to leave large rain garden installations to a professional, it is possible for homeowners to install their own garden, and resources exist to help them.

Where can I get more information about rain gardens?

The Three Rivers Rain Garden Alliance (www.raingardenalliance.org) has detailed information about rain gardens, from how to install your own garden to people and businesses you can contact for assistance. You also can see photographs of other rain gardens in the region and track how many gallons of rainfall they have been able to capture.

For more information about the Shaler Rain Garden, contact Kevin Creagh, Township Engineer (kcreagh@shaler.org) or Jen Novak with the Pennsylvania Environmental Council (jnovak@pecpa.org).