

June 9, 2010

Somerville Students Get Hands Dirty for Clean Water

SOMERVILLE – Fourth grade students at Van Derveer Elementary School spent part of the school day today getting their hands dirty by transforming two patches of grass in the schoolyard into rain gardens designed to provide water quality benefits to the Peters Brook, as well as to educate the students and community.

Prior to the planting, the students learned about watersheds and specifically the Peters Brook Watershed. Concepts such as non-point source pollution, which comes from a variety of sources, including streets, driveways, parking lots, roofs, and compacted lawn areas, rather than from one specific pipe, or point source were introduced to the 4th graders. Salt, pet waste, pesticides, fertilizers, leaves and grass clippings, oil, and litter, are carried by rainwater runoff—also called stormwater—into nearby waterways.

“This Rain Garden Project provides a hands-on experience for our students and is part of an overall lesson plan that teaches young and old about the importance of watershed protection,” Van Derveer School Principal Susan Haynes said.

A rain garden is a planted, shallow depression that is designed to capture the polluted stormwater. Once in the garden, the water is taken up by the plants, infiltrates into the ground or evaporates as water vapor back to the atmosphere. Through these processes, the volume of stormwater reaching storm drains and surface waterways is reduced and is less polluted.

The Peters Brook, which is on the State’s list of impaired waterbodies, enters the Raritan River just upstream of New Jersey American Water’s treatment plant that provides potable water to local residents. Suburban residential neighborhoods, corporate and commercial properties, golf courses, and the major highway network, that characterize the watershed result in a significant increase in the volume of stormwater that reaches the stream.

The rain gardens at Van Derveer are designed to provide an example for homeowners and other land owners of a low-cost, low-maintenance method that can improve the health of our waterways, specifically the Peters Brook. The students will be responsible for the maintenance of the rain gardens, and will mentor next year’s class of fourth grade students.

The project, which is part of Van Derveer’s efforts to become the first certified “River-Friendly School” through a program administered by the New Jersey Water Supply Authority, was achieved as a result of coordination by many partners. The two rain gardens were designed by Rutgers Water Resources Program and funded through a grant from the New Jersey Water Resources Research Institute as part of a larger project being conducted by Rutgers Cooperative Extension of Somerset County. North Jersey Resource Conservation and Development provided rakes, trowels, and other gardening equipment. The Somerset County Park Commission and the New Jersey Water Supply Authority staff were instrumental in the rain garden site preparations. The entire effort has received the full support of Mayor Gallagher, the Somerville Borough Council and the Somerville Public School District.

“I am confident that this project, built by 4th graders, will serve as an example that will inspire other borough residents to undertake similar low cost backyard efforts designed to reduce the volume of stormwater that reaches the Peters Brook and contributes to flooding,” concluded Mayor Brian Gallagher.

For more information, visit www.raritanbasin.org.