

Rain Garden and Naturalizing Retention Basins

Situation



As populations increase in what is already the most densely populated state in the nation, the availability of water resources is a growing concern. The Division of Water Supply and the New Jersey Geological Survey have become increasingly concerned with the rise in potable water used to irrigate lawns and landscapes in New Jersey. This highly treated water, intended for drinking and potable uses, is literally being evaporated into the air, thus placing an increasing stress on the state's aquifers, streams, and reservoirs.

Action

During 2009-2010, New Jersey Water Savers installed multiple demonstration garden sites and developed workshops specifically to educate residents about the true water needs of New Jersey plant life and how residents can do their part to curtail outdoor water waste. Demonstration sites are located in Livingston, East Greenwich, Egg Harbor Township and Belmar. The purpose of these sites is to promote homeowner stewardship of sustainable practices and pollution prevention through building rain gardens and planting native species. By providing a "hands-on" training for the community, the sites will be used as a tool for educating homeowners, landscapers, developers and decision makers on taking responsibility for water resources. To accompany the demonstration projects, different programs have been developed and tested for effectiveness including community workshops, school/youth involvement, self-guided walking tours, etc. All demonstration gardens have been true community efforts engaging local residents and municipal representatives.



Volunteers helping with the installation of the East Greenwich Library Rain Garden Planting, November 2009.



East Greenwich Library Rain Garden June 2010.

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Impact

It is believed that significant water savings can be achieved by integrating water conservation with landscape principles. Estimates indicate that 40-70% of residential water use is for landscape irrigation. The Rain Garden and Naturalizing Retention Basin demonstration projects provide a hands-on opportunity for New Jersey residents to learn about low maintenance practices that can be implemented at home. These projects are aesthetically pleasing, conserve water, and reduce stormwater generated at residences for an overall reduction in nonpoint source pollution traveling to surface water bodies.

Success Story

The rain garden in Livingston was designed and engineered to infiltrate the water of a 100 year storm. The Livingston Mayor, Arlene Johnson, has since reported that the rain garden handled the latest 100 year storm perfectly, and it was the first time since the Livingston Township Public Library was built that flooding did not occur with a storm of that size.



Livingston Township Public Library
Rain Garden, Spring 2010

New Jersey Water Savers Partnership

New Jersey Water Savers is a partnership between the Rutgers Cooperative Extension Water Resources Program, the New Jersey Department of Environmental Protection, and the United States Environmental Protection Agency. This partnership was created to provide leadership to promote water conservation throughout New Jersey. For more information on our partnership efforts, visit us at www.water.rutgers.edu.