

PassaicValleyToday

'Green infrastructure' plans underway for Little Falls flood area

MONDAY JANUARY 13, 2014, 10:27 AM

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PASSAIC VALLEY TODAY



LITTLE FALLS - The township hopes to benefit from a program to reduce nuisance flooding through the building of rain gardens and like measures that attack flooding at its source, while at the same time sprucing up lands made vacant in the wake of flood buyouts.

STAFF PHOTO BY REBECCA GREENE

Here is a rain garden in Wyckoff. Plans are underway that may include installing more extensive such gardens in the Little Falls flood area to beautify the town and better manage storm water.

Rutgers University Cooperative Extension and the **Passaic Valley** Sewerage Commission (PVSC), in conjunction with **Little Falls**, are partnering for the program, the benefits of which could be significant for a town that sees flood damage from the **Passaic** River during major storms, frequent flash flooding from the Peckman River and is in the process of elevating or buying out 78 properties for the purpose of flood mitigation.

A resolution the township council authorized late last month solidifies the municipality's cooperation by authorizing a "Green Infrastructure Assessment" to be conducted by Rutgers that will outline the needs, opportunities, and strategies for a series of such green projects within **Little Falls**.

The aim of the program, which is being offered amongst the 48 towns in the PVSC service area, is to protect water quality, reduce localized flash flooding, and minimize sewer overflow, said Ashley Slagle, a scientist for the sewerage commission, who is working closely with both the towns and Rutgers on the plans.

"General Green Infrastructure benefits include reducing flooding by intercepting storm-water runoff at the source, protecting water quality by promoting infiltration of storm-water, and savings to the communities by reducing inflow and infiltration into the sewer systems, which are all benefits that would positively impact flood-prone municipalities like **Little Falls**," she said.

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The sewerage commission is funding the plans and helping towns identify funding sources for the projects themselves through various grants, Slagle said. Rutgers is developing the plans for the towns and in return, each municipality will agree to implement at least two projects within two years of the plans' completion, she said.

"Rutgers Water Resources Program has been conducting desktop mapping and preliminary site investigations in [Little Falls](#) to identify potential sites for green infrastructure projects with input from municipal officials," Slagle said. "These projects may be rain gardens, rain barrels, porous pavements, and any other type of green infrastructure deemed appropriate in [Little Falls](#)."

The township administrator foresees rain gardens as particularly appropriate for the Singac neighborhood.

"We determined that one area in need of strategic planning as it relates to green infrastructure is the flood area, where the township is implementing a flood mitigation program," township administrator Joanne Bergin said. "While this program will look at the entire community and recommend strategies in all areas, a specific focus will be on how we enhance the open space being created in the flood area."

She added: "Creating a series of rain gardens in that area is ideal, as those serve as a water retention areas, while at the same time enhancing the natural beauty of the area by the river."

A rain garden delays and reduces the peak flows that contribute to flooding and water quality issues, said Jeremiah Bergstrom, senior project manager at the Rutgers Cooperative Extension Water Resources Program.

"For rain gardens we typically try to use native plant materials and any material that can withstand flooding," he said, adding: "It adds a lot of diversity to the landscape in terms of perennials, shrubs and small trees."

The township is on its way to seeing the plan's benefit.

"Right now we're looking at developing a plan that will include 10 to 20 demonstration projects for [Little Falls](#) itself," he said.

Amy Roe, environmental resource agent at the Rutgers Cooperative Extension in [Passaic](#) and Essex counties, which has offices in [Wayne](#) and Roseland, is assisting the plan locally and spreading the word to municipal officials.

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"Typically we use things like irises, Echinacea and cone flower, or cardinal flowers," she said of the gardens. "Sometimes we have shrubs some wintergreen and holly. Some of the rain gardens also have small trees as well, like a small dogwood."

She added, "A rain garden can be any size that you need, depending on the drainage area. I've installed one as little as 70 square feet and as big as 2,000 square feet."

Bergstrom said the hope is to put the gardens in public places where people can enjoy their natural beauty. And the cooperative knows how to get it done as, he said, they have been building the gardens for at least seven years in every county of the state.

Rutgers and the PVSC started the program in May of last year and have plans in the works for nine towns in the local sewer service area, he said.

In the project's first year, the commission is working with [Paterson](#), [Saddle Brook](#), Newark, [Montclair](#), West Orange, and Bayonne, Slagle said.

"Everything should be finished by the end of 2014 in terms of all the installations in the towns, and we're hoping to renew the partnership with PVSC so we can do the projects and installations in other towns," she said.

The measure authorizing the initiative in [Little Falls](#) passed with the full support of the township council.

Council President Lou Fontana said he looks forward to hearing what the scientists have to say.

"Rain gardens are good for open spaces and in the flood area in particular," he said.

"They're of great use for flood protection. It's good for our community to be more green."

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