

Project depicts beauty of water filtration

◆ **Pennichuck Square:** A "commercial version of a rain garden" is reducing pollution.

By **JOHN DONATI**

Special to the Union Leader

MERRIMACK — People passing by Pennichuck Square may not know that the pretty landscaping at the commercial development is really a modern way of protecting the water they use.

What used to be ordinary turf was dug up and replaced with a "bio-filter," a base of crushed stone and porous mate-

rial topped with soils and native vegetation to capture potential contaminants from storm runoff before they entered the water supply.

"These bio-filters are basically a commercial version of a rain garden," said Eileen Pannetier, a biologist who lives in Merrimack.

The project was the result of a coordinated effort and funding from Pennichuck Water Works, the New Hampshire Department of Environmental Services, the town of Merrimack and Comprehensive Environmental Inc., Pannetier said. The state awarded a grant for the project, which cost about \$150,000.

Construction began in the

summer of 2005 and ended last year. Officials hope the end product, dubbed the Rain Garden Demonstration Project, will serve as a model for developers of future projects.

The 18,000-acre Pennichuck Brook watershed gets about 1 million gallons of run-off per acre each year. That was a concern to Merrimack and the four other towns affected by the watershed: Nashua, Hollis, Milford and Amherst.

Before the rain garden was installed, Pannetier said, the Pennichuck Square parking lot was sometimes under 2 inches of water during rainstorms. Now the water gets where it has to go cleanly and naturally, she said.

Even during recent flooding, she said, the bio-filter areas "turned into small ponds and filled but never overtopped," capturing 88 percent of the runoff, treating it and discharging it back into Pennichuck Brook.

working to put together groceries for the cold winter days to come."

Shepard and Fish and Game do not recommend relocating beavers because there would be



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The "bio-filter" system at Pennichuck Square in Merrimack is part of the Rain Garden Demonstration Project.

Beavers

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The Department of Fish and Game stopped trapping and relocating beavers decades ago, but hundreds of private trappers continue to operate in the state.

Fred Shepard of Deerfield,