

Wetland buffers help water quality

Steve J. Miller, Coastal Training Program Coordinator, Great Bay National Estuarine Research Reserve

PORTSMOUTH - "It's landscaping with a mission" said Tracy Degnan, conservation specialist with the Rockingham County Conservation District.

She is part of an effort by the city of Portsmouth and the Great Bay National Estuarine Research (NERR) Reserve to develop wetland buffer designs for people to admire and replicate. Detailed landscaping plans will be available to those wishing to install these environmentally friendly plantings on their property.

Peter Britz, environmental planner for the city, believes this approach has great potential to improve the city's water quality.

"There are (more than) 1,600 citizens in Portsmouth who have wetland buffers as part of their properties, and if homeowners with buffers can landscape their yards in the aesthetically pleasing and ecologically functioning way we are developing, then water quality in the city will be greatly improved," Britz said. The project is being led by Britz's office and the Coastal Training Program at the Great Bay NERR, with help from Degnan and Richard W. Bond of the RCCD. It is funded by a grant from the state's moose plate program.

The project has enlisted the expertise of Kingston landscape designer Lise McNaughton, of Landscapers Depot, who has a landscape architecture degree from the University of California Davis and six years' experience as an environmental consultant.

"Landscaping a wetland buffer takes a bit of creativity and sensitivity to local conditions, but the results can be a nearly maintenance-free and (an) absolutely gorgeous landscaped buffer," McNaughton said.

She said she hopes people will recognize and envision the visible contribution of buffers in our neighborhood" and how "in our neighborhoods it is important to incorporate a human component where these buffers can be spaces shared by wildlife and people."

The project focuses on the landscaping of wetland buffers, which are areas of land between a water body and a source of pollution, like a parking lot, Dumpster or a house. All water flows to the ocean, and as it flows over land, it picks up and carries what it encounters. Sediment, nutrients and toxins are washed into water bodies, where they damage the aquatic ecology and lower water quality.

A wetland buffer naturally filters or reduces the shock of these byproducts of human development on lakes, streams and estuaries. Therefore, a wetland buffer is an important line of defense in protecting and preserving water quality.

In addition to water purification, wetland buffers also provide shade, wildlife habitat, shoreline stabilization and flood control. They act as a right of way for streams and rivers, allowing them to move naturally in the floodplain and pass floodwater downstream without damaging property or endangering lives - something that is often forgotten until a stream or river floods its banks as the recent rains demonstrated. A properly designed buffer puts distance between a stream, river or wetland and any upland development, while maintaining the natural vegetation cover along the waterway - an essential part of the aquatic ecosystem.

Degnan said if people see how beautiful a natural wetland buffer can be, they will want to install one on their property.

Eye on Our Estuaries is an educational column initiated by the New Hampshire Estuaries Project about coastal watershed issues. Go to www.nhep.unh.edu for more information.