



Rolston Park Vegetated Buffer Project

In September of 2016, Soak Up the Rain (SOAK) Great Bay worked with area partners to complete yet another project to benefit the water of Great Bay – a vegetated buffer in Rolston Park. The park is on the Winnicut River, which drains into Great Bay, so protecting the quality of the water in the river helps protect Great Bay.

SOAK Great Bay has been installing “Stormwater Solutions” such as vegetated buffers and rain gardens that soak up runoff to prevent water pollution throughout the Great Bay watershed since 2013. They’ve been assisted by the New Hampshire SOAK program.



The hard-working buffer project volunteer crew

Capitalizing on Momentum

With its open spaces, large trees, and pleasing location along the Winnicut River, Rolston Park in Greenland is a nice spot with a lot of potential as a community resource – such as a gathering spot for a picnic or a reprieve on a hot summer day. There is also a tributary to the Winnicut River in the form of a stream that flows right down the middle of the park.



The Greenland Fire Department and volunteers from the Greenland Women's Club were among those contributing to the success of the day.

Of late, local groups have been interested in making improvements to the park to make it more inviting. In the spring of 2016, the Greenland Women's Club planted several groupings of native plants within the park – an effort led by Laura Byergo of the Great Bay Stewards and SOAK Great Bay. The NH Fish & Game has plans underway to build a small bridge over the stream and a pathway through the park to the river. SOAK Great Bay decided to capitalize on the interest and to install a vegetated buffer along the stream.

Buffering the Stream

In the spring, much of the park to either side of the stream is often too soggy and spongy to walk on. This is due to the ground water table and rain falling on the open grassy areas adjacent to the stream. SOAK Great Bay consulted the SOAK New Hampshire Do-It-Yourself Fact Sheet for Vegetated Buffers and worked with area experts to choose plants and design a vegetated buffer along both sides of the stream. The plants will soak up water with the aim of relieving some of sponginess, while also potentially soaking up pollutants.



The volunteers planting and prepping holes for the buffer plants. Prior to planting, the holes and plants were well watered to help ensure survival.

For vegetated buffers, a variety of types of native plants is best. Larger plants like trees and shrubs and smaller plants like flowering perennials, ferns, and grasses work together to absorb water and uptake pollutants. In general, the wider and thicker the buffer, the better it will work. Buffers can be established from simply not mowing along a waterbody or can be planted intentionally, as was the case in Rolston Park, or can be a combination of both methods. This vegetated buffer is expected to reduce about 145 pounds of sediment, 1 pound of phosphorus, and 4 pounds of nitrogen from reaching the tributary each year.

Community Connections

As is often seen in public projects such as this one, various community groups were willing to lend a hand. Volunteers from the Women's Club of Greenland, the Great Bay Stewards, and the Boy Scouts joined Laura and the SOAK NH team to plant the buffer. The Greenland Fire Department came by and filled buckets and a cistern so the volunteers could thoroughly water the new plantings. The Greenland Department of Public Works trimmed the large oak next to the parking lot. Neighbors were involved too including one who came by with his dog for some friendly encouragement.

To find Do-It-Yourself fact sheets for Vegetated Buffers and other practices, visit www.soaknh.org and look under RESOURCES

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