

Friends of Hothole Pond are "Pond Friendly"

On a hot August day in 2018, members of the Friends of Hothole Pond association gathered to partner with the Soak Up the Rain NH team to install a set of infiltration steps designed to reduce stormwater runoff to the pond.

The project was the culmination of an effort led by Glen and Kitty Rodgers, co-conveners of the association, to inform residents about reducing runoff with a goal of reducing cyanobacteria (also known as blue-green algae) blooms in the pond. Earlier in the summer, the Rodgers had invited the SOAKNH team to do a presentation to interested residents and to tour the runoff control measures they were undertaking on their property. Consequently, the SOAKNH team and interested residents visited several waterside properties to brainstorm and make recommendations for reducing runoff, like capturing it with infiltration trenches and dry wells, to allow it to soak into the ground.

One property, owned by Sherry and Mark Blanchard, had a perfect spot to reduce runoff with a set of infiltration steps down by the waterfront. The area was a sloped access point in need of repair. Water from the driveway and yard was running through it to the beach and pond.

The infiltration steps work by capturing water within the stone wells created by boxing out steps with 6" by 6" timbers, which are held in place with rebar rods.



The steps before (left), during (middle), and after construction was complete (right).

Stormwater runoff was traveling down this sloped area, across the beach, and into the pond. Note how the timbers are flush with the ground on the bottom and sides to prevent runoff from traveling under or around them. They are then backfilled with $\frac{3}{2}$ washed stone.

In addition to installing the steps, the Blanchards added a water bar at the bottom of the driveway, installed another water bar above the beach area, and planted shrubs near the water's edge, all of which will slow runoff and allow for infiltration.



A water bar installed at the bottom of the driveway (left) helps prevent stormwater runoff from traveling down the sloped lawn toward the beach, while another water bar at the top of the beach (right) captures runoff to prevent it from eroding the beach.

It's estimated that by completing these projects, the Blanchards will capture up to 16,435 gallons of runoff per year, potentially reducing the amount of sediment delivered to the pond by almost 24 pounds, total phosphorus by 0.05 pounds, and total nitrogen by 0.18 pounds each year.

If your lake or pond association is interested in a Soak Up the Rain presentation, find us on the Contact Us page at <u>www.soaknh.org</u>.