
Buffer Options *for the Bay*

HOW TO WORK WITH COMMUNITIES: WHEN & HOW DO YOU RESTORE A BUFFER?

Restoring a buffer is best done when water quality impairments have been identified or are visible (e.g. a green appearance on a lake's surface), when there is a desire to increase habitat availability, and/or when storm buffering is needed. Restoration options include the following:

- **REPLANTING** native trees and plants (e.g. river birch, sweet pepper bush, and fragrant sumac) along the buffer area. However, it can often be a challenge to get seedlings to take root and grow especially if the planting year is a dry year. For example, Riparian buffers have been restored at the Sagamore-Hampton Golf Course in North Hampton, New Hampshire, through the N.H. Sea Grant's Coastal Research Volunteers program.



Pre- and post-restoration photos of a riparian buffer area in North Hampton, New Hampshire. Photos provided by New Hampshire Sea Grant.

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- **RESTORING** the floodplain gives rivers more room to accommodate large floods and is the best way to keep communities safe. Giving rivers more room provides a number of other benefits including clean water; open space for agriculture, recreation and trails, and habitat for fish and wildlife. **For example**, since 2009, The Nature Conservancy and partners have spearheaded an effort to protect and restore floodplain forest within the Connecticut River watershed. This began with prioritization of tracts for protection and restoration based on criteria including the existence of low, regularly flooded terraces and extensive shoreline, the potential to link to protected areas across the river, and the location of the tract in an active river area. Within these priority areas, the team used an adaptive management approach to determine the most cost effective approach to bring back silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), and other native floodplain species to floodplain terraces that can support this habitat into the future. This effort has been challenged by the tension between restoring buffers and maintaining active farming and competition caused by invasive plant species, such as oriental bittersweet (*Celastrus orbiculatus*), that can lead to high mortality of planted seedlings, particularly in the lower portion of the watershed. ([CLICK HERE](#) to read more about the Vermont River Corridor and Floodplain Management program.)
 - **RESTORING** buffers through planting native plants and trees is an important tool in protecting waterways and communities. **For example**, more than 8,152 miles of forested buffers covering have been planted within the Chesapeake watershed since 1996. The initiative has been undertaken through the implementation of riparian forest buffer incentive programs, most notably the [Conservation Reserve Enhancement Program](#) (CREP). In the most productive years, the bay states averaged 830 miles of buffers alongside riparian areas restored per year. Proper use of tree tubing and herbicide application were found to greatly improve restoration success. This program has had some setbacks due to lack of funding,

interruptions in program availability, and the need to re-enroll landowners after expiration.

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