

Riparian Buffer Enhancement and Management Project – Spring 2006-2007

One of the most cost effective methods for reducing non point source pollution in the Chesapeake Bay is to restore fully functioning riparian buffers along streams. In addition to the water quality benefits, riparian buffers provide important habitat and migration corridors for wildlife. In the spring of 2006 the Maryland Forest Service, U.S. Fish and Wildlife Service, Chesapeake Bay Foundation, and the U.S. Forest Service worked together to enhance and manage riparian forest buffers that had been planted through the Conservation Reserve Enhancement (CREP) Program. The projects took place in Washington, Frederick, and Carroll Counties in Maryland.

When riparian buffer projects were first planted through CREP in the late 1990's, few people realized the number of challenges and additional work that would be needed to get fully functioning, self sustaining buffers established. After a site is planted, most landowners will need to spend time and money managing and maintaining the site for at least 5-7 years, if not longer. The challenges of site management include seedling mortality from deer, voles and mice; invasive species control; damage from droughts or floods; and management/removal of tree shelters. Each site is different and each landowner varies in their ability or dedication to completing site management.

When CREP contracts expire after 10 or 15 years, a landowner may be able to re-enroll the buffer, or return the site to the previous land use which is typically a pasture, hay, or a row crop field. The ideal situation for public benefit is to have thriving buffers in place at the end of the contract period so that landowners opt to re-enroll the buffer. If the buffer is full of invasive species with few trees surviving at the end of the contract period, there is a greater possibility of the landowner returning the site to an agricultural use.

In the spring of 2006, natural resource agencies teamed up to provide assistance to landowners to enhance and manage their recently planted buffers. The MD Forest Service was responsible for completing initial buffer site assessments, deciding which landowners needed help, ordering seedlings, and providing on-site direction to the forestry crew that completed the work. The U.S. Fish and Wildlife Service provided funds, coordination, and on site assistance to the forestry crew. The Chesapeake Bay Foundation helped develop the project, provided funds, and provided administrative support. The U.S. Forest Service provided funding.

The forestry crew re-planted seedlings, removed tree shelters, and straitened or re-installed shelters on newly planted seedlings. In March-April 2006, the crew worked on 15 sites covering 174 acres, planted 18,300 seedlings, installed or fixed 4,550 tree shelters, and removed 24,800 shelters. The direct costs for the forestry crew and seedlings were approximately \$15,000. The project was repeated in 2007 with similar assistance given. The landowners were very grateful for the free assistance. An unforeseen benefit that became obvious was that landowners seemed eager to re-focus their commitment to their buffer projects. In short, we think many of the landowners will do more buffer management work in coming years as a result of the assistance that was given. In addition, the goodwill provided has created more positive discussion within farming communities about buffers.