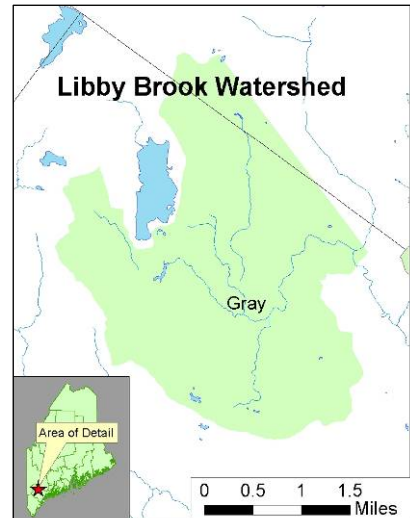


Libby Brook Conservation Project

#2005R-11

Waterbody Name: Libby Brook
Location: Gray – Cumberland County
Project Grantee: Cumberland County SWCD
Project Duration: April 2005 – March 2008
319 Grant Amount: \$53,252
Local Match: \$47,513



PROBLEM:

Libby Brook is a perennial, Class B stream in the Royal River Watershed. The Libby Brook watershed covers 23 square miles, and its tributaries include Mill Brook, Hatchery Brook and Cole Brook. Although Libby Brook is still considered to meet state standards, DEP monitoring in 2000 indicated that at least one site on the stream failed to meet the Class B biological standards.

A 1998 watershed survey conducted by the Friends of the Royal River (now named Royal River Conservation Trust) identified 50 sites having the potential to pollute Libby Brook. Of these, 36 were rated as medium and high impact. In 2003 Cumberland County SWCD staff revisited those 36 sites and found that 33 continued to be impacting the watershed. Over half of the documented issues were associated with state, town and private roads and resulted from lack of drainage and poor road maintenance. Other causes of stream degradation included agricultural livestock having free access to the stream, eroded ATV trails, golf course erosion, and streambank erosion coupled with insufficient riparian buffers.

PROJECT DESCRIPTION:

The primary purpose of this project was to significantly reduce erosion and export of sediment and phosphorus into Libby Brook by installing BMPs at 18 sites. The Royal River Youth Conservation Corps provided labor at 13 project sites.

The project raised awareness about watershed issues and promoted long-term watershed stewardship by working closely with the ecology students at the Gray-New Gloucester High School. The Cumberland County SWCD's Education Coordinator delivered numerous lessons on topics such as watersheds, topography, water quality parameters, testing procedures and non-point source pollutants found in Libby Brook. Project activities were also publicized in local newspapers.



Local high school students study Libby Brook

PROJECT OUTCOMES:

- The project fixed 18 moderate to high impact sites in the watershed, 13 of which included labor from the Royal River Youth Conservation Corps. This work prevented an estimated 143 tons of sediment from reaching Libby Brook annually (EPA Region 5 Method).
- On May 6, 2006, a Gravel Road Maintenance Workshop was held on Wild Acres Road. Ten participants from the Libby Brook Watershed and surrounding areas were trained to use the Front Runner to properly grade and crown gravel roads.
- Students from the ecology class at Gray-New Gloucester High School conducted water quality monitoring on Libby Brook and its tributaries. They also analyzed test results and documented their findings in several articles submitted to several local newspapers.
- On May 23, 2007 these same high school students demonstrated what they had learned by educating sixth graders during a Middle School Field Day. They prepared materials, presentations, and outdoor stations in order to share their knowledge of watershed issues with their younger counterparts.



Several projects were completed at a farm located adjacent to Libby Brook. Fencing was installed along 1000 feet of the brook to keep cows out of the stream. Several cow trails on the farm were stabilized with gravel and mulch, and shrubs and perennials were planted on eroded streambanks.

PROJECT PARTNERS:

Royal River Youth Conservation Corps
Maine Department of Transportation
Royal River Conservation Trust
Gray New-Gloucester High School
Wild Acres Road Association
Casco Bay Estuary Project
Natural Resources Conservation Service
Town of Gray

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