# Sheepscot West Branch NPS Control and Habitat Improvement, Phase III #2006R-08

Waterbody Name:	West Branch Sheepscot River
Location:	China, Palermo, Whitefield, and Windsor – Kennebec, Waldo, and Lincoln Counties
Waterbody Status:	NPS Priority Watershed, Impaired
Project Grantee:	Kennebec County SWCD
Project Duration:	May 2006 – December 2007
319 Grant Amount:	\$77,943
Local Match:	\$87,451



### **PROBLEM:**

The West Branch of the Sheepscot River is categorized by the Maine DEP as Class AA - the highest water quality goal. The West Branch does not meet state water quality standards due to persistent low dissolved oxygen, high phosphorus and high turbidity, as well as thermal stress in some locations. The West Branch has historically supported a wild population of Atlantic salmon, but in recent years there has been a decline in spawning salmon.

Nonpoint source pollution – sedimentation and nutrient loading – are seen as the chief impairments to water quality and have a significant impact on the habitat quality for spawning and juvenile salmon and other species. According to a 2005 watershed survey, public and private roads were considered a major source of NPS pollution in the West Branch's 50 square mile watershed. The first two phases of 319-funded work repaired 65 of the 137 priority road sites identified in the survey. A watershed management plan for the entire Sheepscot River Watershed, including the West Branch, was completed in 2007.

### **PROJECT DESCRIPTION:**

The objectives of this project were to install BMPs on high and medium priority NPS sites in the watershed, provide specialized training in NPS management to town staff, and continue the water quality monitoring program in the West Branch.

BMPs were implemented at 28 sites in the watershed. Work included road rebuilding and crowning, ditch creation and stabilization, and culvert installation and armoring. Trail and shoreline stabilization work at erosion sites in the Whitefield Salmon Preserve was completed by the Maine Conservation Corps and volunteers. The importance of proper road maintenance and its connection to NPS pollution and the water quality of the river was emphasized through specialized training in road maintenance and technical assistance to town public works employees and road commissioners. Another well-received workshop covered the topic of culvert replacement, culvert impacts and the associated permit process.



Erosion control work by the Maine Conservation Corps

## **PROJECT OUTCOMES:**

- BMPs were implemented on 28 sites in the watershed. Projects included crowning and rebuilding roads, creating and stabilizing ditches, and installing and armoring culverts.
- The Maine Conservation Corps and local volunteers stabilized several trail and shoreline erosion sites in the Whitefield Salmon Preserve.
- The project reduced pollutant loading to the river by an estimated 4.6 tons of sediment, 4.6 pounds of phosphorus, and 9.1 pounds of nitrogen each year (WEPP Method).
- A workshop on permitting and culverts brought together state and federal agencies, towns, contractors and watershed association members.
- The Sheepscot Valley Conservation Association completed two more years of water quality monitoring and reporting, resulting in 14 years of continuous monitoring.



Severe erosion at Marden Hill Road stream crossing was stabilized by replacing the culvert, rebuilding the road, and armoring the culvert ends and ditches with riprap.

### **PROJECT PARTNERS:**

Town of Palermo Town of Windsor Town of China Sheepscot Valley Conservation Association Maine Conservation Corps Maine Department of Transportation Local Roads Center

### **CONTACT INFORMATION:**

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