East Machias River Atlantic Salmon Habitat Improvement Project and East Machias River NPS Watershed Survey

#2001R-25A and #2001R-25B WIFAP

Waterbody Name: East Machias River

Location: Washington County

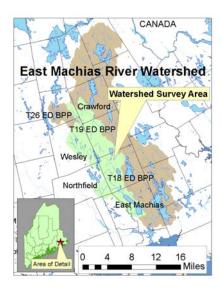
Waterbody Status: Atlantic Salmon Watershed, NPS Priority Watershed

Project Sponsor: Washington County SWCD

Project Duration: June 2002 – October 2005

319 Grant Amount: \$60,000

Local Match: \$39,100 (local), \$40,000 (ME Dept. Ag.)



PROBLEM:

Indigenous Atlantic salmon are considered endangered in the East Machias River watershed. The river is designated in the "Maine Atlantic Salmon Conservation Plan for Seven Maine Rivers" March 1997, and "Maine Non-Point Source Priority Watershed List" as one of eight rivers with a distinct population segment of federally endangered wild Atlantic salmon.

Non point source pollution (NPS) is a threat to Atlantic salmon because sediment may fill in the spaces in coarse gravel stream beds and decrease the viability of spawning and juvenile salmon overwintering habitat. Initial surveys indicate that direct stream bed disturbance at vehicle fording sites and soil erosion from logging roads are significant sources of NPS pollution.

PROJECT DESCRIPTION:

This project eliminated direct disturbance of Atlantic salmon spawning and rearing habitat in the vicinity of the Munson Rips ATV fording site. This was accomplished by constructing an alternative bridge, restoring 168 sq. feet of river habitat by removing remnants of an old bridge at the fording site, and reducing sedimentation in the vicinity of Munson Rips by implementing BMPs at five nearby NPS sites.

In addition, summer interns completed a comprehensive NPS survey of the East Machias River watershed from Great Meadows downstream to Hadley Lake. All forestry roads within this segment were surveyed, and ditches, stream crossings, and debris dams were documented where it was determined that sediment was washing into the tributaries or the main stem of the East Machias River. All sites were prioritized as to cost of implementation and habitat impact as low, medium, or high. In total, 200 sites were documented.



PROJECT OUTCOMES:

- A 6 foot wide, 110 foot long ATV / Snowmobile bridge was constructed over the East Machias River at Munson Rips, replacing a ford that was directly disturbing salmon spawning and rearing habitat.
- The remnants of an old bridge at Munson Rips were removed, restoring 168 square feet of river habitat.
- A vehicle ford at the outlet of Round Lake, upstream of Munson Rips, was blocked off to protect salmon habitat.
- Washington County SWCD interns surveyed approximately two-thirds of the East Machias River watershed and identified 200 NPS sites.
- The survey produced the *East Machias River Watershed Non Point Source Pollution Inventory* (July, 2002), which has since been used by Washington County SWCD and Project SHARE to identify future implementation of NPS sites.





PROJECT PARTNERS:

Project SHARE

USDA - Natural Resource Conservation Service

US EPA



CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2006) "Nonpoint Source Management Program 2005 Annual Report," Document# DEPLW0758. Augusta: MDEP.