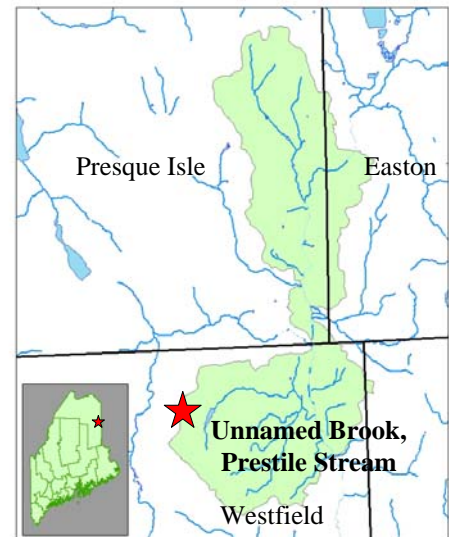


Unnamed Brook, Prestile Stream Pollutant Load Reduction

#2000R-43A - WIFAP

Waterbody Name: Unnamed tributary to Prestile Stream
Location: Westfield – Aroostook County
Waterbody Status: Impaired, NPS Priority Watersheds
Project Grantee: Central Aroostook SWCD
Project Duration: February 2001 - July 2004
319 Grant Amount: \$50,517
Local Match: \$30,208 (ME Dept. Ag.), \$18,610 (local)



PROBLEM:

During most runoff events many tributary brooks as well as the main stem of the Prestile stream turn mild chocolate colored as a result of excessive sediment loads. Soil washed from cropland (potatoes, grain & broccoli) is a major source of water pollution of Prestile Stream and its tributaries.

Approximately 25,000 acres of cropland and 10 livestock operations are in the Prestile Stream watershed. While many BMPs have already been implemented on cropland, additional ones are needed throughout the Prestile Stream watershed to capture the sediment and nutrients before it reaches the tributaries or main stem. An unnamed brook in Westfield is one of the many brooks in the watershed that receive excessive nutrient and sediment loads from croplands. The unnamed tributary discharges in the non-attainment section of the Prestile Stream.

PROJECT DESCRIPTION:

Central Aroostook SWCD, working with the landowner and NRCS designed a series of BMPs to capture both sediments and nutrients coming off the cropland in the watershed of the Unnamed tributary. The BMPs included diversions, waterways, nutrient and sediment control systems (settling basin and pond), and buffers. The nutrient and sediment control system is a special designed BMP originally for potato ground in the St. John Valley by NRCS to address excessive soil and nutrient issues in lake watersheds. This is the first application of this BMP in central Aroostook. For more information, go to www.me.nrcs.usda.gov/features/CentralAroosSuccess.html



Potato crop land that drains to nutrient & sediment control BMP

PROJECT OUTCOMES:

- Many unique BMPs for the central Aroostook region were demonstrated. These included a Nutrient and Sediment Control Structure, which includes sediment basin, level lip spreader, shallow pond & deep-water pond.
- Soil & nutrients off 108 acres of bare ground were captured.
- 13,200 kilograms (14.5 tons) of total suspended solids were captured per year.
- 27 kilograms of total phosphorous were captured per year (60 lbs. of phosphorous or 10,000 pounds of fertilizer).



NRCS staff explain how the nutrient & sediment control structure works at BMP tour. (First component of system the sediment basin)



Nutrient & sediment control structure under construction.



Construction of pond and outfall components of nutrient and sediment control system

PROJECT PARTNERS:

Natural Resource Conservation Service, Presque Isle Office
Smith Farms of Presque Isle

CONTACT INFORMATION:

Kathy Hoppe, DEP – (207) 764-0477, kathy.m.hoppe@maine.gov
Linda Alverson, Central Aroostook SWCD – (207) 764-4153 ext 130, linda.alverson@me.nacdnet.net

Suggested Citation:

Maine Department of Environmental Protection (2005) “Nonpoint Source Management Program Annual Report 2004,” Document # DEPLW0701 2005. Augusta: MDEP.