

Perley Brook Watershed Project: Phase III

#2006R-18B

Waterbody Name: Perley Brook

Location: Fort Kent – Aroostook County

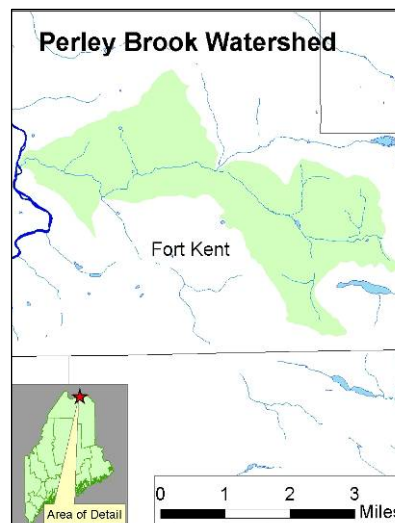
Waterbody Status: NPS Priority Watershed

Project Grantee: St. John Valley SWCD

Project Duration: April 2007 – March 2008

319 Grant Amount: \$28,800

Match: \$14,925 (local), \$20,000 (ME Dept. Ag.)



PROBLEM:

Perley Brook's 19.5 square-mile watershed is a mix of residential (5%), agriculture (45%) and forestry (50%) land uses. There are approximately 66 major landowners, mostly agricultural producers, in the watershed. Application of fertilizers, steep slopes, and lack of winter cover account for many of the NPS problems on agricultural fields. Manure storage, heavy use areas, and water access account for much of the NPS problems associated with livestock. With the help of 319 funding, the St. John Valley SWCD has surveyed the complete Perley Brook watershed and identified numerous site specific problems.

NRCS has been working with the agricultural groups to address as many problems as possible with help from various Natural Resources Conservation Service (NRCS) and Maine Department of Agriculture programs. In addition, the District has secured previous 319 funding to address many of the high priority issues.

PROJECT DESCRIPTION:

This Phase III project addressed three previously identified sites on three farms in both the South and North Perley Brook watersheds. Two farms are small diversified working farms with a variety of livestock issues including livestock trampling sensitive areas on steep slopes and inadequate manure storage. The third farm has 300 head cattle and sits at the headwaters of a tributary to South Perley Brook.

St. John Valley SWCD worked with landowners and NRCS to design and install nutrient control BMPs. BMP designs met NRCS's Conservation Practice Standards and Maine's Certified Nutrient Management Program guidelines. The following BMPs were installed: heavy use area protection, waste storage facility, diversion, alternative watering facility, and a sediment basin. To spread the word and encourage others to install conservation practices the District included articles in their newsletter and articles were submitted to the local paper.



Water diversion to keep clean water from mixing with animal waste

PROJECT OUTCOMES:

- The project successfully partnered with small diversified farms, too small for most NRCS programs, to address nutrient management problems. Manure storage facilities were also installed to control manure from a 300 head cattle operation at the headwaters of a tributary to Perley Brook.
- Buffer areas were planted to eliminate livestock trampling of sensitive areas on steep slopes.
- The project prevented an estimated 136 pounds of phosphorous and 548 pounds of nitrogen from entering Perley Brook each year (STEPL and EPA Region 5 Method).



Cattle farm waste storage site before construction



Cattle farm waste storage site after construction

PROJECT PARTNERS:

Natural Resource Conservation Service, Ft. Kent Office

CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2009) “Nonpoint Source Management Program 2008 Annual Report,” Document# DEPLW-0973 2009. Augusta: MDEP.