

S. Perley Brook Restoration Project: BMP Implementation Phase II

#2004R-23 - WIFAP

Waterbody Name: South Perley Brook

Location: Ft. Kent – Aroostook County

Waterbody Status: NPS Priority Watershed

Project Sponsor: St. John Valley SWCD

Project Duration: September 2004 – September 2006

319 Grant Amount: \$60,000

Local Match: \$95,017 (local), \$20,000 (ME Dept. Ag.)



PROBLEM:

Perley Brook is threatened with not meeting Class B water quality standards as a result of agricultural runoff from both livestock and row crop activities. Approximately 52% of the 19.5 square mile watershed is used for agricultural activities. Measures have been taken in the past to curb some of these sources, including work done by the Soil Conservation Service (now called Natural Resources Conservation Service) during the mid-1970s and mid-1980s.

Three NPS surveys have been conducted in recent years in the Perley Brook watershed. 20 NPS sites were identified in the South Perley Brook watershed. From 2001 - 2004, a 319 grant project (#2001R-27A) treated six NPS sites in the South Perley Brook watershed and helped build momentum in the watershed community.

PROJECT DESCRIPTION:

The Phase II Implementation project was part of a larger, multi-phase South Perley Brook Restoration effort aimed at improving the water quality of a tributary to South Perley Brook. The combined projects planned to install covered manure storage facilities at two livestock operations (800 cattle and 300 cattle) at the headwaters of the brook.

This 319 project installed a covered manure storage facility at the larger facility, while a separate State Nutrient Management Program grant addressed the second, smaller facility. In addition, the project assisted landowners in recognizing appropriate land use measures and BMPs.



Uncovered cattle feedlot – prior to construction.

PROJECT OUTCOMES:

- The Phase II project covered 32,175 square feet of manure storage area from an 800-cattle feedlot.
- The 300-cattle livestock operation was also improved through a separate grant. In total, the projects cover 50,175 square feet of manure storage area (67% covered), which will significantly reduce the potential for manure runoff into South Perley Brook.
- An operations and maintenance plan was developed and provided to the livestock producers.
- The project's estimated pollutant load reduction was 510 pounds of phosphorous and 2,266 pounds of nitrogen, and 3,777 pounds of chemical oxygen demand (COD) per year (USEPA Region 5 Method).
- With the completion of this project, nine of the documented 20 NPS sites have been addressed in the South Perley Brook watershed. All nine sites have been high to moderate priority sites.



PROJECT PARTNERS:

USDA Natural Resources Conservation Service - Fort Kent Office
Maine Department of Agriculture

CONTACT INFORMATION:

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