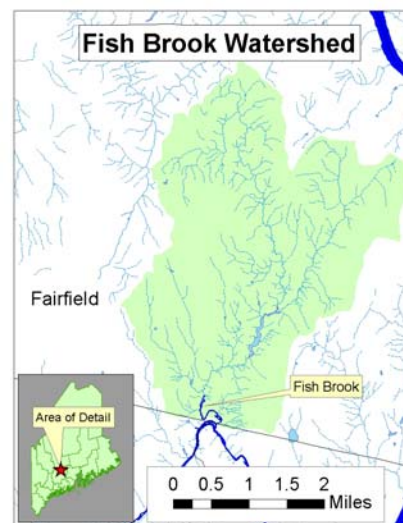


# Fish Brook Agricultural BMP Implementation Project & Watershed Survey, Phase I

#2000R-35

Waterbody Name: Fish Brook  
Location: Fairfield – Kennebec County  
Waterbody Status: Impaired, NPS Priority Watershed  
Project Grantee: Somerset County SWCD  
Project Duration: November 2000 – August 2006  
319 Grant Amount: \$180,497  
Local Match: \$86,377



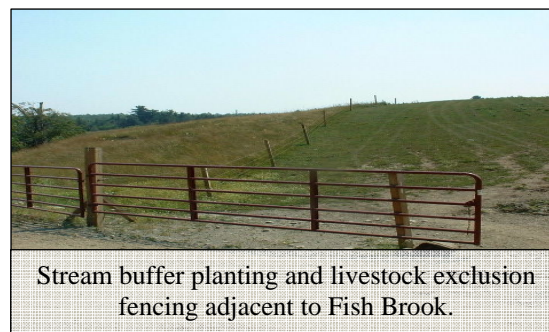
## PROBLEM:

Fish Brook is a tributary of Messalonskee Stream, which flows into the Kennebec River. The entire stream drains 11 square miles and flows through a series of agricultural fields and dairy farms. Land use in the watershed includes a mix of forested areas, agriculture and sparse residential development along major roadways.

Fish Brook is potentially a highly productive trout stream; however, it does not attain Class B water quality standards for dissolved oxygen. Maine DEP studies conducted in 1983 and 1984 found Fish Brook to be seriously impacted by NPS pollution, particularly by five major agricultural operations and also by other lesser NPS sources including roadways, residences and timber harvest operations. Declining brook trout populations, algal blooms, siltation in the brook's larger pools, oxygen depletion, and evidence of nitrate enrichment collectively indicate that the brook is polluted. The Maine DEP completed a TMDL Assessment in 2005.

## PROJECT DESCRIPTION:

This project initially planned to implement conservation practices on five farms within the Fish Brook watershed, remove polluted runoff sources associated with these agricultural operations, and reduce the transfer of pollutants from the operations to the brook. With technical assistance from Natural Resources Conservation Service (NRCS) and Somerset County SWCD staff, farmers on three of the five farms used a variety of BMPs to repair multiple pollutant sources and improve manure and livestock management facilities and operations.



Problems were encountered in completing scheduled tasks and several time extensions were needed to facilitate fieldwork and documentation requirements. However, the project significantly reduced and prevented pollutant loading to Fish Brook.

## PROJECT OUTCOMES:

- Three large farms in the Fish Brook watershed installed numerous BMPs to address pollutant sources and improve their manure and livestock management facilities and operations.
- The following Best Management Practices were installed through the project:

Agricultural waste storage structures	Critical area fencing
Livestock heavy-use area protection	Improved silage leachate collection
Stream crossing and livestock watering area	Erosion control near and adjacent to Fish Brook
Stream buffers installation and enhancement	
- The project leveraged funding from the 319 grant, USDA Environmental Quality Incentive Program (EQIP) and the Conservation Reserve Program funded under the NRCS. Nearly \$420,000 from three funding sources was used in administering the project.
- The project reduced annual pollutant loading to Fish Brook by an estimated 1,697 pounds of phosphorus; 2,971 tons of sediment, and 6,835 pounds of nitrogen.



Ongoing construction on livestock waste storage and heavy use area protection pad.



New culverts installed at stream crossing and livestock exclusion fencing along Fish Brook.

## PROJECT PARTNERS:

USDA Natural Resources Conservation Service  
Trout Unlimited

## CONTACT INFORMATION:

Tony St. Peter, DEP – (207) 287-2116, [tony.stpeter@maine.gov](mailto:tony.stpeter@maine.gov)

Jeff McCabe, Somerset County SWCD – (207) 474-8324, [somerset-swcd@me.nacdn.net](mailto:somerset-swcd@me.nacdn.net)

Suggested Citation:

Maine Department of Environmental Protection (2007) “Nonpoint Source Management Program 2006 Annual Report,” Document# DEPLW0836 2007. Augusta: MDEP.