Cove Brook NPS Pollution Control Project

#2008RR02

Waterbody Name: Cove Brook

Location: Winterport – Waldo County

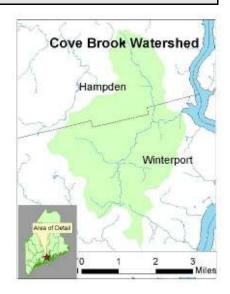
Waterbody Status: Atlantic Salmon River, NPS Priority Watershed

Project Grantee: Cove Brook Watershed Council

Project Duration: February 2008 – August 2010

319 Grant Amount: \$91,759

Local Match: \$91,276



PROBLEM:

Cove Brook is a small, spring-fed coastal stream that flows into Bald Hill Cove of the Penobscot River. Numerous intermittent tributaries, including Meadow Brook and Baker Brook, contribute to 10.3 miles of stream in the 11.2 square mile watershed. Cove Brook is one of only eight rivers in the state of Maine with a genetically distinct population of Atlantic salmon.

The Cove Brook Watershed Council (CBWC) formed in 2001 and completed the *Cove Brook Watershed Plan* in 2003. As part of the effort to develop the watershed plan, 18 NPS sites were identified and documented. Although 10 of the 18 sites were remediated by 2006, CBWC estimated that the remaining 8 sites still contributed an estimated 187 tons of sediment to the stream per year. The *Atlantic Salmon Recovery Plan* emphasizes the importance of mitigating such NPS pollution as a priority action.

PROJECT DESCRIPTION:

The goal of this project was to reduce sediment loading to Cove Brook by fixing three large high priority NPS sites in the watershed. The project addressed a quarter mile section of dirt road where stormwater would sheet flow down the road and into the brook, replaced an undersized culvert (which frequently "blew out") with a much larger arch culvert, and stabilized a large eroding bank that contributed many tons of sediment annually to Cove Brook.

Activities associated with the NPS mitigation work were documented and distributed to the public to raise awareness of NPS pollution in this area. Before and after photos were highlighted on the CBWC website along with descriptive and quantitative estimates of their impacts. Results were also highlighted at the CBWC monthly meetings and in newsletters.



Before implementation, stormwater flowed down Old Cove Road and washed sediment into Cove Brook

PROJECT OUTCOMES:

- Three major NPS sites were fixed in the watershed including a ½-mile section of road that drained into the stream, a large bank erosion site and an undersized culvert that frequently washed out. In addition to reducing pollutant load from the frequent culvert blow outs, the new arch culvert will allow fish to move more freely in Cove Brook.
- Annual pollutant loading to Cove Brook was reduced by an estimated 128 tons of sediment, 127 pounds of phosphorous and 250 pounds of nitrogen (Region 5 Method and WEPP Model).
- A demonstration rain garden was constructed in Winterport, and a story about the project was aired by Maine Public Radio in September 2009.
- Articles about the project appeared in the Bangor Daily News, the Penobscot Times and several CBWC newsletters.
- Match contributions from the Town of Winterport and other partners exceeded initial project goals by nearly \$28,000. This additional match allowed all projects to be completed, despite the fact that construction costs were higher than originally budgeted.





Meadow Road – Before culvert replacement, high flows funneled into an inadequate culvert and caused frequent road washouts during storm events. The undersized round culvert was replaced with a much larger arch culvert, and the road was paved for additional stability.

PROJECT PARTNERS:

Project SHARE
USDA Natural Resource Conservation Service
Lane Construction
University of Maine

CONTACT INFORMATION:

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