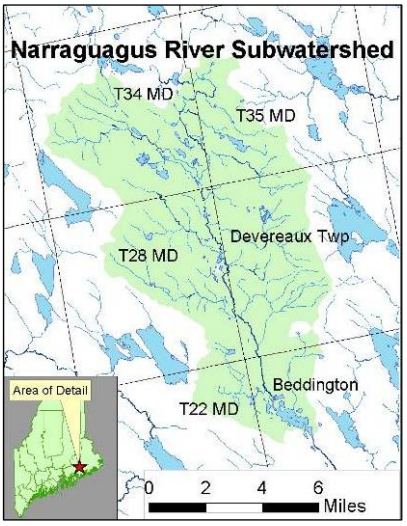
Narraguagus River Protection Project, Phase 2

#2007WW-23 – WIFAP

Waterbody Name:	Narraguagus River
Location:	T28MD and Devereaux TWP – Hancock & Washington Counties
Waterbody Status:	NPS Priority Watershed, Atlantic Salmon River
Project Grantee:	Washington County SWCD
Project Duration:	March 2008 – February 2009
319 Grant Amount:	$30,000
Match:	$13,800 (local), $20,000 (ME Dept. Ag.)



PROBLEM:

The Narraguagus River is listed among 11 rivers in Maine with a federally endangered Distinct Population Segment of Atlantic salmon. According to the Atlantic Salmon Recovery Plan, the river is second only to the Machias River in its importance to Atlantic salmon in Downeast Maine. Soil erosion detrimentally affects salmon habitat and contributes to "embeddedness", where soil particles fill in the spaces of coarse gravel and make it unsuitable for spawning and juvenile habitat.

The *Narraguagus River Watershed Nonpoint Source Pollution Management Plan* was completed in January, 2003 with 319 grant funding. Washington County SWCD conducted a NPS survey in the subwatershed of the Narraguagus River where the majority of high value salmon habitat is located and identified 21 NPS sites, the majority of which were eroding stream crossings. A *Phase 1* grant project fixed 11 of the identified sites in this subwatershed.

PROJECT DESCRIPTION:

The project continued to focus on the highest priority subwatershed of the river, which contains the greatest amount of critical habitat for spawning and rearing juvenile salmon. This subwatershed extends southward from the outlet of Deer Lake to the outlet of Beddington Lake. Best Management Practices were installed at six of the remaining priority NPS sites. All BMP installation work was done by a contractor certified by the Maine DEP's contractor certification program.

Riprap was used to stabilize sideslopes at the Sinclair Brook crossing on the 45000 road.

Treating these sites significantly reduced the amount of sediment washing into the river annually, protecting critical salmon habitat. The project also helped educate landowners about proper BMPs so that these practices will be used and maintained properly during future work in the watershed.

PROJECT OUTCOMES:

- The project installed BMPs to fix 6 NPS sites in the target subwatershed.
- Several "squash" culverts were successfully installed at stream crossings. This method serves as a cost effective substitute for arch culverts.
- A coarse gravel bridge apron was installed at Gould's Brook to reduce the amount of sediment getting into the brook from logging trucks. Gould's Brook is an important tributary to the Narraguagus River and is annually stocked with Atlantic salmon fry by the Bureau of Sea Run Fisheries.
- The project reduced NPS pollutant load to the Narraguagus River by an estimated 74 tons of sediment per year (WEPP Model and Region 5 Method).
- The project was completed in close cooperation with the landowner, American Forestry Technologies (AFT), which owns and maintains a large amount of timberland in the Atlantic salmon watersheds. From this project, AFT learned the proper application and maintenance of BMPs, which they will apply to their forest roads in the future.

"Squash" culverts installed in tributaries of the Narraguagus River. The shape of these culverts allows more water to pass than traditional round culverts. The culverts are much more cost effective than arch culverts.

PROJECT PARTNERS:

American Forestry Technologies
Narraguagus River Watershed Council
Maine Land Use Regulation Commission
Maine Department of Agriculture

CONTACT INFORMATION:

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Maine Department of Environmental Protection (2010) "Nonpoint Source Management Program 2009 Annual Report," Document# DEPLW-1159 2010. Augusta: MDEP.