

NOAA Community-based Restoration Program



Sennebec Dam Removal Union, Maine

The St. George River, located in central Maine, flows through Knox and Waldo Counties with a drainage area of 440 square miles. Historically, the river supported important anadromous fish runs for fish such as Atlantic salmon (*Salmo salar*), alewife (*Alosa psuedoharengus*), blueback herring (*Alosa aestivalis*), American eel (*Anguilla rostrata*) and American shad (*Alosa sapidissima*).

However, with the construction of the Sennebec Dam in Union, Maine in 1916, fish passage to over half the watershed was blocked eliminating a significant amount of nursery and spawning area for anadromous fish. The dam, originally constructed as part of a hydroelectric facility, was sold in the 1960's to the Sennebec Pond Association, who has since used it solely to maintain lake levels. Today, the St. George



Sennebec Dam

River still supports a significant alewife run, which in turn support a local commercial fishery, supply lobster bait and provide forage for many birds and sportfish including striped bass (*Morone saxatilis*), bluefish (*Pomatomus saltatrix*) and largemouth bass (*Micropterus salmoides*).



At the end of the 20th century, the Sennebec Dam represented the last manmade barrier on the St. George River for anadromous fish. With assistance from the NOAA Community-based Restoration Program, Trout Unlimited along with other project partners took the lead to restore anadromous fish passage on the St. George River through removal of the Sennebec Dam. As Sennebec Pond, a naturally occuring lake behind the dam, is also recreationally important area for swimming, boating and fishing for the local community, care was taken to maintain lake levels. The 12 foot high, 200 foot wide dam was removed in 2002 and replaced with a roughened fish ramp 2000 feet upstream at the pond's natural outlet.

With the removal of the Sennebec Dam, fish are able to access 17 additional upstream miles of the St. George River as well as 1100 acres of lake habitat in the Sennebec Pond and Quantabacook Lake. Over a quarter mile of impounded river was also restored to natural riverine conditions. A rock ramp fishway was created at the pond's natural outlet recreating riffles and pools for fish to swim up. In addition, lake levels in Sennebec Pond were maintained in order to maintain the recreational value of the pond. Removal of the dam



Alewives congregating below the Dam



Construction workers building the roughened ramp



Post Removal of the Sennebec Dam

also provided greater safety from potential flooding. The total cost of this project was \$270,000.

Since the removal of the dam and creation of the rock ramp, alewife, smallmouth bass (*Micropterus dolomieu*), and brown trout (*Salmo trutta*) have been observed swimming successfully upstream over the ramp and into Sennebec Pond. Water levels at Sennebec Pond have been successfully maintained for recreational use. The restored section of river further adds to recreational opportunities as it provide an easily accessible white water run for canoeists and kayakers during spring high water as well as has become a popular angling area for brown trout.

In addition to the NOAA Community-based Restoration Program and the St. George Chapter Trout Unlimited, many other agencies, organizations, and individuals have provided support for restoring fish passage on the St. George River including the FishAmerica Foundation, National Fish and Wildlife Foundation, Sennebec Pond Association, Maine Corporate Wetlands Restoration Partnership (Maritimes & Northeast Pipeline), Gulf of Maine Council, River Rehab, Inc., Trout Unlimited, American Rivers, Coastal Conservation Association, US Fish and Wildlife Service, Natural Resources Conservation Service. Maine Department of Marine Resources, Maine Atlantic Salmon Commission, Jack Tibbetts and Ed Collins.

The NOAA Community-based Restoration Program seeks to involve communities in the restoration of marine and estuarine habitat. Partnerships with Federal agencies, states and local governments, non-governmental and non-profit organizations, businesses, industry and schools have assisted over 700 projects nationally including 49 within the Gulf of Maine to restore coastal habitat. The NOAA Community-based Restoration Program and its partners provide funding and expertise to projects that promote coastal stewardship and a conservation ethic. Through partnerships, the Community-based Restoration Program has been able to leverage \$3-\$5 on average for every NOAA dollar invested.

For additional information, contact: John Catena or Eric Hutchins National Marine Fisheries Service One Blackburn Drive Gloucester, MA 01930 (978) 281-9313 http://www.nmfs.noaa.gov/habitat/restoration/



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