



West Winterport Dam Removal

Project: West Winterport Dam Removal, Marsh Stream, Penobscot River Watershed

Before

Tributary: Marsh Stream is located in the lower Penobscot River watershed in Waldo County. The headwaters of the West Branch of Marsh Stream form at Frye Mountain in Knox and flow north and east through Brooks to the confluence with the North Branch near the Monroe and Frankfort town line. The stream



continues through Winterport and Frankfort and enters the Penobscot River at Marsh Bay. The North Branch covers an area of 137.2 square miles and contains 350.5 miles of stream. The North Branch of Marsh Stream contains about 60 percent of the mapped salmon habitat units of all of the lower Penobscot River tributaries.

After deregulation of Maine's utility industry, the owner of this small hydropower dam could no longer make a profit and decided to remove the dam.

Problem: Following the de-regulation of the electricity industry in the late 1990's, many small hydroelectric dams became unprofitable due to the loss of subsidies and guaranteed rates. The West Winterport Dam on the North Branch of Marsh Stream fell into this category, and the economic picture was even more dire given the need to rebuild fish passage and make repairs to the dam. The owner of the dam decided that dam removal made the most sense, both from an economic and an environmental stand point. However, several people within the local community





were not supportive of dam removal due to concerns about future impacts of ice formation and the loss of the impoundment as water supply for the fire department. Despite studies demonstrating that the dam removal would actually lessen ice problems downstream and the offer to construct a dry fire hydrant adjacent to the river, a divisive public debate ensued and removal plans were put on hold in 2004.

Solution: In 2008, the dam's owner, John Jones, re-approached the community about removing the West Winterport Dam. Little opposition emerged at this point and John Jones approached the Atlantic Salmon Federation to help with the dam removal process. ASF worked with staff from the Maine Department of Marine Resources, U.S. Fish and Wildlife Service, and NOAA Restoration Center to secure the funding and permits necessary to remove the dam.

Anticipated Results: Atlantic salmon, American shad, river herring, sea lamprey, and American eel have regained access to more than 85 miles of river and stream habitat above the former dam site. Resident brook trout and the state-listed brook floater mussel have also benefited from increased habitat connectivity and improvements in water quality resulting from the dam removal. 30,000 Atlantic salmon parr were stocked in Marsh Stream in the fall of 2011 and will be stocked through 2014 as part of an effort to restore a salmon run in the watershed.

Partners: The engineering work was completed by Kleinschmidt Associates and the dam removal construction was done by Jones Construction Co. Project partners and funders included ASF and its Maine Council; Gulf of Maine Council on the Marine Environment-NOAA Habitat Restoration Grants Program; National Partnership between the NOAA Community-based Restoration Program and American Rivers; National Partnership between NOAA Fisheries' Community-Based Restoration Program and Restore America's Estuaries; Conservation Law Foundation; Maine Corporate Wetlands Restoration Partnership; The Nature Conservancy in Maine; NOAA Restoration Center; Maine Department of Marine Resources; USF&WS - Gulf of Maine Coastal Program; USF&WS - Maine Field Office; Patagonia, Inc.; The Orvis Company, Inc.; and the Trout and Salmon Foundation.

Total Project Costs: \$270,000
Project Completion: August 2010