NOAA

NOAA's Work on Town Brook in Plymouth, MA

Town Brook is a 1.5-mile stream that runs from the Billington Sea, a 269-acre freshwater pond, to Plymouth Harbor in Plymouth, Massachusetts.

The brook has long been used by alewives, blueback herring, collectively known as river herring, and rainbow smelt annually for spawning. Beginning in the 1790s, six dams were built on Town Brook. The barriers contributed to a decline of many sea-run fish. The stream currently supports an annual run of approximately 150,000 river herring. Even though below the stream's estimated capacity of nearly 1 million fish, the Town Brook river herring run has remained stable despite declines on other rivers. This likely is due, in part, to ongoing restoration work.

NOAA and other state and federal partners have provided technical and financial support to the Town of Plymouth to help restore fish passage on Town Brook for close to 15 years.

In 2002, the Billington Street Dam was the first dam to be removed in the Commonwealth of Massachusetts to help restore anadromous fish populations. Since that time, the dam at the Water Street bridge on Town Brook was lowered by approximately 12 inches to provide greater fish passage. Two fish ladders were also enhanced at the Jenney Grist Mill and the Newfield Street Dam. With the removal of the Off Billington Street Dam last year and plans to remove the Plymco Dam starting in July 2014, access to spawning grounds will be further improved for river herring and other species.

Restored stream after Billington Street dam removal

Over the years, we've collaborated with many partners including the National Resource Conservation Service, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, Inland Fisheries Committee, Town Brook Alliance, Massachusetts Coastal Zone Management, Massachusetts Division of Marine Fisheries, Massachusetts Division of Ecological Restoration, Massachusetts Department of Conservation and Recreation, American Rivers, Massachusetts Watershed Initiative, Massachusetts River Restore Program, The Nature Conservancy, Battelle Marine Science Laboratory, Coastal America, U.S. Army Corps of Engineers, Gulf of Maine Council on the Marine Environment, Conservation Law Foundation, Restore America's Estuaries, U.S. Army Reserves, Milone and Macbroom, SumCo Eco Contracting and Fish-America Foundation.

The total cost for these projects to date is over $2 million.

Why Restore River Herring Populations?

Besides the obvious benefits to the species themselves, restored river herring populations also provide food for other animals. Nesting colonies of common, Arctic and least terns on Plymouth Beach and sportfish such as striped bass and bluefish prey on adult and juvenile river herring. An improved sportfishery would have economic benefits to the towns of Plymouth, Kingston and Duxbury, attracting recreational anglers and increasing tourism. Restored river herring runs would also have cultural significance to the Wampanoag Nation.