## FEILANTIC COASTA

## **ON-THE-GROUND PROJECTS**

Spotlight on Cotton Gin Mill Dam Removal and Fish Passage Project

The Cotton Gin Mill Dam in East Bridgewater, Massachusetts was built in the mid-1800's, and since then has blocked flow of the Satucket River. The dam has hindered natural river processes, such as sediment transport and temperature regulation. It also acts as a barrier to passage for diadromous fishes including river herring (*Alosa pseudoharengus, A. aestivalis*) and American eel (*Anguilla rostrata*).

Project Partners

The Nature Conservancy

Massachusetts Division of Ecological Restoration

US Fish and Wildlife Service

Atlantic Coastal Fish Habitat Partnership The Nature Conservancy will work with partners to remove the dam, allowing fish access to 124 acres of spawning habitat, with potential for 528 more acres. It will also restore 4.4 river miles upstream. The dam currently blocks passage from Narragansett Bay to the river upstream and Robbins pond, both of which provide suitable nursery habitat for river herring.



Cotton Gin Mill Dam, looking upstream.

The effectiveness of this project in restoring migratory fish passage will be measured in the short term through changes in the length of connected river network and in characteristics of physical habitat. Fish counts will be conducted for at least five years following removal, and the project team is collaborating with the Massachusetts Division of Marine Fisheries to conduct fish monitoring at other dam removal sites in the watershed.

Removing the Cotton Gin Mill Dam, restoring river processes in the Satucket River, and restoring riparian habitat will improve system health and resilience to stresses such as increased temperature and more intense storm events due to climate change. Increased habitat available to migratory fish will minimize the chance that stochastic events will wipe out all spawning or juvenile survival in a given year.

The U.S. Fish and Wildlife Service provided the Atlantic Coastal Fish Habitat Partnership with conservation dollars to fund a portion of the dam removal.

Project text and photo provided by The Nature Conservancy. Photos by Cathy Bozek.

For more information on the Partnership visit us at: www.atlanticfishhabitat.org