

**FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
BALMORAL DAM REMOVAL PROJECT
ANDOVER, MASSACHUSETTS**

The U. S. Fish and Wildlife Service (Service), in partnership with the Massachusetts Division of Ecological Restoration and other partners, is proposing to complete the Balmoral Dam Removal Project in Andover, Massachusetts. The purpose of the project is to restore anadromous fish passage and natural stream processes to the Shawsheen River watershed that are impaired by the dam.

An Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the regulations of the Council on Environmental Quality for implementing NEPA (40 Code of Federal Regulation [CFR] 1500-1508), and the implementing regulation (36 CFR 800). The EA analyzes the impacts of two alternatives on the human environment, including the Proposed Action (Dam Removal) and a No Action Alternative. Additional alternatives were considered early on in the analysis and dismissed because of impacts to the floodway, historic resources, or an inability to meet the project's purpose and need.

The Proposed Action will have a net ecological benefit by restoring natural stream process to the watershed and reconnecting 1.2 miles of habitat for American shad (*Alosa sapidissima*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), sea lamprey (*Petromyzon marinus*), American eel (*Anguilla rostrate*), and other aquatic organisms within the watershed. The project complements the Service's ongoing efforts to restore diadromous and resident fishery populations within the Merrimack River Watershed and the Gulf of Maine. The project will also improve public safety by eliminating a lethal threat to recreational boaters. Under the No Action Alternative, the dam would be left in place and historical spawning and rearing habitat would continue to be inaccessible to migratory fishes.

The Proposed Action would remove the entire vertical extent of the dam to the natural streambed except for a short section attached to both the river right and river left floodwalls. The remaining sections would be 2 feet in length along the dam crest with 1:1 side slopes along the breach face. Leaving these sections will protect the structural integrity of the river floodwalls and allow for historical interpretation. In addition, a constructed riffle would be installed at the dam's location to provide grade control to the channel bed and to backwater the upstream retaining walls and Balmoral Street bridge footings. Construction would occur during seasonal low flows and the impoundment would be drawn down in a controlled manner prior to demolition to minimize the amount of in-water work. Once the dam is removed, the River would be allowed to naturally adjust its slope through the impoundment, which would allow the passive transport of accumulated sediments downstream.

The Proposed Action will have negligible, and in some cases beneficial impacts on natural and cultural resources such as water and air quality, sediment chemistry, threatened and endangered species, fish and wildlife resources, wetlands, and public recreation and safety. Adverse effects to cultural resources, including National Register-eligible or -listed cultural resources, will be

addressed, pursuant to section 106 of the National Historic Preservation Act, through a Memorandum of Agreement between the Service, Massachusetts Historical Commission, Board of Underwater Archeological Resources, and Town of Andover (36 CFR Part 800).

Resource agencies, abutters, and other stakeholders have been involved throughout the feasibility and design planning stages of the project. The project has undergone local, State, and Federal permitting processes that require extensive environmental and planning agency circulation, as well as ample public notice and involvement. Several public meetings have been held with interested government agencies, non-profit groups, and local residents, including the Town of Andover, the Massachusetts Department of Environmental Protection, the National Oceanic and Atmospheric Administration Restoration Center, the Massachusetts Department of Fish and Game, the Service, and the Andover Preservation Commission.

The Service finds there will be no significant impacts resulting from the proposed restoration activities of the project. The Proposed Action provides net benefits that far outweigh its potential impacts on the natural and human environment. Therefore, the Service concludes that a Finding of No Significant Impact be issued for the proposed project.



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01 Sept 2016

Date

Reference:

Environmental Assessment, dated September 1, 2016