

## Fact Sheet

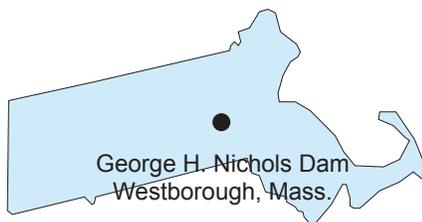
April 2013

# The Case for Reinvesting in the George H. Nichols Dam in the SuAsCo Watershed

### Introduction

Significant upstream urban development has generated the need for rehabilitation of the George H. Nichols Dam in Westborough, Massachusetts and five other dams in the Sudbury-Assabet-Concord (SuAsCo) rivers watershed. A total of nine dams were built between 1962 and 1987 by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) and the Massachusetts Department of Conservation and Recreation (DCR).

Funded through the American Recovery and Reinvestment Act of 2009, this project is part of the Obama Administration's plans to modernize the nation's infrastructure, jump-start the economy, and create jobs. NRCS is using Recovery Act dollars to update aging flood control structures, protect and maintain water supplies, improve water quality, reduce soil erosion, enhance fish and wildlife habitat, and restore wetlands. NRCS acquires easements and restores floodplains to safeguard lives and property in areas along streams and rivers that have experienced flooding.



The George H. Nichols Dam is located in Westborough, Mass., a suburban community of west of Boston.

### Project Description

- **Location:** Town of Westborough in Worcester County, Massachusetts, 3rd congressional district.
- **Size:** 7.17 square miles drainage area.
- **Start Date:** design - September 2009, construction - Spring 2010
- **Completed:** June 2012
- **Total Project Cost:** \$2,496,162
- **Federal Funding:** \$1,697,685
- **Sponsor Funding:** \$798,477

NRCS and the Massachusetts Department of Conservation and Recreation (DCR) have evaluated rehabilitation needs on the SuAsCo watershed dams as a result of land use changes, in addition to checking them annually and after significant storms. The agencies assessed that rehabilitation was needed on the George H. Nichols dam and five of the other SuAsCo dams, and DCR requested federal funding through the NRCS Watershed Rehabilitation Program. Rehabilitation of the George H. Nichols dam involved widening and armoring the auxiliary spillway to prevent overtopping of the dam and potential breach failure.

DCR owns, operates and maintains the dams, and with NRCS assistance, monitors the dams to ensure that they provide flood protection to this continuously growing area west of Boston.

### Partners

- Massachusetts Department of Conservation and Recreation
- Massachusetts Division of Fisheries and Wildlife
- Massachusetts Water Resources Commission
- Middlesex County Conservation District
- Worcester County Conservation District

The George H. Nichols Dam in Westborough, Massachusetts was upgraded so that it will continue to provide flood protection and recreational benefits.



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## Benefits

Bringing the dam up to current performance and safety standards has maintained existing flood control benefits, and fish and wildlife benefits.

It has also greatly improved public health and safety by substantially reducing the potential for flood damages to 131 homes and businesses and 10 bridges. An estimated 870 residents have directly or indirectly benefited in the floodplain. This population uses the 10 bridges for access to homes and businesses.

Upgrading the dam has reduced the threat of loss of life, injury or disease; reduce the need for emergency personnel; it also means less disruption to community services after a flood.

Although the dam was still structurally sound and did not pose an imminent threat to public safety, rehabilitation has modified the dam to accommodate runoff from land use changes using “full build-out” of existing zoning.

## Economic Opportunities

Rehabilitation of the George H. Nichols Dam has injected more than \$2 million into the local economy, creating an estimated 22 jobs and continuing an estimated average annual flood damage reduction benefits of \$110,500, as well as net recreation benefits of \$130,000 annually.

## Statewide Perspective

The 377-square mile SuAsCo watershed encompasses all or part of 36 Massachusetts towns: Stow, Berlin, Northborough, Marlborough, Shrewsbury, and Westborough.

The SuAsCo dams act as a system to control a drainage area of nearly 50 square miles and provide available flood storage of more than four billion gallons.

Today, the SuAsCo dams provide an estimated \$1.7 million in annual flood damage reduction benefits.

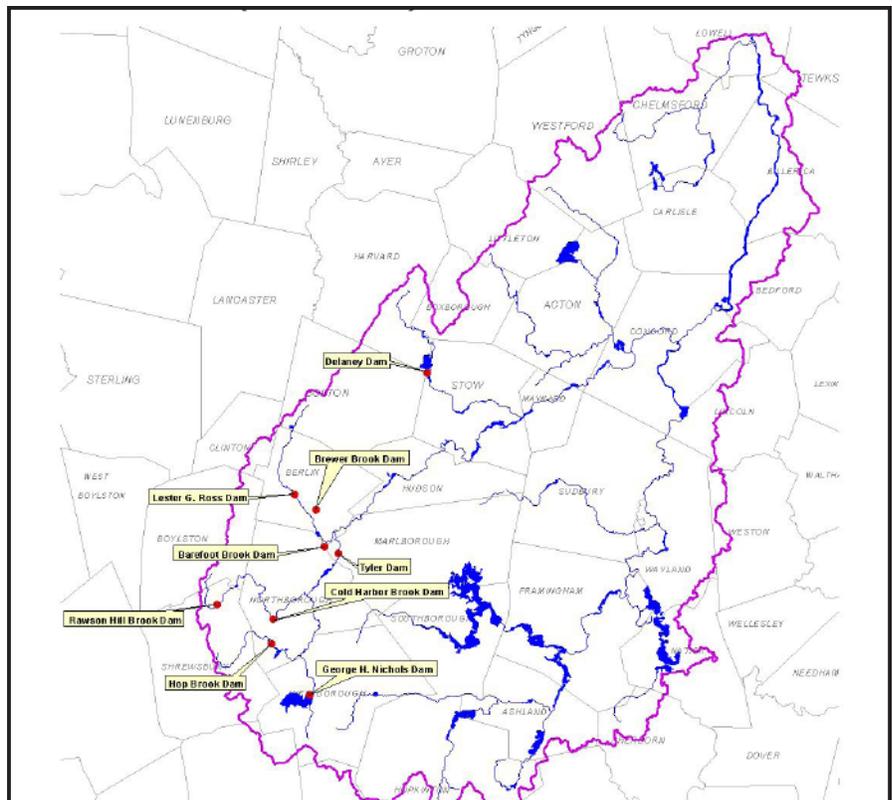
## A Wise Investment

NRCS Recovery Act projects are wise investments in conserving natural resources and protecting public safety and critical infrastructure. This dam rehabilitation project will create or save jobs (both directly and indirectly related to the project) and protect lives and property during floods. During and after floods it will

prevent injury and disease, reduce the need for emergency services, and keep community services operating.

## For More Information

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The nine dams in the SuAsCo watershed were built between 1962 and 1987.

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