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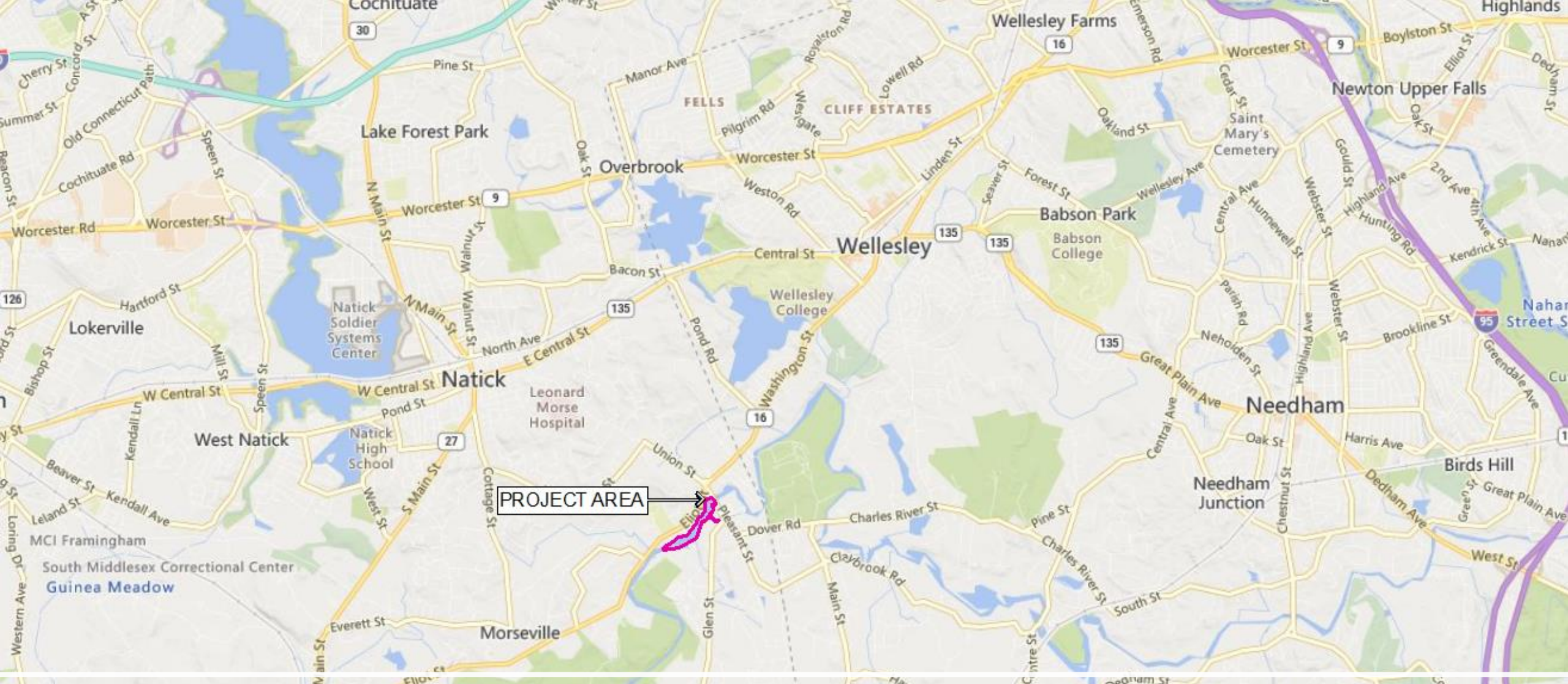


Charles River Dam Decommissioning and River Restoration Project

11 Pleasant Street
South Natick

DEP File No. 233-919
Natick File No. 25-4

Natick Conservation Commission Hearing
March 20, 2025



Project Setting



Ecological Restoration Limited Project

Meets the definition of an Ecological Restoration Project at 310 CMR 10.04

- Designed to improve the natural capacity of the resource (Charles River) that have been degraded by anthropogenic influences to provide the interests of the Act

Do not meet all criteria at 310 CMR 10.13(2)

- Additional eligibility criteria for dam removal projects

Reviewed under 310 CMR 10.53(4)

Filed WPA Form 3 Notice of Intent with Appendix A

WPA Form 5 Order of Conditions sought

Project Purpose

Decommission the dam to permanently resolve the safety and liability concerns related to maintaining a High hazard dam.

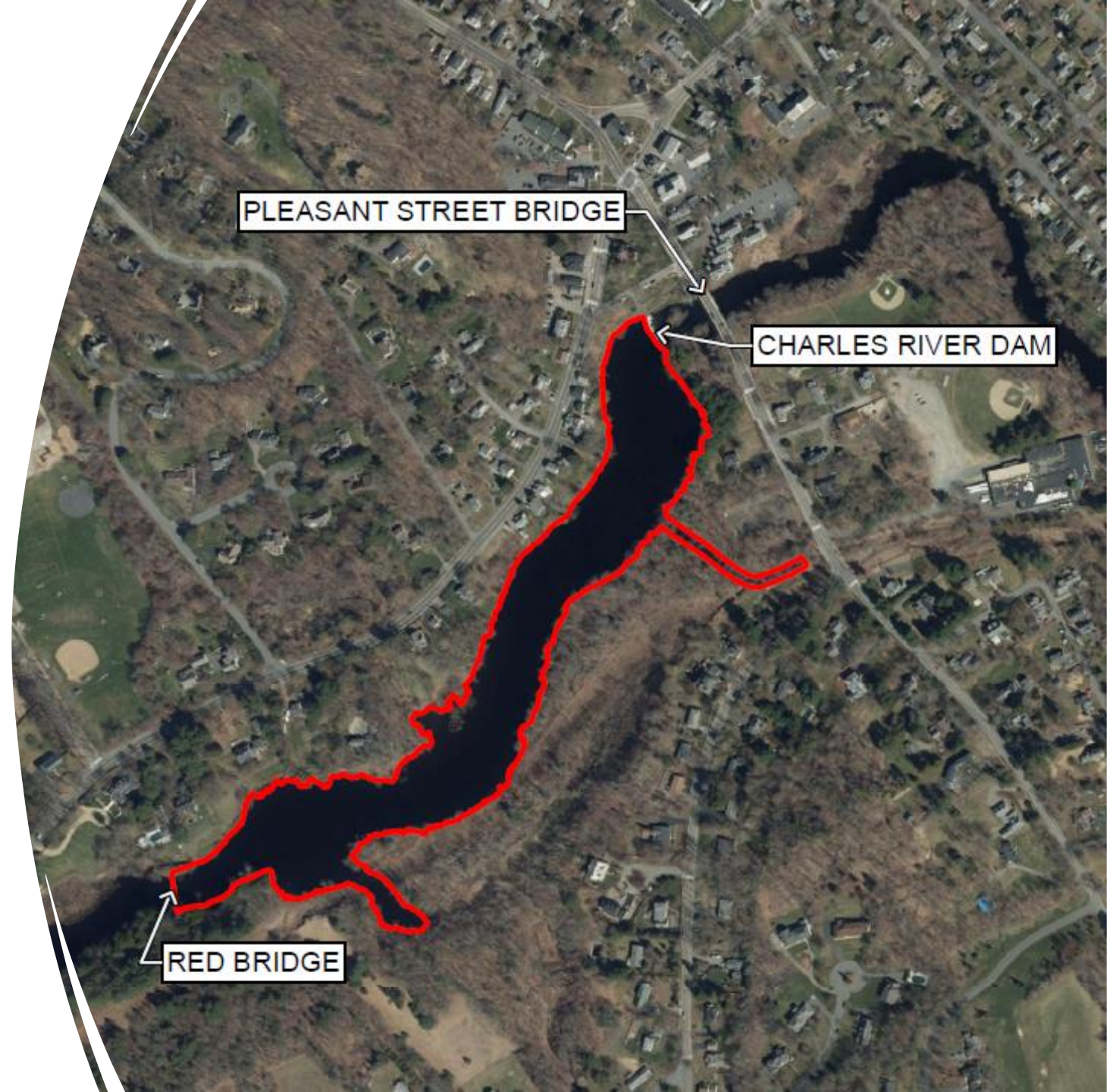
Restore the Charles River within the impoundment area to enhance natural processes and improve climate resilience.



Project Definitions

Existing Conditions

- 16-acre impoundment upstream of dam
- Town-owned park land along both sides of river







Proposed Project

- Remove spillway to restore free-flowing river
- Wetland & Floodplains re-established within existing open water areas

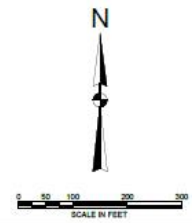






- NOTES:**
1. THE BACKGROUND IMAGE WAS OBTAINED FROM MICROSOFT BING SATELLITE, 2023.
 2. THE USE OF AERIAL PHOTOGRAPHY CAN OFTEN MAKE BUILDINGS AND OTHER SITE FEATURES APPEAR TO BE OVERLAPPING AND DISTORTED WHEN OVERLAD WITH ACTUAL SITE FEATURES.

- LEGEND**
- PROPOSED CHARLES RIVER BASE FLOW
 - EXISTING CHARLES RIVER



NO.	DATE	BY	CHKD

CHARLES RIVER DAM AT SOUTH NATICK
DAM DECOMMISSIONING AND RIVER RESTORATION PROJECT
NATICK, MASSACHUSETTS

FINAL CONDITIONS PLAN AERIAL

PERMIT DRAWINGS

APPROVED:

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com	PROJECT FOR: TOWN OF NATICK 13 E. CENTRAL STREET NATICK, MA 01740
PROGRAM: DAM DRAWING NO.: 19114.025 DATE: JANUARY, 2025	CHECKED BY: GSE SCALE: AS SHOWN REVISIONS: - FIGURE: C-4 SHEET NO. 18 OF 18

Resource Area	Existing	Proposed	Permanent Change
Land Under Water Bodies and Waterways	691,863 SF	384,675 SF	-307,188 SF
Bank	3,683 LF	3,582 LF	-101 LF
Bordering Vegetated Wetlands	0 SF	307,188 SF	+307,188 SF
Bordering Land Subject to Flooding	754,795 SF	714,925 SF	-39,870 SF
Riverfront Area	1,303,162 SF	1,097,014 SF	-206,148 SF

- Impact: Impoundment Area Resource Conversion
- Eligible for review as an Ecological Restoration Limited Project will allow for resource area conversion.

Permanent – Wetland and Surface Water

Compliance with WPA

- No State endangered, threatened, or species of special concern
- In-water time-of-year work restriction from March 15-July15 and September 1-November 15 as coordinated with MA DMF and MassWildlife
- Tree removal time-of-year work restriction of April 15-October 31 as coordinated with US FWS
- Dredging (passive release only) of >100 cubic yards; therefore, 401 Water Quality Certification required. Application (24-WW26-0064-APP) under review
- Dam Safety Chapter 253 Permit issued February 7, 2025

Protection of Public or Private Water Supply & Protection of Ground Water Supply

BVW retain and release water during dry times to maintain base flow conditions.

RA and BVW capture nutrients and sediments which can improve water quality in the river.

Restored sediment transport regime will better distribute sediment composition including organic materials which improves water quality.

Native vegetation and increased shading in BVW and RA may increase groundwater recharge.

Flood Control & Storm Damage Prevention

Existing open water areas will become available for flood storage as BVW and BLSF

Lowered peak water surface elevation upstream of dam during flood events

BVW and BLSF hold flood waters and release them later, resulting in flood attenuation

Removal of threat of potential dam breach or uncontrolled release of water

Restored natural sediment processes improves river bank stability and may decrease excessive downstream scour during storm events

Prevention of Pollution

RA and BVW between developed land and open water decreases runoff-related pollution by filtering stormwater.

Improved water quality as described for water supply interests.

Decreased open water surface area and naturally-formed banks decreases water residence time in the impoundment decreasing thermal pollution of the water.

Healthy wetlands better store carbon dioxide through the accumulation of organic material in the soil.

Protection of Fisheries

Removes a fish migration barrier and provides improved passage to American eel, alewife herring, blueback herring, and American shad.

Project anticipated to increase water quality and decrease thermal pollution.

Improved sediment flows may enhance invertebrate habitat which is a food source for fish.

Naturalized banks improve breeding habitat, escape cover, and improved food resources.

Will follow time of year restrictions identified by Division of Marine Fisheries (DMF) for the Charles River in Wellesley given the proximity. No time of year restrictions identified for Natick.

Protection of Wildlife Habitat

BVW are identified in the Wetland Protection Act as the “most important inland habitat for wildlife” and the Project will increase BVW area.

Creates contiguous naturalized area to provide improved food, shelter, migratory, overwintering, and breeding habitat for wildlife.

Invasive Species Management

Adaptive management of the impoundment area for two growing seasons after dam removal

- Monitor impoundment every three months during growing season with hand or mechanical removal of observed invasive species
- If necessary, cut and drip application of herbicide for Japanese knotweed (*additional coordination with Conservation Commission required*)
- In areas of poor natural revegetation: application of native wetland or floodplain seed mix

Status of Other Reviews & Authorizations

Massachusetts Environmental Policy Act Review (MEPA)

- Secretary's Certificate on Expanded Environmental Notification Form issued April 30, 2024; File number EEA 16832
- Secretary's Certificate on Single Environmental Impact Report issued September 30, 2024 ; File number EEA 16832

Massachusetts Office of Dam Safety

- Chapter 153 Dam Safety Permit issued February 7, 2025; File number 37-2025-449

Massachusetts Department of Environmental Protection (MassDEP)

- Section 401 Water Quality Certification for Dredge and Fill under review; File number 24-WW26-0064-APP
- Chapter 91 Program Demolition Approval and Dredge Permit to be filed

Massachusetts Historical Commission (MHC)

- Project Notification Form submitted September 2023
- Section 106 Consultation to be completed by USACE

Massachusetts Water Resources Authority (MWRA)

- Coordinating regarding potential permit needed

United States Army Corps of Engineers (USACE)

- Preconstruction Notification under review; File number NAE-2024-01669

Thank You



