TALBOT MILLS DAM REMOVAL / CONCORD RIVER ECOLOGICAL RESTORATION PROJECT

EXPANDED ENVIRONMENTAL NOTIFICATION FORM

Town of Billerica, Middlesex County, MA

JUNE 15, 2023

Project Proponent:

CRT DEVELOPMENT REALTY, LLC

Prepared for:

Executive Office of Energy and Environmental Affairs

100 Cambridge St, Suite 900, Boston, MA 02114

Prepared by:

GOMEZ AND SULLIVAN ENGINEERS

PO Box 2179, Henniker, NH 03242

GOMEZ AND SULLIVAN ENGINEERS

41 Liberty Hill Road • PO Box 2179 • Henniker, NH 03242 • Phone 603-428-4960

VIA EMAIL

June 14, 2023

Secretary Rebecca Tepper
Executive Office of Energy and Environmental Affairs, MEPA Office
100 Cambridge Street Suite 900, Boston, MA 02114
MEPA@mass.gov

Re: Talbot Mills Dam Removal / Concord River Restoration Project
Expanded Environmental Notification Form (EENF)

Dear Ms. Tepper:

Gomez and Sullivan Engineers, DPC (Gomez and Sullivan) hereby submits the enclosed Expanded Environmental Notification Form (EENF) for the Talbot Mills Dam Removal / Concord River Restoration Project in Billerica, Massachusetts on behalf of the dam owner, CRT Development Realty, LLC.

The Talbot Mills Dam (NID ID MA00774) is an approximately 127-foot-long, 10-foot-high former mill dam located on the Concord River, about 4.76 miles upstream of its confluence with the Merrimack River. In partnership with multiple state and federal agencies and local watershed organizations, the owner of the Talbot Mills Dam is seeking dam removal as the best alternative to restore migratory fish passage and connectivity for resident aquatic species; decommission aging infrastructure; eliminate ongoing maintenance and repair obligations; reduce flood hazards and increase resilience; and improve water quality, habitat, and natural river functions. The Talbot Mills Dam is one of seven dams identified as a priority for fish passage in the 2021 Merrimack River Comprehensive Plan, and the proposed dam removal project has been designated as a Priority Project by the Massachusetts Division of Ecological Restoration.

Electronic copies of application materials for the proposed project can be downloaded from the following publicly accessible file transfer site: https://tinyurl.com/TalbotDamRemovalPublic. Additional resources can be found on the project website (https://merrimack.org/talbotmills), including links to previous feasibility and design documents, answers to frequently asked questions (translated into several languages), a StoryMap, recordings and/or slides from previous public meetings, and press coverage.

We look forward to your review of this project. Please contact me directly with any questions or comments at jgriffiths@gomezandsullivan.com or (716) 402-6777.

Sincerely,

Jill Griffiths, PE
Water Resources Engineer

CC: See Attachment 1 – Distribution List

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LIST OF ATTACHMENTS

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Talbot Mills Dam Removal			
Street Address: 71 Faulkner Street			
Municipality: Billerica		Watershed: Concord River	
Universal Transverse Mercator Coordinates: 3040793.014 Easting / 714383.9035 Northing		Latitude: 42.591880 Longitude: -71.283835	
Estimated commencement date: July 2024		Estimated completion date: December 2024	
Project Type: Dam Removal (Restoration)		Status of project design: 60% complete	
Proponent: CRT Development Realty, LLC			
Street Address: 80 Washington St			
Municipality: Norwell		State: MA	Zip Code: 02061
Name of Contact Person: Jill Griffiths, PE			
Firm/Agency: Gomez and Sullivan Engineers		Street Address: PO Box 2179	
Municipality: Henniker		State: NH	Zip Code: 03242
Phone: (716) 402-6777	Fax: N/A		E-mail: jgriffiths@gomezandsullivan.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☒Yes ☐No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	☒Yes ☐No
a Rollover EIR? (see 301 CMR 11.06(13))	☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes ☒No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

The project is required to follow Greenhouse Gas Emission Policy and Protocol as it exceeds a MEPA threshold requiring an EIR. Emissions will be limited to the operation of construction equipment on site and there will be no long-term effects as a result. Emissions will only take place during the construction phase of the project. The project will result in the ecological restoration of the site and the removal of a dam; therefore, the project qualifies for a *de minimis* exemption since these projects are provided as examples of projects that typically qualify for *de minimis* exemptions according to the Greenhouse Gas Emission Policy and Protocol. Additionally, current research indicates that methane emissions are increased by the presence of impounded sediment behind dams, and therefore the removal of the dam

will result in a decrease in long term methane emissions[1].

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

- structural alteration of an existing dam that causes any decrease in impoundment capacity (Note this is a run-of-river dam, not a flood storage dam, and its removal will actually decrease flood elevations.)
- alteration of 500 or more linear feet of bank along a fish run or inland bank
- alteration of 5,000 or more sf of bordering or isolated vegetated wetlands
- demolition of all or any exterior part of any Historic Structure listed in or located in any Historic District listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth
- environmental impacts within 1 mile of an Environmental Justice population

Which State Agency Permits will the project require?

- Clean Water Act Sect. 401 Water Quality Cert. (MA Dept. of Environmental Protection (DEP))
- Public Waterfront Act Ch. 91 Waterways Dredge Permit (DEP)
- Ch. 253 Dam Safety Permit (MA Dept. of Recreation, Office of Dam Safety (ODS))
- Ecological Restoration Project Notice of Intent & Order of Conditions (DEP/Town of Billerica)
- National Historic Preservation Act Sect. 106 Review (MA Historical Commission (MHC))

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

The project has received financial assistance in the following amounts from the Massachusetts Department of Fish and Game (DFG):

- MA Div. of Ecological Restoration - $75,667 for 2022 Conceptual Design
- MA Div. of Ecological Restoration - $385,000 for 2023-24 Design, Permitting, & Construction Phase Services

[1] *Maeck, A., DelSontro, T., McGinnis, D. F., Fischer, H., Flury, S., Schmidt, M., Fietzek, P., & Lorke, A. (2013). Sediment trapping by dams creates methane emission hot spots. Environmental Science & Technology, 47(15), 8130–8137. https://doi.org/10.1021/es4003907*

SUMMARY OF PROJECT SIZE & ENVIRONMENTAL IMPACTS

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	2.7 *(incl. conservative areas for potential access/ staging & in-water work; not all of this area will be disturbed)*		
New acres of land altered		0.1 *(new LUW where structures will be removed)*	
Acres of impervious area	1.5	-0.1 *(dam structures to be removed)*	1.4
Square feet of new bordering vegetated wetlands alteration		24,000 *(net gain of BVW)*	
Square feet of new other wetland alteration		-436,000 *(conversion of LUW to BVW)*	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	3870 *(dam structures)*	-2970 *(dam structures to be removed)*	900 *(remaining abutment/buttress)*
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WASTEWATER			
Water Use (gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEPA before? ☐ Yes (EEA #_____) ☒ No			
Has any project on this site been filed with MEPA before? ☐ Yes (EEA #_____) ☒ No			

GENERAL PROJECT INFORMATION

PROJECT DESCRIPTION

Describe the existing conditions and land uses on the project site:

The Talbot Mills Dam is located on the Concord River in Billerica, approximately 4.76 miles upstream of its confluence with the Merrimack River. Location and aerial site maps are shown in **Figures 1** through **3** of Attachment 3.

Project Support

Project partners include CRT Development Realty, LLC (CRT, the dam owner), the National Oceanic and Atmospheric Administration (NOAA) Restoration Center, the US Fish and Wildlife Service (USFWS), the National Park Service (NPS), the Massachusetts Department of Fish and Game (DFG) Division of Marine Fisheries (DMF) and Division of Ecological Restoration (DER), OARS For the Assabet Sudbury and Concord Rivers (OARS), the Merrimack River Watershed Council (MRWC), the Lowell Parks and Conservation Trust (LPCT), and others.

This project was approved for implementation by the Nyanza Chemical Waste Dump Superfund Site Natural Resource Damages (NRD) Trustee Council (comprised of the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), represented by the Massachusetts Department of Environmental Protection (DEP), USFWS, and NOAA) and has received funding from the Nyanza Site NRD Settlement. The Talbot Mills Dam is one of seven dams identified as a priority for fish passage in the 2021 Merrimack River Comprehensive Plan, and the proposed dam removal project has been designated as a Priority Project by the Massachusetts Division of Ecological Restoration.

Previous Studies

The following previous studies and design phases have been completed to date (documents available from www.merrimack.org/talbotmills[1]):

- Concord River Diadromous Fish Restoration Feasibility Study (Gomez and Sullivan Engineers (GSE), 2016)
- Review of Talbot Mills Dam Removal Feasibility Study (Streamworks, 2020)
- Talbot Mills Dam Removal Targeted Impact Analysis (GSE, 2021)
- Review of Talbot Mills Dam Removal Targeted Impact Analysis (Woodard & Curran and Streamworks, 2022)
- Conceptual Design (GSE, 2022)
- Preliminary Design (GSE, 2023)

Public Outreach

The following formal outreach meetings have been conducted to date for the project.

- August 7, 2014: The project team held a public information session regarding the fish passage feasibility study. View the slides here.
- February 23, 2016: The project team held a public meeting regarding the fish passage feasibility

1 Note: If you are reviewing a hardcopy of this document, all hyperlinked documents can be found by navigating from the project website at www.merrimack.org/talbotmills.

study. View the slides here.

- May 15, 2022: The project team presented to the Middlesex Canal Association. Watch the recording here and view the slides here.
- June 29, 2022: The project team held a public meeting about the Talbot Mills Dam removal. Watch the recording here and view the slides here.
- March 2, 2023: The project team held a pre-filing meeting with representatives from MEPA, the DEP 401 WQC Program, the DEP Wetlands Program, and the USACE.
- April 10, 2023: Members of the project team gave an informational presentation to the Billerica Planning Board. Watch the recording here and view the slides here.
- April 12, 2023: Members of the project team gave an informal presentation to the Billerica Planning Board. View the slides here.
- April-June 2023: OARS, one of the project leads, made informal presentations to various community groups in and around Billerica.

Watershed

The Concord River is part of the 399-square-mile Sudbury-Assabet-Concord (SuAsCo) watershed. The Assabet and Sudbury Rivers start in Westborough and flow north to Concord where they join to form the Concord River. The Concord River then flows north to join the Merrimack River in Lowell. From there, the Merrimack River flows northeast into the Atlantic Ocean in Newburyport and Salisbury, Massachusetts. The drainage area of the Concord River at the Talbot Mills Dam is about 370 square miles.

Talbot Mills Dam

The Talbot Mills Dam (NID ID MA00774) is an approximately 127-foot-long, 10-foot-high, granite masonry former mill dam built in 1828. It is classified as an Intermediate sized, Significant (Class II) Hazard potential structure in "fair" condition based on the most recent (2021) dam inspection report. The dam was previously used for industrial waterpower, but no longer serves a useful purpose. The current dam was built just downstream of a previous dam at the site, built in 1798. The 1798 dam was approximately 150 feet long and 8 feet high and is believed to be submerged in the impoundment approximately 8 to 12 feet upstream of the current dam, with rock/gravel fill between the two dams.

Impoundment

Because the upper Concord and lower Assabet and Sudbury Rivers are relatively flat in gradient, the Talbot Mills Dam has some effect on upstream water levels for 11.6 miles on the Concord River, 17 miles on the Sudbury River (up to the Saxonville Dam in Framingham), and 6.4 miles on the Assabet River (up to the High Street Dam in Acton). However, the area of significant hydraulic influence is limited to the area between the dam and the Pollard Street bridge (about 0.6 miles upstream of the dam), which is referred to in this document as the lower impoundment. A natural high point in the riverbed known as the Fordway Bar, comprised primarily of cobbles, boulders, bedrock, and other hard substrate, spans the river in the vicinity of the Pollard Street bridge and reduces the hydraulic influence of the dam upstream of that point. The lowermost section of the impoundment, which is significantly wider than the riverine sections upstream, is referred to as the Mill Pond and is approximately 9 acres in surface area.

Land Use

The Talbot Mills Dam is situated in a small industrial area that includes several active and former mill buildings on the downstream side of Faulkner Street, with residential areas beyond the immediate dam vicinity. The lower impoundment (downstream of the Pollard Street bridge) is surrounded by a buffer of mostly deciduous forest and bordering vegetated wetlands. Wilson Street parallels the western shoreline

of the lower impoundment, with single- and multi-family homes set back approximately 100 to 250 feet from the bank with a forested buffer between.

Regulated Areas

The project is not located within, nor will it directly impact, any of the following regulated areas:

- Massachusetts Natural Heritage and Endangered Species Program (NHESP) Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife
- Areas of Critical Environmental Concern (ACECs)
- Outstanding Resource Waters (ORWs)

Environmental Justice Communities

Figures 4 and **5** in Attachment 3 depict Environmental Justice (EJ) blocks within 1 mile and 5 miles of the project site, respectively. No air quality impacts are anticipated for this project, so a 1-mile radius is the appropriate "designated geographic area" per the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations. The two EJ blocks within 1 mile of the project site are both designated as the "Minority" category. No EJ populations with English isolation are identified within 1 mile of the project site. However, the project team has proactively translated and distributed a project summary and Frequently Asked Questions (FAQ) document into Spanish, Portuguese, and Khmer based on input from local community organizations about languages other than English that may be spoken in the vicinity of the project.

Cultural Resources

The Talbot Mills Dam is a historic property listed in the National Register of Historic Places as a contributing resource to both the Middlesex Canal Historic and Archaeological District and the Billerica Mills Historic District. The dam is also within the North Billerica Mills Local Historic District. The project's area of potential effects (APE) contains eleven other historic properties that are listed as contributing resources in the historic district(s), three of which are also identified as archaeological sites (see lists in the **General Project Information** – Historical/Archaeological Resources section). The project's APE is also assessed as having a high potential to contain unrecorded pre-contact Native American and other documented post-contact archaeological resources.

The site of the current Talbot Mills Dam has a long and controversial past, with multiple dams being constructed, removed, and rebuilt throughout the years. Prior to the damming of the river at this location, the area was used by generations of Native Americans as an encampment and fishing grounds. A map of Billerica circa 1700 documents the existence of a series of falls in the Concord River between the present-day Pollard Street and Faulkner Street bridges. A large Native American village is reported to have been located along the Concord River in proximity to the Talbot Mills Dam. The Native American occupation in the area of the dam was focused on a natural falls, which would have afforded an abundance of diadromous fish resources and wildlife. The first dam was erected at the location of the current Talbot Mills Dam in 1710-11.

The Talbot Mills Dam removal project requires review under Section 106 of the National Historic Preservation Act (NHPA). A historic and archaeological reconnaissance survey was conducted for the Talbot Mills Dam project area as a part of the 2016 Feasibility Study. A Project Notification Form (PNF) was submitted to the Massachusetts Historical Commission (MHC) on November 10, 2014. Correspondence with MHC regarding the cultural resources survey is provided in Attachment 5. A technical report was prepared and submitted to the MHC on January 19, 2016. A redacted version of the

report is provided as Appendix H of the 2016 Feasibility Study Report. Additional details about historical and archaeological resources, impacts, and mitigation measures are provided in the Historical and Archaeological Resources Section of this EENF.

Describe the proposed project and its programmatic and physical elements:

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

The owner of the Talbot Mills Dam is seeking dam removal as the best alternative to restore migratory fish passage and connectivity for resident aquatic species; decommission aging infrastructure; eliminate ongoing maintenance and repair obligations; reduce flood hazards and increase resilience; and improve water quality, habitat, and natural river functions.

Preliminary (60%) design plans are provided in Attachment 4. Major elements of the proposed project include: 1) removal of the approximately 127-foot-long, 10-foot-high existing granite masonry spillway and concrete right abutment, 2) documentation and removal of a former 1798 timber/rock fill dam assumed to be submerged just upstream (if found), and 3) grading of sediment immediately upstream of the dam. Sediment within the dam impoundment is proposed to be allowed to move downstream naturally over time and restore sediment-deprived areas (see *Sediment Management* discussion below).

Construction Approach

Timing

Construction is anticipated to take approximately three to four months and will ideally be scheduled during the low flow period in summer/fall. Any time-of-year (TOY) restrictions for fisheries imposed by DMF or DFW will be accommodated.

Access/Staging

Temporary construction access and staging will likely be concentrated in the small, paved open area between the river right[1] dam abutment and Faulkner Street, as well as in the lot immediately south of the new Middlesex Canal Museum building at 2 Old Elm Street. At least one additional potential loading/access point has been identified, but the project team is still assessing the need and obtaining necessary permissions. In order to provide access for heavy equipment into the channel to remove the dam, a temporary stone fill ramp will be built adjacent to the stone retaining wall leading down from the small, paved park area. Swamp mats (temporary wood platforms) will be utilized as needed to minimize disturbance while traversing dewatered soft sediments with equipment. The area of direct disturbance due to temporary access/staging and demolition activities is anticipated to be less than one acre and will be restored to former conditions following construction.

Water Control

The selected contractor will be required to prepare a water control plan to be approved by the engineer that conforms to applicable environmental permit requirements and conditions. A preliminary water control approach is depicted in the design plans in Attachment 4. At this stage, it is envisioned that the impoundment will first be lowered by removing stoplogs in the existing sluice gate and then removing the

1 River-right and river-left refer to the direction when facing downstream.

concrete right abutment. A flow diversion can then be constructed (e.g., using Super Sacks or other cofferdam materials) to direct flow away from the spillway and through the sluiceway channel to allow removal of the spillway to commence. If inflows exceed the capacity of the sluiceway channel, work can be suspended, or alternate flow diversion channels can be constructed.

Erosion, Sedimentation, & Pollution Control

Proposed erosion, sedimentation, and pollution controls are shown in the design plans in Attachment 4. All work will be conducted in accordance with the local erosion and sedimentation control guidelines and best management practices. Erosion, sedimentation, and pollution controls will be installed prior to any major soil or stream disturbance and maintained until permanent protection is established. Recommended controls include compost filter socks around the access and staging areas, an oil boom across the channel downstream of the dam, a stabilized construction entrance, and temporary access ramps and/or swamp mats as needed to minimize soil disturbance while accessing channel areas, and erosion control blankets to be placed on any slopes greater than a 3 horizontal to 1 vertical (3H:1V) slope.

Sediment Management

A Sediment Management Plan has been developed in consultation with DEP. Sediment volume estimation and contaminant sampling efforts were conducted in the dam impoundment and upstream and downstream reference areas in 2014 and 2022. The Sediment Management Plan provides detailed descriptions of sampling methods, locations, results, and the proposed management approach.

A partial in-stream sediment management approach is proposed. This approach will involve grading sediment directly behind the spillway and former dam to a 3H:1V slope or flatter and allowing upstream sediment to be transported downstream and repositioned naturally over time.

During dewatering of the impoundment and construction, weighted turbidity curtains will be temporarily installed along the edges of invasive water chestnut growth areas, which coincide with major sediment deposits, to encourage sediment to stabilize in place, reduce the downstream transport of water chestnuts, and allow the water chestnuts to dry out, which will prevent their continued growth due to lack of suitable lacustrine habitat (see additional details in *Invasive Species* section below). Drawing down the impoundment and letting the dewatered sediment stabilize prior to construction will facilitate a more gradual erosion process once the dam is removed. Sediment in backwatered areas will likely stabilize in place as restored floodplains and/or bordering vegetated wetlands.

Invasive Species Management

Invasive water chestnut (*Trapa natans*) is present throughout the SuAsCo watershed, including on the Concord River both upstream and downstream of the Talbot Mills Dam. Water chestnut prefers quiet, nutrient rich water bodies but can occasionally be found in slow moving water. Water chestnut degrades water quality and productivity in rivers and ponds due to the large amount of water surface covered by the plants and the resulting decaying biomass. In addition, recreational access can be extremely restricted when the water chestnuts are in full growth because the tangled mass of water chestnut stems in the water makes it difficult or impossible to paddle a boat, fish, or swim through it. Water Chestnut reproduces primarily via the production of nuts. Control methods include herbicide (currently the preferred method), drawdowns, hand-pulling, or mechanical harvesting.

During the summer months, heavy water chestnut growth fills most of the surface of the Mill Pond (approximately 8 acres) upstream of Talbot Mills Dam, except for the main riverine flow path where the water is moving more quickly. With the dam in place, the existing invasive water chestnut present in the

lower dam impoundment will continue to grow each summer and will likely spread over time as the impoundment becomes more and more eutrophic. The extensive infestation of water chestnut in the dam impoundment is well beyond hand-pulling removal methods typically used elsewhere in the watershed and could only be controlled by foliar herbicide or dam removal. Removal of the dam would eliminate most of the stagnant/slow-moving habitat necessary for the water chestnut to thrive and thus would address the infestation without requiring ongoing efforts and costs. As is the case in upstream and downstream reaches, scattered pockets of water chestnut may persist in slow-moving areas near the banks, but these populations could be feasibly removed by hand pulling and would not re-establish to previous extents due to the lack of suitable habitat. As discussed under *Sediment Management* above, turbidity curtains will be used to isolate water chestnut infestations in the impoundment during dewatering and construction to minimize the number of nuts moving downstream. In accordance with the 2017 Water Chestnut Management Plan for the SuAsCo watershed, monitoring will continue to occur on a regular basis (for at least two years following dam removal) to identify and control new infestations of water chestnut at the project site.

Potential Impacts

Upstream Impacts

Engineering studies have demonstrated that significant changes in water levels upstream of the dam will be limited to the lower impoundment downstream of the Pollard Street bridge. Upstream of the bridge, water level changes will be no more than 5 inches for modeled flow conditions ranging from drought to the 0.2 percent annual exceedance probability (AEP) (i.e., 500-year) flood. Following dam removal, it is anticipated that the lower impoundment will be restored to a series of cascading waterfalls that were formerly present at the site before the dam was built.

Water Supply

A Targeted Impact Analysis was conducted in 2021 to evaluate potential effects of the proposed removal of Talbot Mills Dam on an upstream raw water intake operated by the Town of Billerica approximately 1.25 miles upstream of the dam, as well as address other Town concerns with the proposed project. The anticipated reduction in water surface elevation at the intake during the 7Q10 drought flow (28 cfs) is 0.3 feet (about 4 inches). The minimum water depth above the intake pipe invert would be 4.3 feet (down from 4.6 feet for existing conditions) for the 7Q10 drought flow. The Town's consultant reviewed the 2021 impact analysis, and in an April 15, 2022 memo by Woodard & Curran, indicated that they "do not anticipate the predicted change in water level as a result of the dam removal will cause a hydraulic issue at the intake structure." The Town's consultant noted that changes in water quality at the intake are difficult to predict, but if anything, dam removal may improve water quality by increasing flow velocity and reducing water temperate, which can lead to less stagnation, sedimentation, and other issues that could affect water treatment costs.

The 2021 Targeted Impact Analysis also addressed the Town's concerns with potential contaminant migration from a nearby USEPA Superfund Site known as Iron Horse Park, located approximately one mile southeast of the Talbot Mills Dam at Iron Horse Park off High Street in North Billerica. A wetted section of the old Middlesex Canal runs between the dam impoundment (approximately 1.2 miles downstream of the Town's water intake) and the Superfund Site. The 2021 desktop analysis preliminarily concluded that the proposed dam removal project was unlikely to result in the migration of contaminated groundwater, surface water, or sediments away from the Iron Horse Park Superfund Site due to presumed surface water and groundwater flow directions away from the Concord River, as well as the presence of a significant geologic and watershed divide near the railroad that crosses the canal approximately halfway between

the river and the Superfund Site. The Town's consultant reviewed the analysis, and in an April 15, 2022 memo by Streamworks, recommended additional field studies to confirm the assumptions. A field survey was conducted in April 2023 and confirmed that 1) the canal is completely blocked at the railroad with fill material (no culvert present), 2) water flows east from the railroad toward the Superfund Site, 3) the culvert nearest to the impoundment (Rogers Street) has an invert elevation approximately 2.5 feet above the Talbot Mills Dam, which would be significantly perched above the river post-dam removal. Based on these findings, it was determined that the proposed dam removal project will not result in the migration of contaminants away from the Iron Horse Park Superfund Site via surface water.

Infrastructure Scour

Gomez and Sullivan conducted an infrastructure scour analysis for infrastructure upstream of the Talbot Mills Dam, including the Pollard Street and Boston Road (Route 3A) bridges and the sewer force main crossing downstream of Boston Road, to evaluate the potential for scour due to the proposed dam removal. Scour analyses were performed consistent with the Federal Highway Administration's (FHWA) Hydraulic Engineering Circular No. 18 (HEC-18), "Evaluating Scour at Bridges" (2012), except where noted in the MassDOT bridge manual (2020). No potential scour issues were identified, and no scour mitigation measures were proposed. Additional details can be found in the 2022 Infrastructure Scour Analysis Report.

Downstream Impacts

Because the Talbot Mills Dam is a run-of-river dam with no flood storage capacity, outflow from the dam would still equal inflow even with the proposed dam removal, and there would be no change in flow downstream of the immediate project area. To confirm this assumption, an unsteady flow hydraulic model was developed using flows from the March 2010 flood event. The results indicated that there would be no changes between existing and proposed (post-dam removal) water surface elevations downstream of the Talbot Mills Dam. Therefore, no impacts are anticipated for downstream structures, including the Faulkner Street bridge immediately downstream of the dam and a sewer crossing and combined sewer outfall near Ilford Road approximately 0.25 miles downstream of the dam. Additional details can be found in the 2022 Downstream Impacts Memo.

Cultural Resources

The project team is committed to working with consulting parties to mitigate impacts to historical and archeological resources. Outreach to consulting parties has been initiated, and continued discussions will be held to determine ways to avoid, minimize, and/or mitigate adverse effects from the project to historic properties, including archaeologically sensitive areas, in accordance with Section 106 of the NHPA and MGL Chapter 9, Sections 26-27C (950 CMR 70-71).

The historic and archaeological reconnaissance survey (Appendix H of the 2016 Feasibility Study Report) found that the removal of the Talbot Mills Dam would directly impact the Middlesex Canal Historic and Archaeological District and the Billerica Mills Historic District by removing a contributing resource and altering the functional relationship of additional contributing historic/archaeological resources associated with the Middlesex Canal (i.e., lock and canal prism, floating towpath peninsula, and associated anchor stone. Dam removal would also create a permanent drawdown of the dam impoundment (Mill Pond) and expose and potentially impact archaeologically sensitive upland shoreline and underwater ground surfaces. These sensitive shoreline and underwater areas could contain potentially significant pre-contact Native American archaeological resources and structural remains of other documented resources associated with the Middlesex Canal, including a 1798 dam.

Measures to minimize impacts to the Talbot Mills Dam that have already been incorporated into the project design include retaining the river-left (west) granite masonry abutment (which contains the waste gate openings), as well as an adjacent section of the granite masonry spillway to support the remaining abutment. Potential mitigative measures could include reuse of historic dam materials (e.g., granite blocks) onsite and/or in the Middlesex Canal Museum), interpretive signage depicting both the pre-contact Native American and post-contact Euro-American history of the site, archeological monitoring and recordation during construction, and other measures to be identified and discussed with consulting parties.

Additional details about historical and archaeological impacts and potential mitigation measures are provided in the Historical and Archaeological Resources Section of this EENF.

Project Benefits

The proposed dam removal and Ecological Restoration Project will provide the following community and environmental benefits:

- Decommissioning of aging and unsafe infrastructure
- Elimination of ongoing maintenance and repair obligations
- Reduction of upstream flood hazards and increased climate resiliency
- Elimination of the potential for a catastrophic dam failure resulting in downstream flooding/property damage
- Restoration of natural riverine processes and ecological functions (e.g., sediment movement)
- Improvement of water quality (increased flow velocity and dissolved oxygen, reduced water temperature and stagnation)
- Restoration of passage and connectivity for diadromous fish and resident aquatic species
- Enhancement of aquatic habitat
- Significant reduction of invasive water chestnut infestation in impoundment and associated ongoing monitoring and treatment costs
- Improved public access to the river and new recreational activities (e.g., through-paddling, whitewater boating, fishing in fast-moving flow conditions, viewing of natural falls)
- Support of commercial and sport fisheries (e.g., striped bass, trout, cod, bluefish, tuna, etc.) and other species that forage upon diadromous fish throughout the Gulf of Maine

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

***NOTE**: The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Project Alternatives

The 2016 Feasibility Study considered various alternatives to restore diadromous fish to the Concord River watershed, including the following alternatives at Talbot Mills Dam:

- No Action

- Technical Fishway
- Dam Removal (partial or full)

These alternatives are summarized below. Additional information can be found in the 2016 Feasibility Study Report.

No Action

The "no action" alternative assumed that none of the proposed or other fish passage restoration alternatives would be implemented at the Talbot Mills Dam, and the dam would remain in place. No action at the Talbot Mills Dam would not meet target fish passage thresholds. The dam is an upstream barrier to diadromous and resident riverine fishes, so passage efficiency would be essentially zero. Failure to provide some form of upstream passage at the Talbot Mills Dam will continue to block anadromous species from accessing historic spawning, foraging, and nursery areas within the Concord River drainage.

With the dam in place, the existing invasive water chestnut present in the lower dam impoundment will continue to grow each summer and will likely spread over time as the impoundment becomes increasingly eutrophic. Water chestnut further degrades water quality and productivity in rivers and ponds due to the large amount of water surface covered by the plants and the resulting decaying biomass. In addition, recreational access can be extremely restricted when the water chestnuts are in full growth because the tangled mass of water chestnut stems in the water makes it difficult or impossible to paddle a boat, fish, or swim through it.

The Talbot Mills Dam is operated as a "run-of-river" dam where inflow equals outflow on a nearly continuous basis and therefore does not provide flood control. In fact, the dam increases upstream water surface elevations. Under the "no action" alternative, it would continue to artificially raise the river's water surface elevation, contributing to upstream flooding.

If the dam remains in place, the dam owner (currently CRT Development Realty) will continue to be responsible for ongoing operation and maintenance costs as well as liability. Although the dam was reported to be in "fair" condition in the most recent dam safety inspection report, several deficiencies were noted, and the structure will only continue to degrade over time. If the dam were to remain in place, several remedial measures would need to be implemented, which could result in impacts to cultural and environmental resources. If the dam were to unexpectedly fail, which is increasingly feasible with the higher intensity storms associated with climate change, there could be catastrophic impacts to downstream infrastructure and residential properties. Additionally, without the careful construction methods associated with a planned dam removal and controlled drawdown of the impoundment, a sudden dam failure could result in greater impacts to environmental and cultural resources (e.g., more sediment could erode downstream at a faster pace, large quantities of water chestnuts could be transported downstream, buried archeological artifacts could be lost, etc.).

Technical Fishway

Installation of a technical fishway, or fish ladder, was evaluated to allow fish to migrate upstream of the Talbot Mills Dam. Due to its relative effectiveness at passing target species including American shad, a Denil fishway was selected for the concept design in the 2016 Feasibility Study. A simple eel ramp was proposed to accommodate upstream migrating elvers. A downstream passage notch in the spillway was also proposed.

Installation of a fishway at the Talbot Mills Dam would provide some passage for at least some of the

target species. However, passage of other aquatic species and overall connectivity of the river would be minimal. None of the ecological and community benefits associated with dam removal (e.g., improved water quality, reduction in flooding, elimination of a dam safety hazard, new recreational opportunities, eradication of invasive species, etc.) would be achieved with a fish ladder. This alternative would result in impacts to cultural resources and aesthetics, as well as temporary impacts to wetland resources during construction. In order to install a fish ladder, the dam would need to be brought into compliance with dam safety regulations, which would require a significant cost and construction effort. The dam owner would continue to be responsible for ongoing operation, maintenance, and liability associated with the dam, as well as operation and maintenance of the fish ladder. The current dam owner is not interested in pursuing a fish ladder alternative and does not want to pass on the burden of maintaining a dam and fish ladder to the next generation.

Dam Removal

For the dam removal alternative, both full and partial dam removal were considered. It was determined that full removal of the entire Talbot Mills Dam and all appurtenances (including the former intake gates to the Faulkner Mills complex, the sluiceway channel, and any embankment sections that may or may not have been constructed as part of the original dam) is not feasible due to the integral nature of some structures with Faulkner Street and other adjacent structures. Partial dam removal would consist of removing the majority of the dam structure, including the spillway and left abutment down to bedrock, as well as the former 1798 dam (if found). The dam breach width was checked to ensure that it would no longer impound flow under the 0.2% AEP (500-year) flood. Partial dam removal was selected as the preferred alternative due to the numerous benefits listed under *Project Benefits* above, as well as minimal impacts that can't be addressed or mitigated.

Sediment Management Alternatives

Dam removal requires management of the sediment impounded by the dam. A sediment management plan is developed based on the quantity and quality of sediment present in the impoundment and in upstream and downstream reaches as well as the results of a due diligence analysis to assess the potential for contaminants in the watershed upstream of the dam. Management alternatives generally fall under one of two approaches—active or passive management. Active management includes more traditional methods to remove or otherwise control the sediment, such as mechanical dredging and channel reconstruction or in-place stabilization. Conversely, passive management, also known as "in-stream management," involves the natural erosion and downstream repositioning of impounded sediments over time. The approach is based on the premise that most (if not all) of the accumulated sediments in impoundments resulted from the presence of the dam, and that the accumulated material would have been transported downstream in the absence of the barrier. In fact, substrate in reaches downstream of dams are often lacking in finer sediments and would benefit from a release of sediments from behind the breached dam.

Dam removal projects in Massachusetts and elsewhere in New England have demonstrated that in-stream management of the appropriate types of sediments can be an acceptable sediment management strategy. While minor short-term impacts to downstream receiving areas may occur (e.g., deposition of sediment in pools), the potential for numerous medium- and long-term ecological benefits exists, including benthic habitat improvements and an influx of organic matter. Natural channel formation (versus a constructed channel) is also preferred as it is more likely to result in a dynamically stable stream form, involves far less cost, and avoids related impacts from the use of heavy equipment in recently dewatered soft wetland areas that typically have high archeological sensitivity due to their former status as Native American encampments prior to dam construction.

At this stage, a partial in-stream sediment management approach is proposed. Partial in-stream sediment management at this dam would involve removing material directly behind the spillway (if needed) and allowing upstream material to erode naturally over time. Additionally, areas of water chestnut growth in the impoundment (which coincide with the largest sediment deposits) will be contained with turbidity curtains during dewatering of the impoundment to prevent downstream migration of water chestnuts. This will have the benefit of stabilizing the majority of sediment in place along the sides of the impoundment. Drawing down the impoundment and allowing dewatered sediment to stabilize prior to construction will facilitate a more gradual erosion process once the dam is removed. Sediment in backwatered areas will likely stabilize in place as restored floodplains and/or bordering vegetated wetlands. Justification for partial instream management at this site includes, but is not limited to, the following factors:

- The dam removal will be implemented outside the most sensitive times of year for migratory fish species (coordination with DMF is ongoing)
- Contaminant concentrations are similar upstream, within the impoundment, and downstream (or will be isolated during dewatering and construction with turbidity curtains to encourage stabilization);
- The total of estimated likely/short-term and potential/long-term mobile impounded sediment is only 2% of the modeled mean annual sediment load for the watershed;
- Downstream migration of impounded sediments would be beneficial for the rocky sediment-deficient reach downstream of the dam;
- Mechanical removal of the impoundment sediments would require unnecessary significant impacts to natural resources;
- Cost effectiveness; and,
- Timing of the work and careful sequencing, along with construction oversight will ensure the proper implementation of this sediment management approach.

See the Sediment Management Plan for additional details.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The proposed project is a proactive ecological restoration project with climate change resilience benefits. All temporary and permanent impacts have been minimized in order to restore ecological processes while eliminating long-term operation and maintenance requirements. No mitigation is proposed.

If the project is proposed to be constructed in phases, please describe each phase:

The project is not planned to be constructed in phases.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?
☐Yes (Specify: _____) ☒No

If yes, does the ACEC have an approved Resource Management Plan? ☐Yes ☐No N/A;

If yes, describe how the project complies with this plan. N/A

Will there be stormwater runoff or discharge to the designated ACEC? ☐Yes ☐No N/A;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC. N/A

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species?
☐Yes (Specify: _____) ☒No

HISTORICAL/ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☒Yes (Specify: See below) ☐No

The project APE contains 14 historic properties that are eligible for listing in the National and State Registers of Historic Places. These properties include three historic districts that overlap and extend outside of the Project APE:

- Middlesex Canal Historic and Archaeological District/Middlesex Canal Historic District (MHC Nos. BIL.T, BIL.K, BIL.P)
- Billerica Mills National Register Historic District (MHC No. BIL.O)
- Billerica Mills Local Historic District (MHC No. BIL.E)

Contributing resources within these historic districts in the project APE consist of:

- Middlesex Canal Dam and Locks (aka Talbot Mills Dam) (MHC Nos. BIL.900/BIL-HA-09)
- Middlesex Canal Segment 24 (MHC Nos. BIL.P, BIL.T, BIL.929/BIL-HA-08)
- Middlesex Canal Floating Towpath Peninsula (MHC No. BIL.953/BIL-HA-39)
- Middlesex Canal Floating Towpath Anchor Stone (MHC No. BIL-HA-40)
- J.R. Faulkner Mills (MHC No. BIL.77)
- Faulkner Kindergarten (MHC No. BIL.78)
- Talbot Mills (MHC No. BIL.80)
- William Rogers House/Toothaker Tavern (MHC No. BIL.273)
- Talbot Woolen Mills Worker Housing (MHC No. BIL.274)
- Warehouse (MHC No. BIL.317)
- Faulkner Street Bridge over Concord River (MHC No. BIL.935)

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☒Yes (Specify: See below) ☐No

There are four contributing historic/archaeological resources to the Middlesex Canal Historic and Archaeological District within the project APE. The proposed project would involve the removal of the

granite masonry spillway and concrete right abutment of the Talbot Mills Dam (MHC No. BIL-HA-09). The proposed permanent drawdown of the impoundment would expose the Middlesex Canal Prism, Middlesex Canal Floating Towpath Peninsula, and the Middlesex Canal Floating Towpath Stone Anchor, all of which are inventoried archaeological sites (MHC Nos. BIL-HA-08, BIL-HA-39, and BIL-HA-40, respectively).

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?
☐Yes ☒No; if yes, identify the ORW and its location.

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? ☒Yes ☐No; if yes, identify the water body and pollutant(s) causing the impairment:

Concord River – Eurasian Water Milfoil, Fanwort, Fish Passage Barrier, Non-Native Aquatic Plants, Water Chestnut, Mercury in Fish Tissue

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ☒Yes ☐No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations.

The proposed project is a dam removal and Ecological Restoration Project; it is not a development project. Therefore, only stormwater standards related to temporary construction impacts would apply.

The selected contractor will be responsible for developing and implementing a plan to control construction-related impacts, including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities. The plan will be required to comply with all conditions contained in relevant permits and must be approved by the engineer.

During construction, temporary erosion, sedimentation, water, and pollution controls will be utilized in accordance with BMP guidelines recommended by DEP. All potential access/staging areas are paved and not subject to erosion. Sedimentation due to stormwater runoff will be managed with approved measures such as silt socks installed at the limits of all work/disturbances. Disturbed and stockpile areas will receive temporary seeding/mulching/riprap as appropriate. Dust will be controlled as necessary. The site will be restored to its former condition following construction.

The proposed project will not create any new impervious surfaces. All work will be conducted using best management practices for construction under strict oversight and in compliance with state, federal, and local permit conditions.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts

Contingency Plan? ☐Yes ☒No; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

Is there an Activity and Use Limitation (AUL) on any portion of the project site? ☐Yes ☒No;
if yes, describe which portion of the site and how the project will be consistent with the AUL:

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?
☐Yes ☒No; if yes, please describe:

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

The primary solid waste material to be generated during construction will be the granite masonry blocks that comprise the spillway. It is expected that these granite blocks will be salvaged for appropriate reuse on or offsite. It is anticipated that some stones will be reused onsite as a mitigative measure to honor the history of the structure. Other solid waste materials will include the concrete right spillway and timber and stone fill materials from the 1798 dam, if found. It is anticipated that these materials will be taken offsite for lawful recycling or disposal.

Will your project disturb asbestos containing materials? ☐Yes ☒No;
if yes, please consult state asbestos requirements at http://mass.gov/MassDEP/air/asbhom01.htm

Describe anti-idling and other measures to limit emissions from construction equipment.

Excessive idling during the construction period will be prohibited. The methods of reducing idling will include posting signage limiting idling to five minutes or less at the project site, driver training, and periodic inspections by site supervisors to ensure compliance with this regulation once the project is occupied. Finally, staging areas will be established in a manner that minimizes impacts to abutting properties from construction equipment emissions.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? ☐Yes ☒No; if yes, specify name of river and designation:

The Talbot Mills Dam and lower impoundment (where the most significant river change will occur following dam removal) is not located on a Wild and Scenic designated segment; however, 29 miles of the upstream Concord, Sudbury, and Assabet Rivers are designated as Wild and Scenic, portions of which are hydraulically influenced by the Talbot Mills Dam. The designated reach includes: the 14.9-mile segment of the Sudbury River downstream of the Danforth Street Bridge in Framingham; the 4.4-mile segment of the Assabet River downstream of the Damonmill Dam in West Concord; and the 8-mile segment of the Concord River from the confluence of the Sudbury and Assabet Rivers downstream to the Route 3 bridge in Billerica.

Construction activities associated with the proposed dam removal will not directly impact the Wild and Scenic designated segment of the rivers; however, water levels will be slightly lowered after the dam

removal as far upstream as the first dams on the Sudbury and Assabet Rivers. Reductions in water surface elevation will be limited to less than 0.3 feet (3.6 inches) for modeled flows ranging from the 7Q10 drought to the 500-year (0.2% AEP) flood.

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?
☐Yes ☒No; if yes, specify name of river and designation:

if yes, will the project result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River. ☐Yes ☒No;

if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

Based on preliminary consultation with the NPS, there is a strong potential for positive impacts to several of the "outstandingly remarkable" values (ORVs) for which the rivers were designated, mainly ecology. The ecological benefits of the project to the upstream designated river segments are numerous, and include restoration of natural riverine processes (e.g., sediment movement), improvement of water quality (e.g., increased flow velocity and dissolved oxygen, reduced water temperature and stagnation), restoration of passage and connectivity for diadromous fish and resident aquatic species, and enhancement of aquatic habitat.

LAND SECTION

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to land (see 301 CMR 11.03(1)
☐Yes ☒No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	0	0	0
Internal roadways	0	0	0
Parking and other paved areas[1]	1.41	0	1.41
Other altered areas[2]	0.09	-0.07	0.02
Undeveloped areas[3]	1.17	0.07	1.24
Total: Project Site Acreage	2.67	0	2.67

1. Parking/paved areas include potential access/staging areas.

2. Other altered areas include existing structures (e.g., the spillway, abutments, and former 1798 dam). The change in this category reflects the proposed removal of the spillway, right abutment, and 1798 dam.

3. Undeveloped areas include the river channel (LUW) and forested bank. The change in this category reflects the removal of the dam structures and conversion to additional LUW.

B. Has any part of the project site been in active agricultural use in the last five years?
☐Yes ☒No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use? ☐Yes ☒No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ☐Yes ☒No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
☐Yes ☒No; if yes, does the project involve the release or modification of such restriction?
☐Yes ☒No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ☐Yes ☒No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? ☐Yes ☒No; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan

Title: Town of Billerica, MA Master Plan Date: 2018

B. Describe the project's consistency with that plan with regard to:

1. economic development

This project will not directly impact economic development. However, as the site is proposed for a future public access point to the river, indirect economic benefits may result due to increased recreational tourism (e.g., fishing, canoeing/kayaking, and possibly whitewater boating). The restoration of diadromous fish in the Concord River would also result in economic benefits related to the recreational and commercial fisheries of other fish species (e.g., striped bass, trout, cod, bluefish, tuna, etc.) that forage upon diadromous fish along the Atlantic coast.

2. adequacy of infrastructure

The existing dam has various dam safety issues, including inadequate spillway capacity to pass flood flows, failed outlet structures, and lack of an Emergency Action Plan. This project will decommission aging and ineffective infrastructure and eliminate the threat of a potential catastrophic dam failure.

3. open space impacts

This project will contribute positively to open space goals indicated in the plan, including protection of surface waters from non-point source pollution and improving overall water quality and well as enhancing climate resilience against severe storm and flooding events through the restoration of wetland and floodplain resources.

4. compatibility with adjacent land uses

Land use in the project area is primarily industrial (in the immediate dam vicinity) and residential (along the lower impoundment). The proposed project will increase public access to the river and reduce upstream flooding of residential areas, which is compatible with adjacent land uses.

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

RPA: Northern Middlesex Council of Governments

Title: Regional Strategic Plan for Greater Lowell Date: September 2011

D. Describe the project's consistency with that plan with regard to:

1. economic development

This project will not directly impact economic development. However, as the site is proposed for a future public access point to the river, indirect economic benefits may result due to increased recreational tourism (e.g., fishing, canoeing/kayaking, and possibly whitewater boating). The restoration of diadromous fish in the Concord River would also result in economic benefits related to the recreational and commercial fisheries of other fish species (e.g., striped bass, trout, cod, bluefish, tuna, etc.) that forage upon diadromous fish along the Atlantic coast.

2. adequacy of infrastructure

   This project is designed to enhance existing infrastructure to improve habitat continuity. Several deficiencies have been noted in the most recent dam safety inspection report for the Talbot Mills Dam. Removal of the dam would address these deficiencies by eliminating the dam and reducing the safety risk associated with a deficient dam.

3. open space impacts

   The project will contribute positively to open space goals indicated in the plan, including improvement of ecological benefits by improving flood and erosion control and enhancing biodiversity conservation.

RARE SPECIES SECTION (N/A)

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ☐Yes ☒No; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

B. Does the project require any state permits related to **rare species or habitat**? ☐Yes ☒No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ☐Yes ☒No.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ☐Yes ☐No. If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ☐Yes ☐No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ☐Yes ☐ No; if yes, attach the letter of determination to this submission.
2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ☐Yes ☐No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts
3. Which rare species are known to occur within the Priority or Estimated Habitat?
4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? ☐Yes ☐No
5. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ☐Yes ☐No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ☐Yes ☐No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ☐Yes ☐No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? ☒Yes ☐No; if yes, specify, in quantitative terms:

- Structural alteration of an existing dam that causes any decrease in impoundment capacity
  - The dam removal will decrease impoundment capacity. However, this is a run-of-river dam, not a flood storage dam, and its removal will actually decrease flood elevations.
- Alteration of 500 or more linear feet of bank along a fish run or inland bank
  - The project will result in the loss of about 2,800 linear feet of bank due to reduction of the impoundment area.
- Alteration of 5,000 or more sf of bordering or isolated vegetated wetlands.
  - The project will result in the conversion of approximately 436,000 sf of LUW to BVW and the conversion of up to approximately 411,000 sf of BVW to upland riparian resources, for a net gain in BVW of approximately 24,000 sf.

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? ☒Yes ☐No; if yes, specify which permit:

- Clean Water Act Sect. 401 Water Quality Certification (DEP)
- Public Waterfront Act Ch. 91 Waterways Dredge Permit (DEP)
- Ecological Restoration Project Notice of Intent & Order of Conditions (DEP/Town of Billerica)

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? ☒Yes ☐No;

1. if yes, has a Notice of Intent been filed? ☐Yes ☒No;
2. if yes, list the date and MassDEP file number:
3. if yes, has a local Order of Conditions been issued? Was the Order of Conditions appealed? Will the project require a Variance from the Wetlands regulations? ☐Yes ☒No.

A Notice of Intent for an Ecological Restoration Project will be filed once a 401 Water Quality Certification is issued for the project.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The proposed dam removal will restore free-flowing riverine conditions and continuity in the former impoundment, replacing the unnatural lacustrine (lake-like) conditions caused by the dam. Wetland resources are expected to re-establish at lower elevations along the restored river banks as new bordering vegetated wetlands and riparian buffers develop in formerly impounded areas. Any temporary impacts to wetland resources during construction will be mitigated with best management practices. Temporarily disturbed areas used for access/staging will be restored

following construction.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	Area (square feet) or Length (linear feet)	Temporary or Permanent Impact?
Land Under the Ocean	N/A	N/A
Designated Port Areas	N/A	N/A
Coastal Beaches	N/A	N/A
Coastal Dunes	N/A	N/A
Barrier Beaches	N/A	N/A
Coastal Banks	N/A	N/A
Rocky Intertidal Shores	N/A	N/A
Salt Marshes	N/A	N/A
Land Under Salt Ponds	N/A	N/A
Land Containing Shellfish	N/A	N/A
Fish Runs	N/A	N/A
Land Subject to Coastal Storm Flowage	N/A	N/A
Inland Wetlands		
Bank (lf)	1,200 / -2,800	Temporary / Permanent*
Bordering Vegetated Wetlands	0 / 24,000	Temporary / Permanent*
Isolated Vegetated Wetlands	0	N/A
Land under Water	46,000 / -436,000	Temporary / Permanent*
Isolated Land Subject to Flooding	0	N/A
Bordering Land Subject to Flooding	900 / -441,000	Temporary / Permanent*
Riverfront Area	61,000 / -314,000	Temporary / Permanent*

**Temporary impacts indicate the area that may be directly disturbed during construction. Permanent impacts indicate the anticipated permanent change of a wetland resource from one type to another. It is anticipated that approximately 436,000 sf of LUW will be converted to BVW. Up to approximately 411,000 sf of existing BVW may convert to upland riparian areas or may remain partially as BVW, depending on other hydrologic inputs. Consequently, there will be a net increase in BVW of up to 24,000 sf. The riverfront area will be reduced by about 314,000 sf due to the narrowing of the river banks to a more natural riverine condition representative of bankfull width.*

D. Is any part of the project:

1. proposed as a **limited project**? ☐Yes ☒No; if yes, what is the area (in sf)? N/A
2. the construction or alteration of a **dam**? ☒Yes ☐No; if yes, describe:

   Removal of the granite masonry primary spillway and river-right (east) concrete abutment of the Talbot Mills Dam. The river-left (west) granite masonry abutment will be retained. An approximately 20-foot-wide stepped section of the spillway adjacent to the left abutment will be retained to support the abutment.
3. fill or structure in a **velocity zone** or **regulatory floodway**? ☐Yes ☒No
4. dredging or disposal of dredged material? ☒Yes ☐No; if yes, describe the volume of

dredged material and the proposed disposal site:

The project will involve active dredging or excavation of the following materials:

- Granite masonry spillway & right abutment (384 CY) – Salvage
- Concrete right abutment (20 CY) – Lawful recycling or disposal site TBD
- Wood/rock fill 1798 dam (238 CY) – Reuse onsite and/or lawful disposal site TBD
- Rock fill from between dams (411 CY) – Reuse onsite and/or lawful disposal site TBD
- Sediment grading upstream of dam to achieve 3:1 slope (31 CY) – Reuse onsite and/or lawful disposal site TBD

Additionally, impounded sediment upstream of the dam is proposed for passive instream management. Sediment that will potentially mobilize due to dam removal was divided into two categories—sediment within the main flow path that would likely mobilize in the short-term, and sediment outside the main flow path (behind the proposed turbidity curtains) that would initially dewater in place but could potentially mobilize over the long-term as the river adjusts its course. The likely short-term mobilization volume was found to be 2,600 CY, while the potential long-term mobilization was estimated to be 7,000 CY. The total of estimated likely/short-term and potential/long-term mobile impounded sediment represents only 2% of the modeled mean annual sediment load for the watershed. See Sediment Management Plan for additional details.

5. a discharge to an Outstanding Resource Water (ORW) or an Area of Critical Environmental Concern (ACEC)? ☐Yes ☒No
6. subject to a wetlands restriction order? ☐Yes ☒No; if yes, identify the area (in sf): N/A
7. located in buffer zones? ☒Yes ☐No; if yes, how much (in sf): The area of direct construction disturbance near the dam (including access/staging areas) includes approximately 50,500 sf of 100-foot bank/BVW buffer zones and 60,900 sf of 200-ft Riverfront Area.

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ☒Yes ☐No:
2. alter any federally protected wetlands not regulated under state law? ☐Yes ☒No
3. if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ☒Yes ☐No

1. if yes, is there a current Chapter 91 License or Permit affecting the project site? ☐Yes ☒ No;
2. if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

B. Does the project require a new or modified license or permit under M.G.L.c.91? ☒Yes ☐No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current: 0 Change: 0 Total: 0
If yes, how many square feet of solid fill or pile-supported structures (in sf)? 0

For non-water-dependent use projects, indicate the following:
Area of filled tidelands on the site: N/A
Area of filled tidelands covered by buildings: N/A
For portions of site on filled tidelands, list ground floor uses and area of each use: N/A

Does the project include new non-water-dependent uses located over flowed tidelands?
☐Yes ☒No

Height of building on filled tidelands: N/A

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-Dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks. See design plans in Attachment 4.

C. Is the project located on landlocked tidelands? ☐Yes ☒No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

D. is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ☐Yes ☒No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project non-water-dependent and located on landlocked tidelands or waterways or tidelands subject to the Waterways Act and subject to a mandatory EIR? ☐Yes ☒No; (NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

F. Does the project include dredging? ☒Yes ☐No; if yes, answer the following questions:

1. What type of dredging? Improvement ☒ Maintenance ☐ Both ☐
2. What is the proposed dredge volume, in cubic yards (cy) See Item II.D.4 above.
3. What is the proposed dredge footprint? 150 length (ft) 30 width (ft) Up to 11 depth (ft);

   Note this footprint includes both the current and former dams plus the area of sediment to be graded immediately upstream of the dams. The depth is conservative as it is the maximum height of the current spillway.
4. Will dredging impact the following resource areas?

   Intertidal ☐Yes ☒No; if yes, ___ sf

   Outstanding Resource Waters ☐Yes ☒No; if yes

   Other resource area (i.e., shellfish beds, eel grass beds) ☐Yes ☒No; if yes __ sf

   If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

   Measures to avoid, minimize, and mitigate environmental impacts of the proposed project include: obtaining and complying with all applicable environmental permits; minimizing the amount of impounded sediment that mobilizes downstream using turbidity curtains, maintaining continuous flow during construction (if inflow is sufficient to spill over the dam); adherence to TOY restrictions to limit impacts to fisheries; use of erosion, sedimentation,

water, and pollution control BMPs during construction; and restoration of disturbed areas following construction.

If no to any of the above, what information or documentation was used to support this determination? Resource areas mapped by MassGIS datalayers

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Sediment sampling efforts have been conducted in the dam impoundment and upstream and downstream reference areas in 2014 and 2022. See the Sediment Management Plan for a detailed description of sampling methods, locations, and results. As expected in most developed watersheds, the results indicate that there are some Threshold Effects Concentration (TEC) exceedances throughout the impoundment and upstream and downstream areas, particularly in metals, PAHs, and pesticides, which is not necessarily a cause for concern. There are also a few Probable Effects Concentration (PEC) exceedances for metals (including total chromium (but not the more mobile and concerning hexavalent chromium), copper, and mercury), PAHs (acenaphthylene), and pesticides (delta-BHC and chlordane) in the impoundment. The pesticides were also found to exceed PEC levels in upstream and downstream samples, but the others were not. Lastly, arsenic was found at or just above the MCP Method 2 / S-2 standard threshold for human exposure (20 mg/kg) in two of the composited impoundment samples (20 mg/kg at IMP-MB-1 and 23 mg/kg at IMP-MB-4). However, the area where these exceedances were found will be isolated during dewatering and construction using turbidity curtains, which will encourage the sediment to stabilize in place and minimize the likelihood that it will mobilize downstream.

Sediment Characterization

Existing gradation analysis results? ☒Yes ☐No: if yes, provide results. See Sediment Management Plan.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ☒Yes ☐No; if yes, provide results. See Sediment Management Plan.

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Potential/anticipated options are checked.

- ☐ Beach Nourishment
- ☐ Unconfined Ocean Disposal
- ☐ Confined Disposal:
  - ☐ Confined Aquatic Disposal (CAD)
  - ☐ Confined Disposal Facility (CDF)
- ☐ Landfill Reuse in accordance with COMM-97-001
- ☐ Shoreline Placement
- ☒ Upland Material Reuse
- ☒ In-State landfill disposal
- ☒ Out-of-state landfill disposal

(NOTE: This information is required for a 401 Water Quality Certification.)

See item II.D.4 above for more info.

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ☐Yes ☒No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management: N/A

B. Is the project located within an area subject to a Municipal Harbor Plan? ☐Yes ☒No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan: N/A

WATER SUPPLY SECTION (N/A)

I. **Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **water supply**? ☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	Existing	Change	Total
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ☐Yes ☐No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ☐Yes ☐No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____Will the project require an increase in that withdrawal? ☐Yes ☐No; if yes, then how much of an increase (gpd)? _____

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ☐Yes ☐No. If yes, describe existing and proposed water supply facilities at the project site:

	Permitted Flow	Existing Avg Daily Flow	Project Flow	Total
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ☐Yes ☐No
2. a Watershed Protection Act variance? ☐Yes ☐No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ☐Yes ☐No

III. Consistency

A. Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION (N/A)

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **wastewater**? ☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	Existing	Change	Total
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____

	Existing	Change	Total
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ☐Yes ☐No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ☐Yes ☐No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ☐Yes ☐No; if yes, describe as follows:

	Permitted	Existing Avg Daily Flow	Project Flow	Total
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ☐ Yes ☐ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ☐ Yes ☐ No; if yes, what is the capacity (tons per day):

	Existing	Change	Total
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ☐ Yes ☐ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION) (N/A)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **state-controlled roadways**? ☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	Existing	Change	Total
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

Roadway	Existing	Change	Total
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ☐Yes ☐No; if yes, describe if and how the project will participate in the TMA:

F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ☐Yes ☐No; if yes, generally describe:

G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

A. Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS & OTHER TRANSPORTATION FACILITIES) (N/A)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **roadways or other transportation facilities**?
☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency

A. Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION (N/A)

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **energy**? ☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	Existing	Change	Total
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ☐Yes ☐No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency

A. Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION (N/A)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **air quality**? ☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ☐Yes ☐No; if yes, describe existing and proposed emissions (in tons per day) of:

	Existing	Change	Total
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION (N/A)

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ☐Yes ☒No; if yes, specify, in quantitative terms: N/A

B. Does the project require any state permits related to **solid and hazardous waste**?
☐Yes ☒No; if yes, specify which permit: N/A

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ☐Yes ☐No; if yes, what is the volume (in tons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ☐Yes ☐No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?
☐Yes ☐No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

A. Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ☒Yes ☐No; if yes, attach correspondence. See Attachment 5. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ☒Yes ☐ No; if yes, attach correspondence. The Massachusetts Board of Underwater Archeological Resources (BUAR) was copied on a June 8, 2022 letter from NOAA to potential consulting parties. See Attachment 5.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ☒Yes ☐No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ☒Yes ☐No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ☒Yes ☐No; if yes, does the project involve the destruction of all or any part of such archaeological site? ☒Yes ☐No; if yes, please describe:

There are four contributing historic/archaeological resources to the Middlesex Canal Historic and Archaeological District within the project APE. The proposed project would involve the removal of the granite masonry spillway and concrete right abutment of the Talbot Mills Dam (MHC No. BIL-HA-09). The proposed permanent drawdown of the impoundment would expose the Middlesex Canal Prism, Middlesex Canal Floating Towpath Peninsula, and the Middlesex Canal Floating Towpath Stone Anchor, all of which are inventoried archaeological sites (MHC Nos. BIL-HA-08, BIL-HA-39, and BIL-HA-40, respectively).

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

A. Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

The removal of the Talbot Mills Dam will have direct and indirect (visual) impacts on the Middlesex Canal Historic and Archaeological District and the Billerica Mills Historic District by removing a contributing historic/archaeological resource and altering the functional relationship of the impoundment, lock, Canal Segment 24, Floating Towpath Peninsula, and the Floating Towpath Anchor Stone of the Middlesex Canal. The Talbot Mills Dam is also within the Billerica Mills Local Historic District.

The dam removal would also directly impact archaeologically sensitive underwater areas that have a high potential for unrecorded pre-contact Native American resources and other documented post-contact resources, including a 1798 Middlesex Canal dam and early fishway/fish ladder structures in the impoundment. If the 1798 dam exists and possesses archaeological integrity, it would be significant for its association with the development of the Middlesex Canal and would be a contributing resource to the Middlesex Canal Historic and

Archaeological District and Billerica Mills Historic District.

III. Consistency

A. Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

In 2014, on behalf of the project proponent, The Public Archaeology Laboratory, Inc. (PAL) submitted a PNF and permit application to the MHC to conduct a historic and archaeological reconnaissance survey for the modification or removal of the Talbot Mill Dam. The PNF identified that the project involved participation by federal agencies, including NOAA, the USFWS, and possibly the USACE. In a comment letter dated November 18, 2014, in response to the PNF, the MHC recommended that NOAA (as the lead federal agency) contact potential consulting parties, including the Billerica Historical Commission (BHC), Billerica Historic Districts Commission (BHDC), Middlesex Canal Association (MCA), and Middlesex Canal Commission (MCC), to ascertain their interest in reviewing and commenting on the project. The MHC requested to receive copies of any written comments received from these bodies.

In 2014–2016, PAL completed the reconnaissance survey for the project under a State Archaeologist's Permit issued by the MHC. The reconnaissance survey identified previously recorded historic and archaeological resources and sensitive areas within the study area, and based on the concept plan, recommended an APE for the dam removal option. The survey identified 14 listed/inventory historic properties, including archaeological resources within the recommended APE (see lists in the **General Project Information –** Historical/Archaeological Resources section).

In a letter dated February 16, 2016, the MHC provided comments to NOAA on PAL's reconnaissance survey report. The MHC requested to review additional information as project planning proceeds, including scaled proposed conditions project plans and NOAA's determinations and findings for the preferred project alternative, including determinations of the project's APE and potential effects to significant historic and archaeological resources.

In June 2022, NOAA distributed a letter to potential consulting parties, including the Town of Billerica, MCC, MCA, BHC, BHDC, Wampanoag Tribe of Gay Head (Aquinnah), Mashpee Wampanoag Tribe, Narragansett Indian Tribe, Massachusetts Commission on Indian Affairs, and MA BUAR. The letter invited parties to attend a public meeting that was held on June 29, 2022, and to formally participate in the Section 106 consultation process as the project progresses. A response was requested by July 29, 2022; responses were received from the BHC and the MCC.

Correspondence with MHC and consulting parties regarding the cultural analysis is provided in Attachment 5. A redacted version of the reconnaissance survey report is provided as Appendix H of the 2016 Feasibility Report.

In compliance with Section 106 of the NHPA and MGL Chapter 9, Sections 26-27C (950 CMR 70-71), NOAA, as the lead federal agency for the project, will consult with the Massachusetts State Historic Preservation Officer/MHC and the parties that have been invited to join the consultation to resolve the adverse effects of the dam removal on historic properties including, archaeologically sensitive areas. The consultation will result in a memorandum of agreement (MOA) that will specify measures to avoid, minimize, or mitigate the adverse effects.

Measures to minimize impacts to the Talbot Mills Dam that have already been incorporated into the dam removal design include retaining the river-left (west) granite masonry abutment (which contains the waste gate openings), as well as an adjacent section of the granite masonry spillway that will support the remaining abutment. Potential mitigation measures could include reuse of historic dam materials (e.g., granite blocks) onsite and/or in the Middlesex Canal Museum), interpretive signage depicting both the pre-contact Native American and post-contact Euro-American history of the site, archeological monitoring and recordation during construction, and other measures to be identified and discussed with consulting parties.

Because any new construction or alterations to the exterior of buildings and structures within the LHD will not receive a building permit until the proposed work has been issued a certificate of appropriateness from the BHDC, the BHDC will also be consulted separately through the Billerica Building Permit process.

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the "MEPA Interim Protocol"), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the "Climate Resilience Design Standards and Guidelines" project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available here.

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to rmat@mass.gov.

All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF. In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a respond to a user feedback survey on the RMAT website or to provide feedback to rmat@mass.gov, which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the RMAT Climate Resilience Design Guidelines.

Climate Change Adaptation and Resiliency Strategies

I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? ☒Yes ☐No

Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the RMAT Climate Resilience Design Guidelines.

A. If no, explain why.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and

design storm used (e.g., 100-year, 24-hour storm).

The proposed dam removal project is an Ecological Restoration Project that will improve climate change resilience by 1) reducing upstream flooding (by lowering water levels and increasing available floodplain storage) and 2) eliminating the risk of a catastrophic dam failure that could result in downstream flooding, property damage, and/or loss of life. Hydraulic modeling has demonstrated that dam removal will not increase downstream flooding as the dam provides no flood storage (see 2022 Downstream Impacts Memo).

The project will improve the listed climate parameters as follows:

- Sea Level Rise/Storm Surge – Not applicable.
- Extreme Precipitation – Dam removal will reduce upstream flooding and eliminate the risk of a catastrophic dam failure that would result in downstream flooding.
- Extreme Heat – The proposed project will improve access to the river and the natural falls that are anticipated to develop through the former impoundment once the dam is removed will provide a recreational opportunity for residents to cool off during periods of extreme heat.

The project will implement the following climate resilience design guidance best practices:

- Mitigate adverse climate impacts and provide benefits
- Restore critical natural resources
- Prioritize nature-based solutions

The project was designed in consideration of the anticipated increase in the magnitude of precipitation, flooding, and drought events due to climate change. A hydrologic analysis was conducted to compare flow results from multiple methods, and the most conservative flows were selected for use in the hydraulic model. Although the project does not involve the design of any structures that would need to withstand a certain design storm, the size of the dam breach was designed to ensure that it would provide adequate hydraulic capacity to no longer impound water during the 0.2% annual exceedance (500-year) flood. The project involves the removal of a structure and restoration to natural conditions, so there is no specific design time horizon.

C. Is the project contributing to regional adaptation strategies? ☒Yes ☐No; If yes, describe.

A June 2020 summary report of Municipal Vulnerability Preparedness (MVP) planning workshops conducted for the Town of Billerica identified several vulnerabilities related to the Talbot Mills Dam, including that the spillway is not adequate to handle the 1% annual exceedance storm and the dam's presence encourages the growth of invasive species (water chestnut) in the impoundment and negatively impacts water quality. Removal of the dam will address these vulnerabilities as described above.

The Town of Billerica's raw water intake, located approximately 1.25 miles upstream of the dam, was also identified as vulnerable during the MVP planning process, as it is susceptible to water quality and flow conditions, and there is a lack of an alternative water supply. GSE's 2021 Targeted Impact Analysis (reviewed by the Town's consultant) found that dam removal is unlikely to affect the Town's ability to withdraw water during low flow conditions and may actually improve water quality (by increasing velocity and reducing water temperature which would result in less

stagnation, algae growth, etc.). Poor water quality during low flow conditions has historically resulted in the need for additional and costly treatment measures for water withdrawn from the river.

II. Has the Proponent considered alternative locations for the project in light of climate change risks? ☐Yes ☒No.

A. If no, explain why.

The project involves the removal of a specific dam, so an alternative location is not feasible.

B. If yes, describe alternatives considered.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? ☒Yes ☐No

A. If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available here.

The project is within a river, so it affects Bordering Land Subject to Flooding (BLSF). The project will increase the amount of available floodplain storage as the dewatered impoundment will convert to BLSF. The removal of the dam will also lower upstream water levels, which will reduce flood impacts at residential properties that currently experience flooding upstream of the dam. No fill is proposed for the project.

ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of "Minority," "Minority and Income," etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

Figures 4 and **5** in Attachment 3 depict Environmental Justice (EJ) blocks within 1 mile and 5 miles of the project site, respectively. No air quality impacts are anticipated for this project, so a 1-mile radius is the appropriate "designated geographic area" per the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations. The two EJ blocks within 1 mile of the project site are both designated as the "Minority" category.

B. Identify all languages identified in the "Languages Spoken in Massachusetts" tab of the EJ Maps Viewer as spoken by 5 percent or more of the EJ population who also identify as not speaking English "very well." The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

According to 2015 data from the Census Bureau's American Community Survey (ACS), no census tracts are identified within 1 mile of the project for which 5 percent or more of the population identifies as not speaking English "very well." Within 5 miles of the project, the following languages were identified in several tracts (all in Lowell):

- Spanish or Spanish Creole
- Portuguese or Portuguese Creole
- MonKhmer/Cambodian

The project team held a pre-filing meeting with the MEPA Office, the EEA EJ Office, and other regulatory agencies on March 2, 2023 to solicit guidance on how to identify potential languages spoken by people in the vicinity of the project, and how to reach these populations with information about the project. Per MEPA's suggestion, outreach was conducted to local schools and the Billerica Board of Health; however, no feedback was received. Outreach was also conducted to other community organizations, including the Coalition for a Better Acre in Lowell, the Lowell Parks & Conservation Trust, and the MA Association of Portuguese Speakers, who confirmed the languages identified above as the key languages spoken in the project area.

C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol"). If the project is exempt from Part II of the protocol, please specify.

N/A (the list provided in Section I.B is the current list)

II. Potential Effects on EJ Populations

A. If an EJ population has been identified using the EJ Maps Viewer within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

No adverse effects have been identified for EJ populations within 1 mile of the project site. There will be an aesthetic change as the dam and impounded reach are replaced with natural falls. Project benefits that may specifically affect EJ populations include:

- Reduction of upstream flood hazards and increased climate resiliency
- Elimination of the potential for a catastrophic dam failure resulting in downstream flooding/property damage
- Improvement of water quality (increased flow velocity and dissolved oxygen, reduced water temperature and stagnation)
- Improved public access to the river and new recreational activities (e.g., through-paddling, whitewater boating, fishing in fast-moving flow conditions, viewing of natural falls)

See Attachment 10 for an Expanded EJ Analysis in accordance with the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations (effective January 1, 2022).

B. If an EJ population has been identified using the EJ Maps Viewer within 5 miles of the project site, will the project: (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) ☐Yes ☒No; or (ii) generate150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. ☐Yes ☒No

C. If you answered "Yes" to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s). N/A

III. Public Involvement Activities

A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the MEPA EJ Public Involvement Protocol. In particular:

1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.

   See Attachment 7 (EJ Screening Form), Attachment 8 (EJ Reference List) and Attachment 9 (EJ Correspondence).

   The project team developed and translated a Frequently Asked Questions (FAQ) document into Spanish, Portuguese, and Khmer. This document provides a very clear description of the project and its potential impacts and includes questions raised by the public to date. Copies have been distributed to relevant community organizations and municipal offices with a request for them to be circulated widely. Hardcopies were provided to the Billerica main and branch libraries, the Conservation Commission, the Planning Department, and the Billerica Council on Aging. They are also available on the Project Website.

   The project team has also made informal presentations to the public at Billerica Town Hall (hybrid), the Planning Board (hybrid and BATV), and Conservation Commission, as well as to local community groups. A list of formal presentations with links to recordings and/or slides

is provided in the Project Description section of this ENF.

2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.

3. If the project is exempt from Part II of the protocol, please specify.

B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.

See Attachment 8.

C. Describe (or submit as a separate document) the Proponent's plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing

The Project Website includes a way for the public to sign up for email updates if they are interested in hearing more about the project. The project team will continue to send periodic email updates to this group, including notice of when the EENF is published in the *Environmental Monitor*, when the public meeting will be held, and when public comments will be due. A notice of the public meeting will be translated into other languages and circulated among this list and the EJ Reference List. The FAQ document (translated into several languages) will continue to be circulated among community groups and municipal offices. Other handouts or documents may be translated upon request.

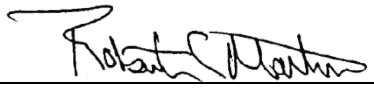
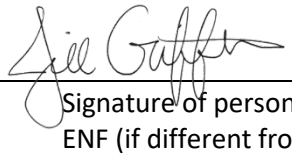
CERTIFICATIONS

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

   Name: Lowell Sun Date: By 6/23/2023

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

6/15/2023		6/15/2023	
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)

Robert Martin	Jill Griffiths, PE
Name (print or type)	Name (print or type)
CRT Development Realty, LLC	Gomez and Sullivan Engineers DPC
Firm/Agency	Firm/Agency
80 Washington Street	PO Box 2179
Street	Street
Norwell, MA 02061	Henniker, NH 03242
Municipality/State/Zip	Municipality/State/Zip
978-314-8080	716-402-6777
Phone	Phone

Attachment 1 – Distribution List

In accordance with 301 CMR 11.16 (5) and current MEPA office guidelines, the ENF has been distributed electronically to all entities on the following list, with the exception of the Massachusetts Historical Commission and the Northern Middlesex Council of Governments, to which a hardcopy was sent. Electronic copies of the ENF and all attachments can be downloaded from the following publicly accessible file transfer site: https://tinyurl.com/TalbotDamRemovalPublic. Additional resources can be found on the project website (https://merrimack.org/talbotmills), including links to previous feasibility and design documents, answers to frequently asked questions (translated into Spanish, Portuguese, and Khmer), a StoryMap, recordings and/or slides from previous public meetings, and press coverage. Hardcopies of the ENF and attachments may be requested by contacting Jill Griffiths at (716) 402-6777 or jgriffiths@gomezandsullivan.com. Note that Attachments 5 through 9 are not included with hardcopies unless specifically requested.

Executive Office of Energy and Env. Affairs
Secretary Rebecca Tepper
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston MA 02114
MEPA@mass.gov

Executive Office of Energy and Env. Affairs
MEPA Office
Attn: EEA EJ Director
100 Cambridge Street, Suite 900
Boston, MA 02144
MEPA-EJ@mass.gov

MA Dept. of Environmental Protection
Commissioner's Office
Attn: MEPA Coordinator
1 Winter Street
Boston, MA 02108
helena.boccadoro@mass.gov

MA Dept. of Environmental Protection
Northeast Regional Office
Attn: MEPA Coordinator
205B Lowell Street
Wilmington, MA 01887
john.d.viola@mass.gov

MA Dept. of Transportation
Public/Private Development Unit
Attn: Lionel Lucien, Manager
10 Park Plaza Suite 4150
Boston, MA 02116
MassDOTPPDU@dot.state.ma.us

MA Dept. of Transportation
District #4
Attn: MEPA Coordinator
519 Appleton Street
Arlington, MA 02476
timothy.paris@dot.state.ma.us

MA Historical Commission
The MA Archives Building
Attn: Brona Simon, Executive Director
220 Morrissey Blvd
Boston, MA 02125
mhc@sec.state.ma.us
(hardcopy mailed)

MA Board of Underwater Archaeological Resources
Attn: David S. Robinson, Director
100 Cambridge Steet, Suite 900
Boston, MA 02114
david.s.robinson@mass.gov

Northern Middlesex Council of Governments
Attn: Jennifer Raitt
40 Church Street
Lowell, MA 01852-2686
jraitt@nmcog.org
lshahbazian@nmcog.org
(hardcopy mailed)

Continued on next page.

Town of Billerica
Board of Selectmen
Attn: Michael Riley
365 Boston Road Office 203
Billerica, MA,01821
mriley@town.billerica.ma.us

Town of Billerica
Planning Board
Attn: Blake Robertson, Chairman
365 Boston Road Office 105
Billerica, MA, 01821
blake.robertson@meitechnic.com

Town of Billerica
Conservation Commission
Attn: Isabel Tourkantonis
Director of Environmental Affairs
365 Boston Road Room G02
Billerica, MA 01821
itourkantonis@town.billercia.ma.us

Town of Billerica
Board of Health
Attn: Kristel Bennet, Director
326 Boston Road Room G03
Billerica, MA 01821
kbennett@town.billerica.ma.us

Town of Billerica
Town Manager
Attn: John C. Curran
365 Boston Road Office 207
Billerica, MA 01821
jcurran@town.billerica.ma.us
(hardcopy mailed)

Attachment 2 – List of Required Permits/Regulatory Reviews

The following permits and regulatory reviews are anticipated to be required or potentially required for this project:

- MA Historical Commission (MHC) Project Notification Form (PNF) (*completed; see Attachment 5*) and Section 106 Consultation
- MA Environmental Policy Act (MEPA) Expanded Environmental Notification Form (EENF) and Environmental Impact Report (EIR)
- MA Dept. of Environmental Protection (DEP) Ch. 91 Waterways Dredge Permit
- DEP 401 Water Quality Certification (WQC)
- USACE Preconstruction Notice (PCN)
- Billerica – Wetlands Protection Act (WPA) Notice of Intent (NOI) for an Ecological Restoration Project
- Billerica – Building Permit for Demolition

Attachment 3 – Figures

The following figures are attached:

Figure 3-1: Topographic Map of Project Features
Figure 3-2: Aerial Image Map of Project Features
Figure 3-3: Aerial View of Talbot Mills Dam
Figure 3-4: Environmental Justice Populations within 1 Mile of Project Site
Figure 3-5: Environmental Justice Populations within 5 Miles of Project Site
Figure 3-6: Existing Wetland Resources
Figure 3-7: Proposed Wetland Resources – Lower Impoundment
Figure 3-8: Talbot Mills Dam Photographs

Figure 3-1: Topographic Map of Project Features

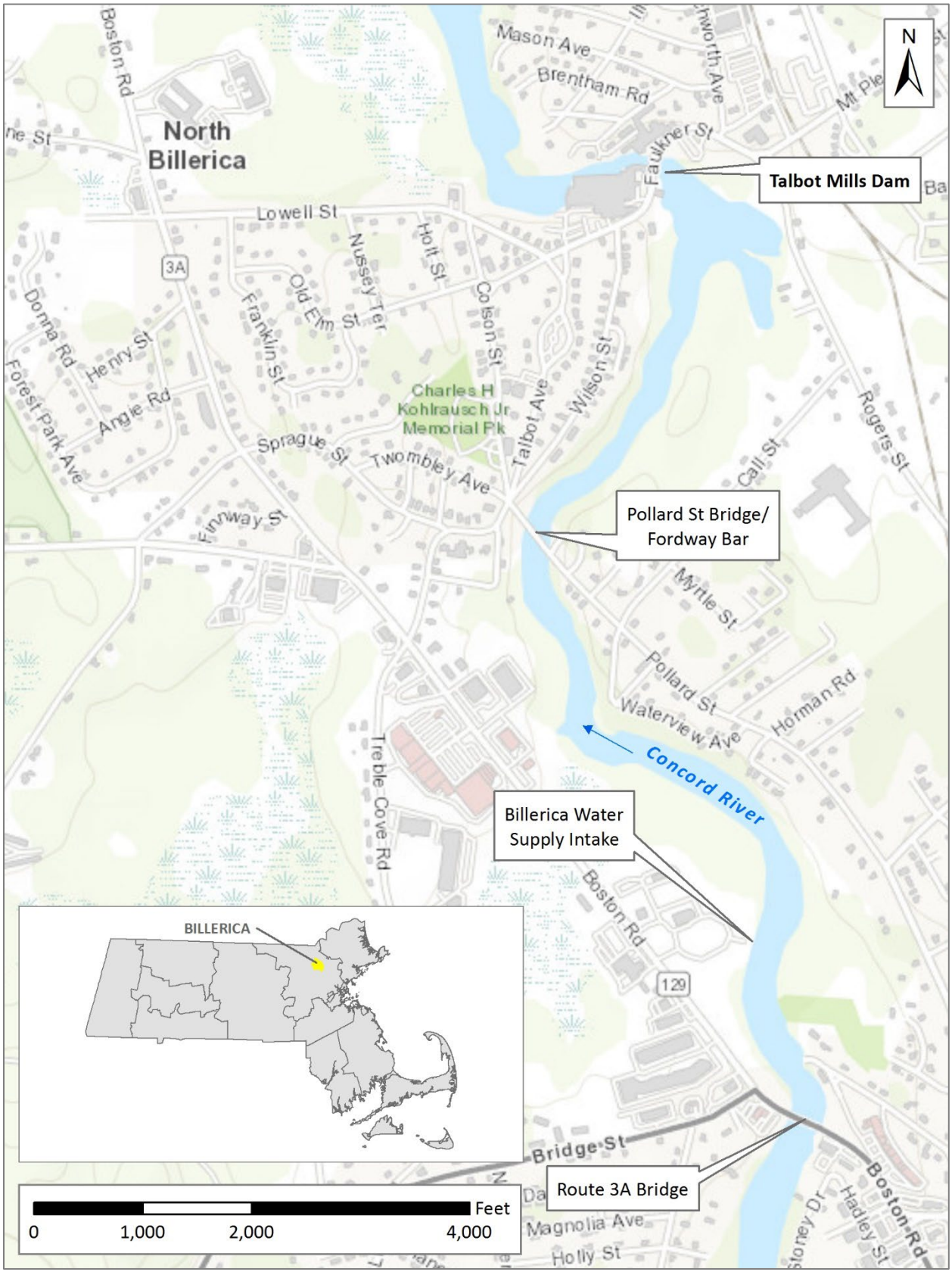
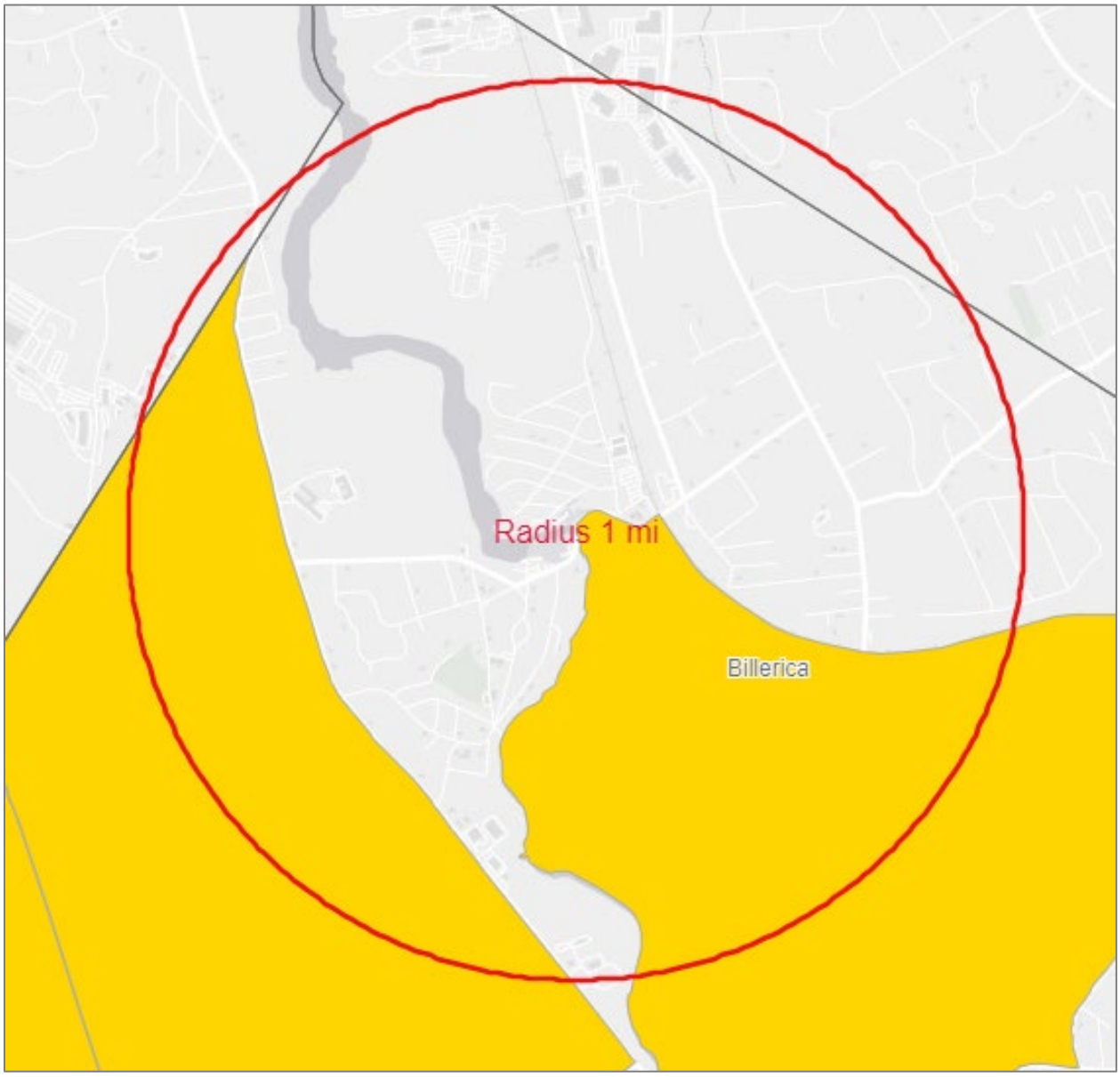


Figure 3-2: Aerial Image Map of Project Features

Figure 3-3: Aerial View of Talbot Mills Dam

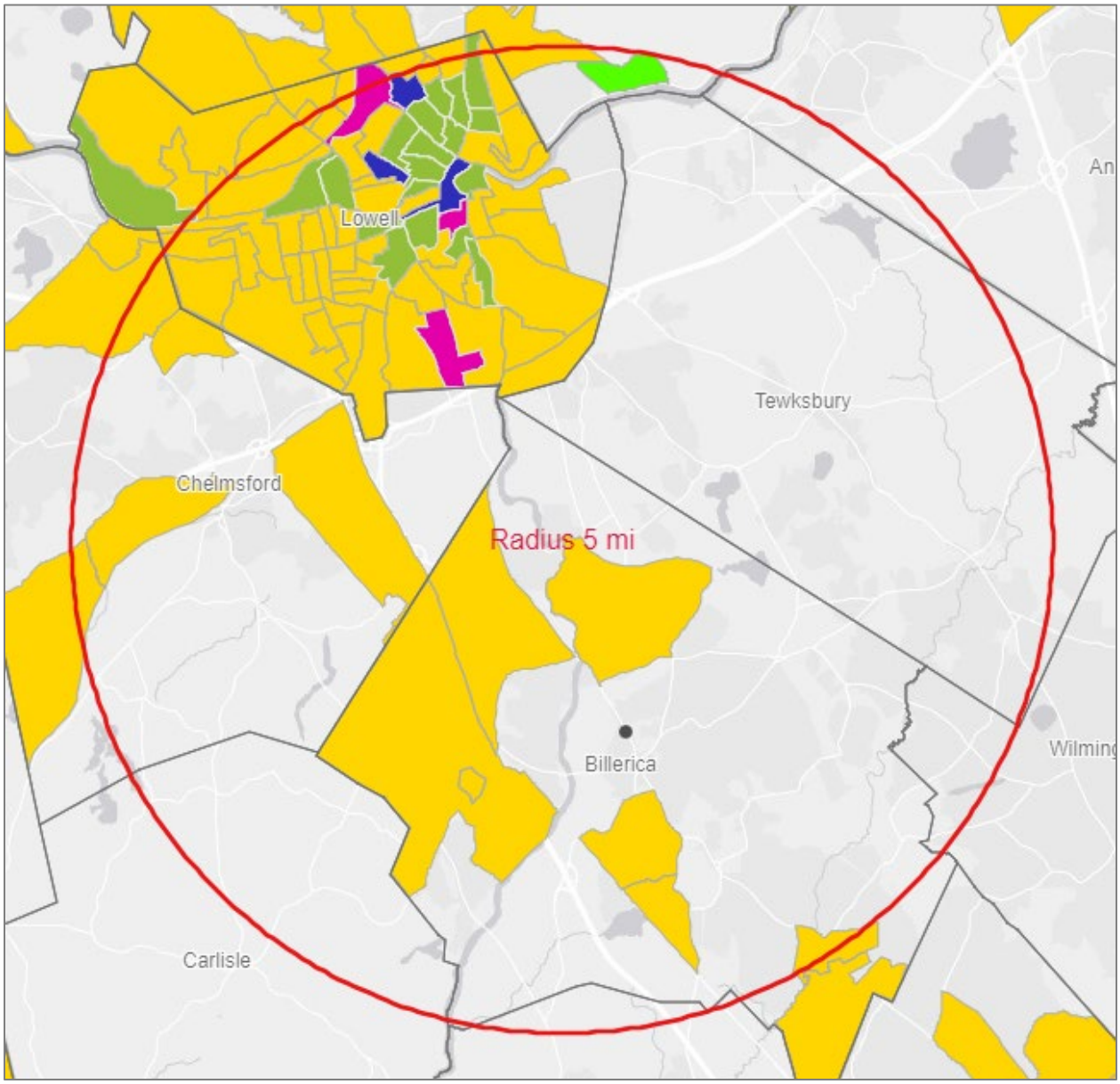
Figure 3-4: Environmental Justice Populations within 1 Mile of Project Site



Legend

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Figure 3-5: Environmental Justice Populations within 5 Miles of Project Site



Legend

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Figure 3-6: Existing Wetland Resources

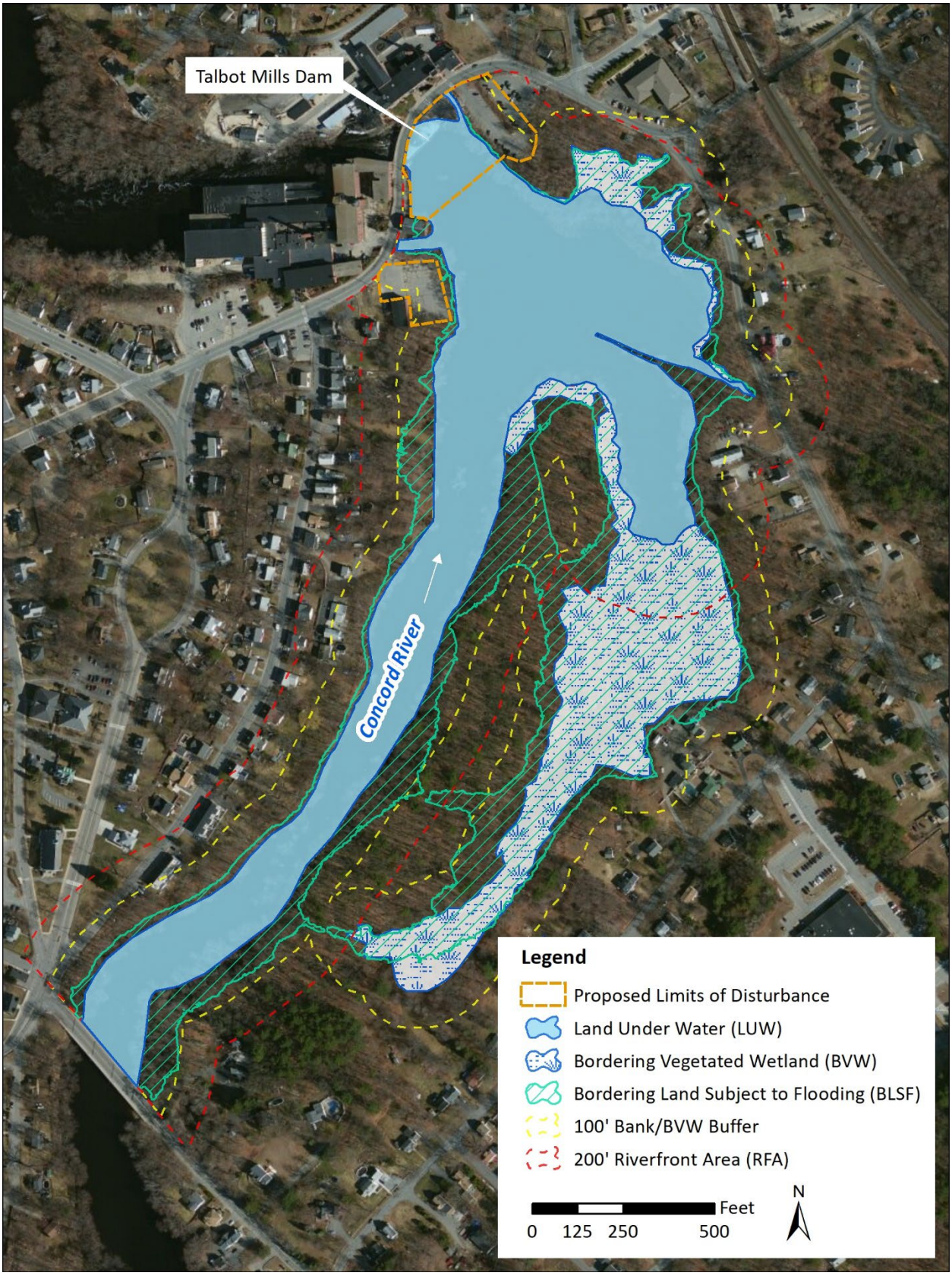


Figure 3-7: Proposed Wetland Resources

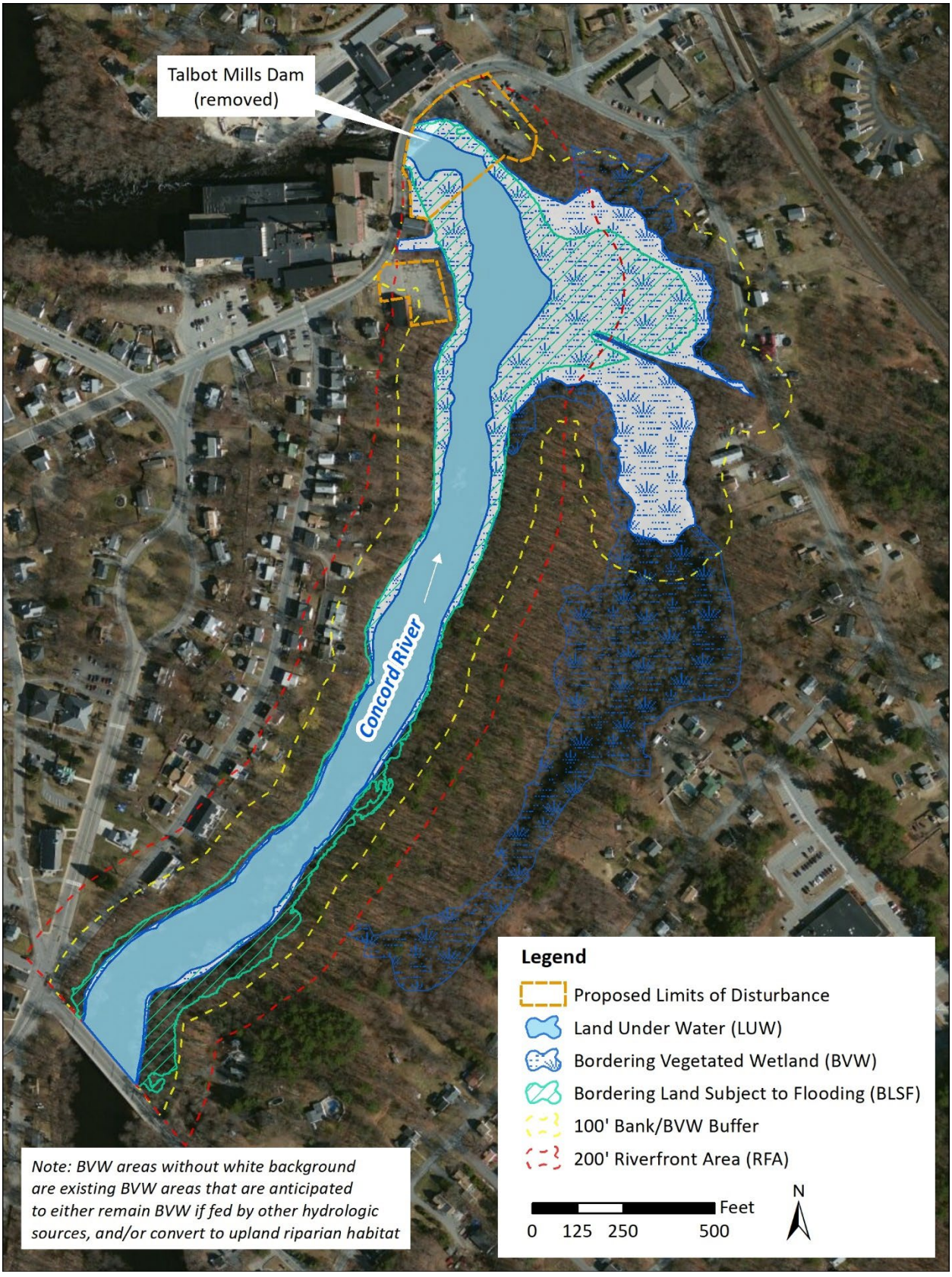


Figure 3-8: Talbot Mills Dam Photographs

September 4, 2022 (Low Flow – No Spill)

August 21, 2018 (Normal Flow)

July 14, 2021 (High Flow)

Attachment 4 – Design Plans

Preliminary (60%) design plans for the project are attached.

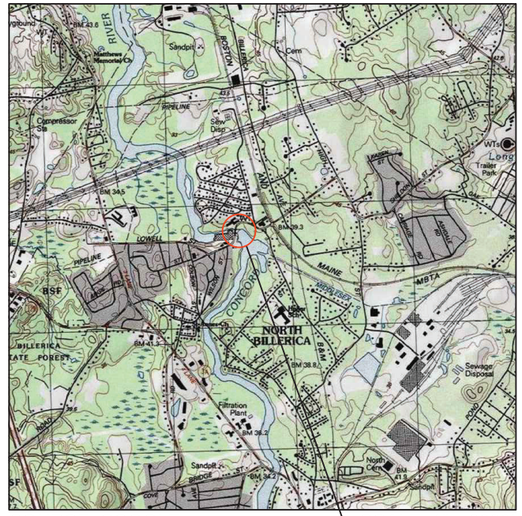
TALBOT MILLS DAM REMOVAL/
CONCORD RIVER RESTORATION PROJECT

BILLERICA, MA

MASSACHUSETTS DIVISION OF ECOLOGICAL RESTORATION
251 CAUSEWAY STREET, SUITE 400
BOSTON, MA 02114

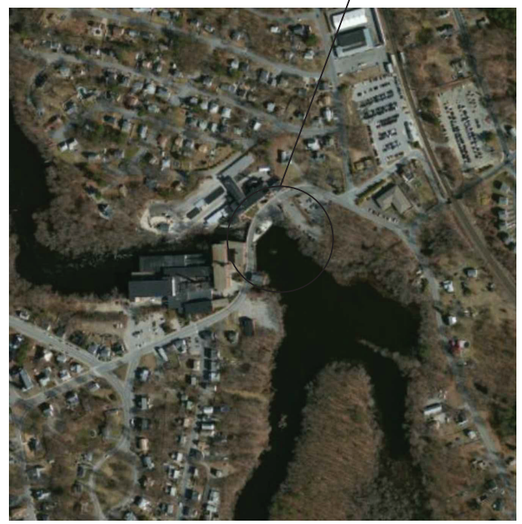
PRELIMINARY (60%) DESIGN PLANS

DRAWING NO.	TITLE
1	COVER SHEET
2	EXISTING SITE PLAN
3	EXISTING DAM SECTION AND ELEVATION
4	PROPOSED STAGING AND INVASIVE SPECIES CONTROL PLAN
5	PROPOSED ACCESS, STAGING, AND WATER CONTROLS
6	PROPOSED DAM BREACH SECTION AND ELEVATION
7	PROPOSED SITE PLAN
8	EROSION AND SEDIMENT CONTROL DETAILS



SOURCE: GOOGLE *SCALE: 1" = 2000'*

PROJECT SITE



SOURCE: GOOGLE *SCALE: 1" = 1000'*

PRELIMINARY
NOT FOR
CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

DRAWN BY: MAM
CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL /
CONCORD RIVER RESTORATION

COVER SHEET

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: AS NOTED

DRAWING: 1

DATA SOURCES

1. HORIZONTAL DATUM IS NORTH AMERICAN DATUM (NAD) 1983, MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 FEET.
2. CONTOUR INTERVAL SHOWN ON PLANS IS 1 FOOT.
3. TOPOGRAPHIC SURVEYS OF THE DAM AND DOWNSTREAM CHANNEL WERE CONDUCTED BY SULLIVAN ENGINEERS, DPC ON OCTOBER 6, 2014 AND AUGUST 9, 2022. PLANS WERE SUPPLEMENTED BY SURVEY DATA COLLECTED BY EAGLEBROOK ENGINEERING & SURVEY, LLC ON APRIL 14, 2009.
4. ALL OTHER TOPOGRAPHY OUTSIDE SURVEY AREAS DERIVED FROM LIDAR DATA WITH A VERTICAL ACCURACY OF 0.56 FEET COLLECTED IN WINTER/SPRING 2011 AND OBTAINED FROM MASSGIS.
5. BATHYMETRIC DATA WITHIN THE IMPOUNDMENT WAS COLLECTED BY GOMEZ AND SULLIVAN ENGINEERS, DPC ON JULY 28, 2021.
6. WETLAND BOUNDARIES IN THE VICINITY OF THE DAM AND MILL POND WERE DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, INC ON JUNE 29, 2022. WETLAND BOUNDARIES UPSTREAM OF THE MILL POND AND DOWNSTREAM OF FAULKNER STREET WERE DERIVED FROM 2005 MASSACHUSETTS DEPT. OF ENVIRONMENTAL PROTECTION (MASSDEP) WETLANDS DATA AND/OR AERIAL IMAGERY.
7. PROPERTY BOUNDARIES WERE OBTAINED FROM MASSGIS.

GENERAL NOTES

1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION. CONTRACTOR SHALL NOTIFY DIG SAFE MASSACHUSETTS AT 811 OR 1–888–344–7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION. SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS ARE NOT TO BE INCLUDED IN THE REQUIRED 72 HOUR NOTICE.
2. CONTRACTOR SHALL MAINTAIN CONTROL POINTS DURING CONSTRUCTION, INCLUDING BENCHMARKS AND ELEVATIONS AT CRITICAL AREAS. SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR AND PERFORMED BY A MASSACHUSETTS' REGISTERED PROFESSIONAL LAND SURVEYOR. ALL GRADE STAKES SET BY SURVEYOR SHALL BE MAINTAINED BY CONTRACTOR UNTIL FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY ENGINEER.
3. EXCESSIVE IDLING DURING THE CONSTRUCTION PERIOD IS PROHIBITED. SIGNS SHALL BE POSTED AT THE SITE LIMITING IDLING TO 5 MINUTES OR LESS. PERIODIC INSPECTIONS SHALL BE CONDUCTED BY SITE SUPERVISORS TO ENSURE COMPLIANCE. STAGING AREAS SHALL BE LOCATED TO MINIMIZE EMISSION IMPACTS TO ABUTTING PROPERTIES.

CONSTRUCTION WASTE MANAGEMENT

1. SITE SHALL BE KEPT WELL ORGANIZED, SIGNED, AND FREE OF WASTE MATERIALS, DEBRIS, AND RUBBISH AT ALL TIMES. GOOD HOUSEKEEPING PRACTICES SHALL BE MAINTAINED ON A CONTINUOUS BASIS FROM WORK SITE TO WORK SITE. DISPOSAL OF ANY WASTE MATERIALS ON THE CONSTRUCTION SITE IS PROHIBITED.
2. SANITARY, WASTE DISPOSAL, AND EMPLOYEE FACILITIES SHALL BE PROVIDED BY CONTRACTOR.
3. ALL WATER RESOURCES (E.G., GROUND AND SURFACE WATERS), INCLUDING ALL DRAINS AND CATCH BASINS, SHALL BE PROTECTED FROM LEACHING AND/OR RUN–OFF OF CHEMICAL POLLUTANTS, SOLID WASTES, AND CONSTRUCTION SITE DEBRIS. ALL CATCH BASINS SHALL BE MAINTAINED FREE FLOWING.
4. ALL COMBUSTIBLE WASTE MATERIALS SHALL BE PLACED IN COVERED METAL CONTAINERS AND PROMPTLY DISPOSED OF IN AN APPROVED MANNER AT AN APPROVED WASTE DISPOSAL FACILITY.
5. STORAGE AND/OR USE OF CHEMICALS, FUELS, OILS, GREASES, BITUMINOUS MATERIALS, SOLIDS, WASTE WASHINGS, AND CEMENT SHALL BE HANDLED APPROPRIATELY AS TO PREVENT LEACHING OR SURFACE RUNOFF INTO PUBLIC WATERS OR DRAINS. ALL APPROVED STORAGE AREAS FOR THESE MATERIALS MUST BE DIKED.
6. ALL ROADWAYS SHALL BE MAINTAINED FREE OF DEBRIS. STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED TO CAPTURE DEBRIS FROM WHEELS OF CONSTRUCTION VEHICLES. VEHICLES SHALL BE INSPECTED AT ENTRANCES BEFORE TURNING ONTO THE ROADWAY AND EXCESS DEBRIS SHALL BE REMOVED.
7. ALL EXCESS DREDGED MATERIALS SHALL BE REMOVED FROM THE SITE AS SOON AS POSSIBLE AND IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS FOR REUSE AND DISPOSAL.

CARE AND DIVERSION OF WATER

1. CONTRACTOR SHALL PREPARE A WATER CONTROL PLAN STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN MASSACHUSETTS TO BE APPROVED BY ENGINEER INCLUDING 1) PROPOSED COFFERDAM/TEMPORARY BYPASS PLAN, DETAILS, AND CALCULATIONS 2) WATER CONTROL CONTINGENCY PLAN, AND 3) DEWATERING/SEDIMENT CONTROL METHODS. WATER CONTROL PLAN SHALL CONFORM TO ALL APPLICABLE ENVIRONMENTAL PERMIT REQUIREMENTS AND CONDITIONS.
2. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO WORK OR EQUIPMENT BY HIGH WATER OR STORMS.
3. ANY WATER PUMPED FROM THE EXCAVATION MUST FLOW THROUGH A SEDIMENT FILTER BAG (OR APPROVED EQUAL) PRIOR TO RELEASE INTO ANY WATERBODY.

TEMPORARY ACCESS ROUTE STABILIZATION

1. DEFINITION: THE STABILIZATION OF TEMPORARY CONSTRUCTION ACCESS ROUTES, ON–SITE VEHICLE TRANSPORTATION ROUTES, AND CONSTRUCTION PARKING AREAS.
2. PURPOSE: TO CONTROL EROSION ON TEMPORARY CONSTRUCTION ROUTES AND PARKING AREAS.
3. CONDITION WHERE PRACTICE APPLIES: ALL TRAFFIC ROUTES AND PARKING AREAS FOR TEMPORARY USE BY CONSTRUCTION TRAFFIC.
4. DESIGN CRITERIA: CONSTRUCTION ROADS SHOULD BE LOCATED TO REDUCE EROSION POTENTIAL, MINIMIZE IMPACT ON EXISTING SITE RESOURCES, AND MAINTAIN OPERATIONS IN A SAFE MANNER. HIGHLY EROSIVE SOILS, WET OR ROCKY AREAS, AND STEEP SLOPES SHOULD BE AVOIDED. ROADS SHOULD BE ROUTED WHERE SEASONAL WATER TABLES ARE DEEPER THAN 18 INCHES. SURFACE RUNOFF AND CONTROL SHOULD BE IN ACCORDANCE WITH OTHER STANDARDS.
5. ROAD GRADE: A MAXIMUM GRADE OF 12% IS RECOMMENDED, ALTHOUGH GRADES UP TO 20% ARE ACCEPTABLE FOR SHORT DISTANCES.
6. ROAD WIDTH: 14 FT (9 FT MINIMUM) FOR ONE–WAY TRAFFIC, OR 24 FT MINIMUM FOR TWO–WAY TRAFFIC.
7. SIDE SLOPE OF ROAD EMBANKMENT: 2:1 OR FLATTER.
8. COMPOSITION: USE AN 8–INCH LAYER OF STATE DOT APPROVED GRAVEL SUB–BASE OR EQUIVALENT, PLACED ON A GEOTEXTILE FABRIC.
9. MAINTENANCE: ACCESS ROUTES AND PARKING AREAS SHALL BE INSPECTED PERIODICALLY FOR CONDITION OF SURFACE AND TOPDRESSED WITH NEW GRAVEL AS NEEDED.
10. RESTORATION: UPON COMPLETION OF THE WORK, ALL TEMPORARY MATERIALS SHALL BE REMOVED AND THE SITE SHALL BE RESTORED TO PRE–PROJECT CONDITIONS.

CONSTRUCTION SEQUENCE

1. CONTRACTOR SHALL PREPARE A CONSTRUCTION SEQUENCE PLAN TO BE APPROVED BY OWNER AND ENGINEER. THE FOLLOWING GENERAL SEQUENCE SHALL BE ADAPTED FOR THE SITE–SPECIFIC REQUIREMENTS.
2. SURVEY AND STAKE THE PROPOSED LIMIT OF DISTURBANCE AND LIMIT OF EROSION CONTROLS. INSTALL EROSION CONTROLS AND CONTAINMENT MEASURES AS INDICATED IN THE PLANS.
3. FLAG LIMITS OF CLEARING, TO BE APPROVED BY LANDOWNER PRIOR TO ANY TREE REMOVAL. CLEAR AND GRUB ALONG APPROVED ACCESS ROUTES AS NEEDED.
4. INSTALL TEMPORARY EROSION AND POLLUTION CONTROLS, STAGING AREA, AND TEMPORARY ACCESS RAMPS/ROUTES AS NEEDED. UTILIZE SWAMP MATS (OR APPROVED EQUAL) TO MINIMIZE DISTURBANCE TO WETLAND AREAS.
5. INSTALL DEWATERING AND/OR WATER DIVERSION MEASURES AS NECESSARY IN ACCORDANCE WITH THE APPROVED WATER CONTROL PLAN.
6. COMMENCE SITE WORK.
7. REMOVE TEMPORARY DEWATERING/WATER DIVERSION MEASURES.
8. REMOVE ANY TEMPORARY ACCESS ROUTES. RESTORE ACCESS AND STAGING AREAS TO FORMER CONDITIONS.
9. REMOVE EROSION AND POLLUTION CONTROL MEASURES ONLY AFTER ALL AREAS ARE STABILIZED TO THE SATISFACTION OF ENGINEER.

SOIL EROSION AND SEDIMENTATION CONTROL

1. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH MASSDEP EROSION AND SEDIMENTATION CONTROL GUIDELINES AND APPLICABLE NPDES STANDARDS.
2. ALL APPLICABLE SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY SOIL OR STREAM DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ALL DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING WITH A NATIVE SEED MIXTURE. MULCH, WATER AND ANCHOR AS NECESSARY TO ESTABLISH GRASS AND PREVENT LOSS TO WIND OR EROSION. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS SHALL BE MULCHED WITH SMALL GRAIN STRAW AT A RATE OF TWO (2) TONS PER ACRE IN ACCORDANCE WITH STATE STANDARDS.
4. PERMANENT VEGETATION SHALL BE SEEDED WITH A NATIVE SEED MIXTURE ON ALL EXPOSED AREAS IMMEDIATELY AFTER FINAL GRADING. MULCH SHALL BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
5. ALL CRITICAL AREAS SUBJECT TO EROSION SHALL RECEIVE A TEMPORARY SEEDING WITH AN APPROVED NATIVE SEED MIXTURE IN COMBINATION WITH STRAW MULCH, AT A RATE OF TWO (2) TONS PER ACRE IN ACCORDANCE WITH STATE STANDARDS.
6. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE SHALL BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED, OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
7. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHTS–OF–WAY SHALL BE REMOVED IMMEDIATELY.
8. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE. ALL SOIL STOCKPILES SHALL BE TEMPORARILY STABILIZED IN ACCORDANCE WITH NOTE #3 AND PROTECTED BY COMPOST FILTER SOCKS ON DOWNHILL SIDES.
9. THE CONTRACTOR SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION AND THAT HAVE NOT BEEN FINALLY STABILIZED, STABILIZATION PRACTICES, STRUCTURAL PRACTICES, AND OTHER CONTROLS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER THE END OF ANY STORM THAT PRODUCES AT LEAST 0.5 INCHES OF RAINFALL AT THE SITE. WHERE SITES HAVE BEEN FINALLY STABILIZED, SUCH INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH UNTIL FINAL COMPLETION. CRITICAL AREAS AND AREAS WHERE VEHICLES EXIT THE SITE SHALL BE INSPECTED DAILY.

WETLAND RESOURCE AREA IMPACTS

WETLAND RESOURCE	AREA (SF)	
	TEMP. DISTURBANCE	PERMANENT CHANGE
BANK (LINEAR FEET)	1,200	-2,800
LAND UNDER WATER (LUW)	46,000	-436,000
BORDERING VEGETATED WETLANDS (BVW)	0	24,000
BORDERING LAND SUBJECT TO FLOODING (BLSF)	900	-441,000
BVW BUFFER ZONE	51,000	-388,000
RIVERFRONT AREA (RFA)	61,000	-314,000

PROPOSED DREDGE/FILL VOLUMES

TYPE	VOLUME (CY)	DESCRIPTION
DREDGE	390	GRANITE MASONRY SPILLWAY + ABUTMENT
	20	CONCRETE ABUTMENT
	240	WOOD/ROCK FILL FORMER DAM
	600	ROCK FILL BETWEEN DAMS
	220	ACTIVE SEDIMENT GRADING UPSTREAM OF DAMS
	1,470	**TOTAL DREDGE**
FILL	**0**	**TOTAL FILL**

PROPOSED DREDGING DIMENSIONS

LENGTH (FT)	150	SPILLWAY + ABUTMENT
WIDTH (FT)	30	BOTH DAMS + ACTIVE SEDIMENT GRADING
DEPTH (FT)	< 13	MAX HEIGHT OF SPILLWAY
AREA (SF)*	4,500	

**NOTE THAT THE VOLUME CALCULATED BY THESE DIMENSIONS IS LARGER THAN THE PROPOSED DREDGING VOLUME IN THE TABLE ABOVE BECAUSE IT IS CONSERVATIVE IN ALL DIMENSIONS.*

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

DRAWN BY: MAM
CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

GENERAL NOTES

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: NONE

DRAWING:

PARCEL 9–93–1
71 FAULKNER ST
FAULKNER MILLS AQUISITION CORP.

FAULKNER MILLS COMPLEX

STILLING BASIN

CB R = 114.0

CB R = 113.4

OUTLET GATE

STONE WALL

SLUICEWAY

CONC. WEIR WITH SLUICE GATE

FOOTBRIDGE

EXISTING BANK/OHW/MAHW FOLLOWS STONE RETAINING WALLS (TYP)

PARCEL 10–39–4
0 FAULKNER ST
FAULKNER MILLS AQUISITION CORP.

CB R = 113.4

BIT. CONC.

CONC. SIDEWALK

STONE RETAINING WALL

GAZEBO

CONCRETE ABUTMENT

GRANITE MASONRY SPILLWAY APPROX. CREST EL. 108.2 FT

FORMER FISHWAY LOCATION

GRANITE ABUTMENT

TALBOT MILLS DAM, ADJACENT WALLS, SPILLWAYS, GATES, AND FLOWAGE RIGHTS OWNED BY CRT DEVELOPMENT CORP. (DEED BK. 2429, PG. 687)

FAULKNER STREET

BEDROCK OUTCROPS DOWNSTREAM OF DAM (ELEVATIONS VARY/UNKNOWN)

ASSUMED SUBMERGED 1798 WOOD FRAME/ROCK FILL DAM (APPROX.)

ASSUMED SUBMERGED ROCK FILL BETWEEN DAMS

GRANITE ABUTMENT

ROCK OUTCROP

APPROX. LOCATION OF IRON BOLT BENCHMARK EL. 108.81 FT NAVD 88

CONCORD RIVER

PARKING LOT

200' RIVERFRONT AREA

PARCEL 10–39–4
0 FAULKNER ST
L. DOHERTY TR.

BORDERING VEGETATED WETLAND

100' BANK/BVW BUFFER

EXISTING BANK/OHW/MAHW (TYP)

TALBOT MILLS COMPLEX

PARCEL 9–94–0
1 OLD ELM ST
L&P ALUMINUM HOLDINGS LLC

OLD ELM STREET

FORMER INTAKE STRUCTURE

IMPOUNDMENT (MILL POND)

PARCEL 10–231–2
2 OLD ELM ST
MIDDLESEX CANAL ASSOC. INC.

FORMER WAREHOUSE/FUTURE MUSEUM BLDG.

40' 0 40' 80'

SCALE:1"=40'

LEGEND

- MINOR CONTOUR
- MAJOR CONTOUR
- PROPERTY BOUNDARY
- OHE — OVERHEAD ELECTRIC LINE
- TREE LINE
- BANK/ORDINARY HIGH WATER (OHW)/MEAN ANNUAL HIGH WATER (MAHW)
- BORDERING VEGETATED WETLAND (BVW)
- WETLAND FLAG
- 100' BVW BUFFER
- RIVERFRONT AREA (200' BANK BUFFER)

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

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CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

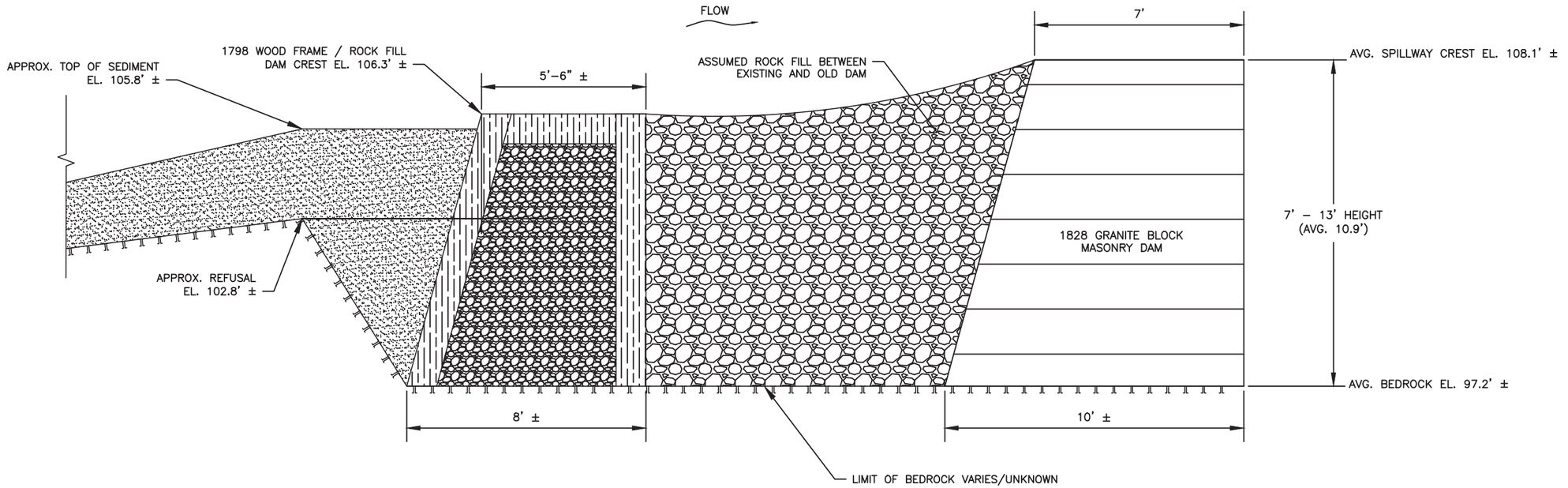
EXISTING SITE PLAN

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

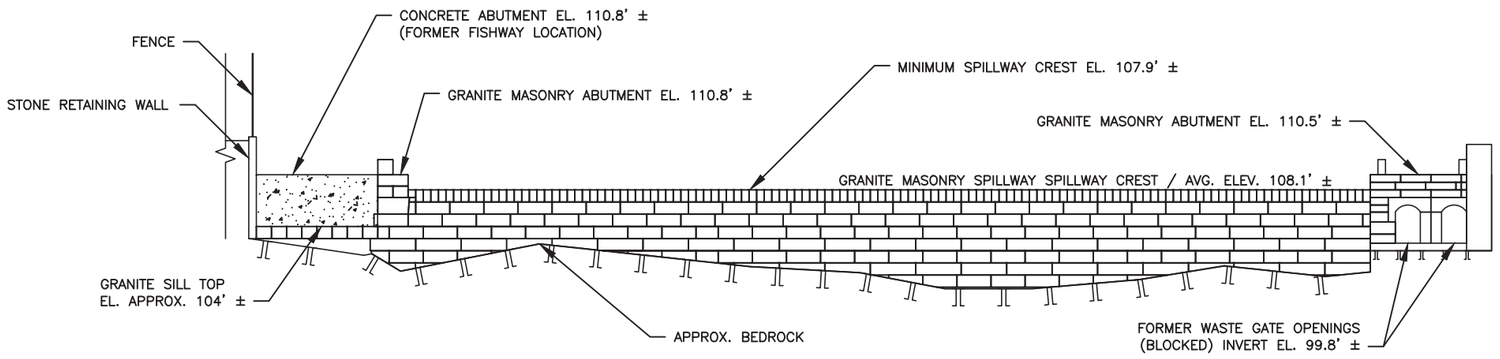
Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: 1" = 40'

DRAWING: 2



1/3 EXISTING AND 1798 DAM SECTION
SCALE: 1/4" = 1'-0"



2/3 EXISTING DAM ELEVATION (LOOKING UPSTREAM)
SCALE: 1" = 20'

4' 0 4' 8'
SCALE:1/4"=1'-0"

20' 0 20' 40'
SCALE:1"=20'

PRELIMINARY
NOT FOR
CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

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PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

EXISTING DAM SECTION AND ELEVATION

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

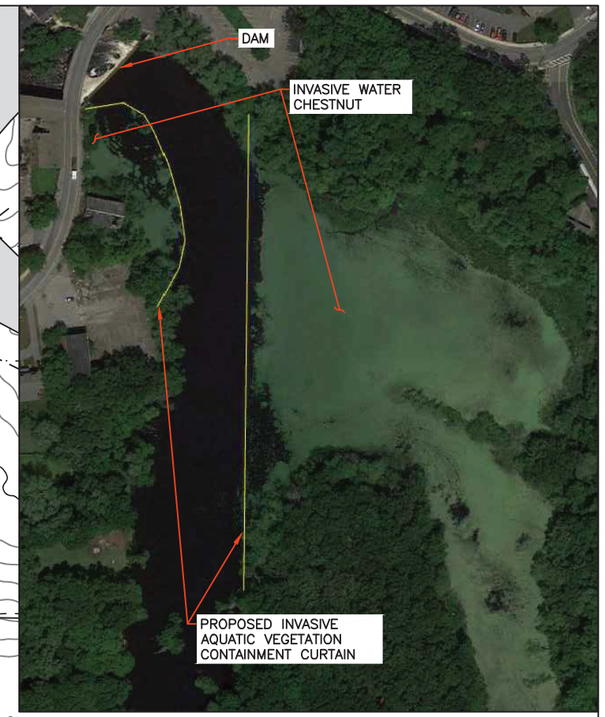
Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: AS NOTED

DRAWING: 3

BUILDING
FAULKNER MILLS COMPLEX
OUTLET GATE
SLUICEWAY OUTLET
POTENTIAL STAGING AREA
CONC. WEIR WITH SLUICE GATE
FOOTBRIDGE
POTENTIAL LOADING AREA
200' RIVERFRONT AREA
120
100' BANK/BVW BUFFER
BORDERING VEGETATED WETLAND
POTENTIAL STAGING AREA
COMPOST FILTER SOCK OR APPROVED EQUAL
EXISTING BANK/OHW/MAHW (TYP)
TALBOT MILLS DAM
FAULKNER STREET
CONCORD RIVER
SILT FENCE ON PAVEMENT OR APPROVED EQUAL
TALBOT MILLS COMPLEX
OLD ELM STREET
WATER CHESTNUT GROWTH AREA (TYP)
IMPOUNDMENT (MILL POND)
FORMER WAREHOUSE/FUTURE MUSEUM BLDG.
MIDDLESEX CANAL
PROPOSED INVASIVE AQUATIC VEGETATION CONTAINMENT CURTAIN
WATER CHESTNUT GROWTH AREA (TYP)
POTENTIAL STAGING AREA
COMPOST FILTER SOCK OR APPROVED EQUAL
OHE
100
110
120

60' 0 60' 120'
SCALE:1"=60'



EXTENTS OF AQUATIC VEGETATION CONTROL
SCALE: NOT TO SCALE

LEGEND

- MINOR CONTOUR
- MAJOR CONTOUR
- PROPERTY BOUNDARY
- OHE — OVERHEAD ELECTRIC LINE
- TREE LINE
- BANK/ORDINARY HIGH WATER (OHW)/MEAN ANNUAL HIGH WATER (MAHW)
- BORDERING VEGETATED WETLAND (BVW)
- WETLAND FLAG
- 100' BVW BUFFER
- RIVERFRONT AREA (200' BANK BUFFER)
- AQUATIC VEGETATION CONTAINMENT CURTAIN
- COMPOST FILTER SOCK
- SILT FENCE ON PAVEMENT

NOTES:

1. PERMISSION TO USE POTENTIAL STAGING/LOADING AREAS SHALL BE CONFIRMED WITH LANDOWNER(S) AND TEMPORARY ACCESS EASMENTS TO BE ESTABLISHED AS NEEDED.
2. PROPOSED AQUATIC VEGETATION CONTAINMENT CURTAIN TO BE INSTALLED ALONG EDGES OF EXISTING INVASIVE WATER CHESTNUT GROWTH AREAS TO PRIOR TO LOWERING OF THE IMPOUNDMENT TO MINIMIZE DOWNSTREAM TRANSPORT OF SEDIMENT CONTAINING NUTS. SEE DETAIL DWG 8.

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

DRAWN BY: MAM
CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

PROPOSED STAGING AND INVASIVE SPECIES CONTROL PLAN

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: 1" = 60'
DRAWING: 4

FAULKNER MILLS COMPLEX

OUTLET GATE

3. INSTALL SILT FENCE ON PAVEMENT (SEE DETAIL DWG 8)

4. INSTALL TEMPORARY SWING GATE

5. REMOVE EXISTING FENCE SECTIONS (TEMP.)

7. REMOVE CONCRETE ABUTMENT TO LOWER IMPOUNDMENT

13. REMOVE GRANITE MASONRY SPILLWAY

STEPPED GRANITE BLOCKS TO REMAIN TO SUPPORT ABUTMENT (SEE DWG 6)

GRANITE ABUTMENT TO REMAIN

12. REMOVE ROCK FILL

1. INSTALL INVASIVE AQUATIC VEGETATION CONTAINMENT CURTAIN PRIOR TO DEWATERING (SEE DWG 4)

CONCORD RIVER

FAULKNER STREET

4. INSTALL TEMPORARY SECURITY FENCE (TYP)

POTENTIAL STAGING AREA

2. REMOVE STOPLOGS TO LOWER IMPOUNDMENT

4. INSTALL TEMPORARY SWING GATE

6. INSTALL TEMPORARY BRIDGE

DECOMMISSIONING OF SLUICEWAY AND SLUICE GATES TO BE DETERMINED IN A LATER DESIGN PHASE

9. CONSTRUCT TEMPORARY ACCESS RAMP

8. INSTALL SUPER SACKS TO DIVERT FLOW THROUGH SLUICEWAY

10. INSTALL CONSTRUCTION MATTING (TYP)

11. REMOVE REMAINS OF 1798 WOOD FRAME/ROCK FILL DAM (CONDUCT ARCHAELOLOGICAL MONITORING/RECORDING AS REQUIRED PER PERMIT CONDITIONS)

14. GRADE UPSTREAM SEDIMENT AT A 3:1 SLOPE OR FLATTER

100' BANK/BVW BUFFER

POTENTIAL STAGING AREA

EXISITING BANK/OHW/MAHW (TYP)

3. INSTALL COMPOST FILTER SOCK (TYP)

100 110 120 111 109 107

3/6 4/6

30' 0 30' 60'

SCALE:1"=30'

WATER CONTROL NOTES:

1. CONTRACTOR SHALL PREPARE A WATER CONTROL PLAN STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN MASSACHUSETTS TO BE APPROVED BY OWNER AND ENGINEER INCLUDING: 1) PROPOSED COFFERDAM/TEMPORARY BYPASS PLAN, DETAILS, AND CALCULATIONS; 2) WATER CONTROL CONTINGENCY PLAN; AND 3) DEWATERING/SEDIMENTATION CONTROL METHODS. WATER CONTROL PLAN SHALL CONFORM TO ALL APPLICABLE ENVIRONMENTAL PERMIT REQUIREMENTS AND CONDITIONS.
2. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO WORK OR EQUIPMENT BY HIGH WATER OR STORMS.
3. ANY PUMPED WATER MUST FLOW THROUGH AN APPROVED SEDIMENT FILTRATION BAG OR SETTLEMENT TANK PRIOR TO RELEASE INTO ANY WATERBODY.
4. THE 2–YEAR FLOOD (50% ANNUAL EXCEEDANCE PROBABILITY) EVENT SHALL BE USED AS THE DESIGN FLOOD EVENT FOR TEMPORARY CONSTRUCTION–RELATED STRUCTURES THAT WILL BE IN PLACE FOR ONE YEAR OR LESS. BASED ON A FLOOD FREQUENCY ANALYSIS OF ANNUAL PEAK FLOW AT USGS GAGE NO. 01099500 (CONCORD RIVER AT LOWELL) THROUGH 2020 PRORATED BY RATIO OF DRAINAGE AREA TO THE PROJECT SITE (370/400 SQ MI), THE 2–YEAR FLOOD IS APPROX. 2,400 CFS.
5. BASED ON A DURATION ANALYSIS OF FLOW AT USGS GAGE NO. 01099500 THROUGH SEPT. 2021 PRORATED BY RATIO OF DRAINAGE AREAS TO THE PROJECT SITE, THE ANNUAL MEDIAN FLOW IS APPROX. 470 CFS, THE 95% EXCEEDANCE FLOW FOR SEPT. IS APPROX. 30 CFS, AND THE HIGHEST MONTHLY 5% EXCEEDANCE FLOW FOR FOR THE MONTHS OF AUG. THROUGH OCT. IS APPROX. 980 CFS.

LEGEND

- MINOR CONTOUR
- MAJOR CONTOUR
- PROPERTY BOUNDARY
- OHE — OVERHEAD ELECTRIC LINE
- TREE LINE
- BANK/ORDINARY HIGH WATER (OHW)/MEAN ANNUAL HIGH WATER (MAHW)
- BORDERING VEGETATED WETLAND (BVW)
- WETLAND FLAG
- 100' BVW BUFFER
- RIVERFRONT AREA (200' BANK BUFFER)
- AQUATIC VEGETATION CONTAINMENT CURTAIN
- COMPOST FILTER SOCK
- SILT FENCE ON PAVEMENT

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

PROPOSED ACCESS, STAGING, AND WATER CONTROLS

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

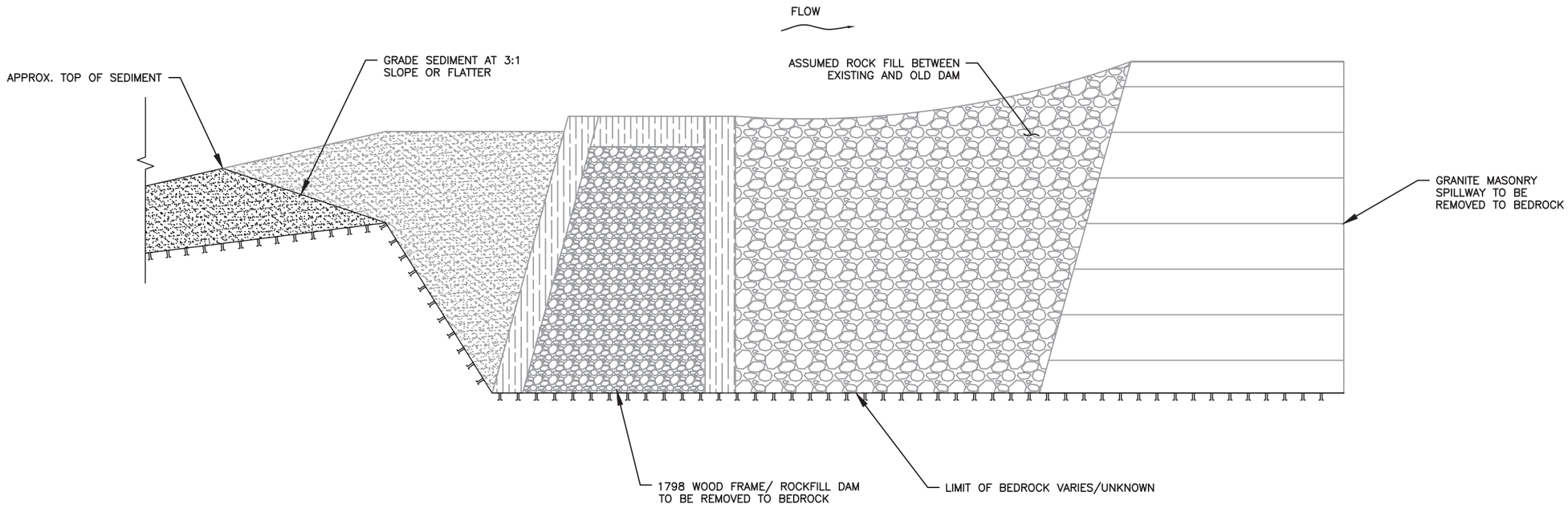
DRAWN BY: MAM
CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

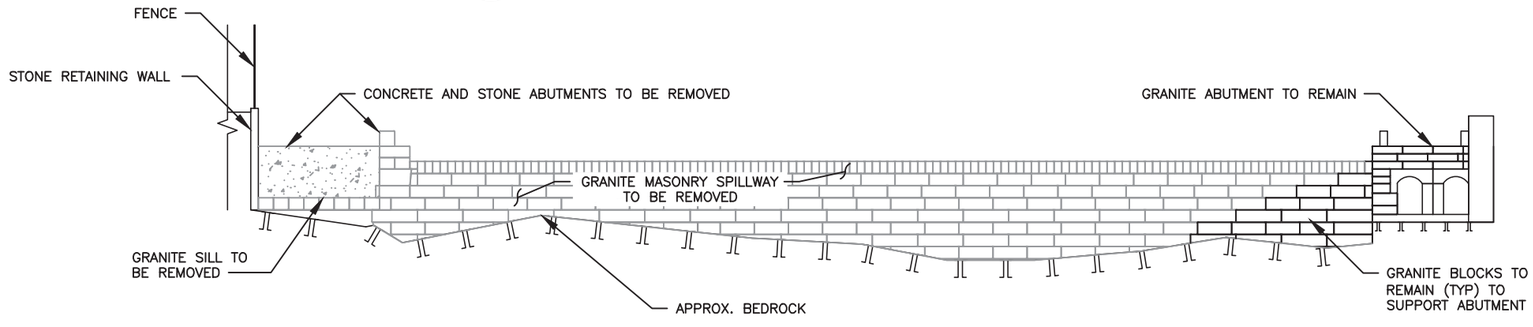
Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: 1" = 30'

DRAWING: 5



3/6 PROPOSED DAM REMOVAL SECTION
SCALE: 1/4" = 1'



4/6 PROPOSED DAM REMOVAL ELEVATION (LOOKING UPSTREAM)
SCALE: 1" = 20'

4' 0 4' 8'
SCALE:1/4"=1'-0"

20' 0 20' 40'
SCALE:1"=20'

PRELIMINARY NOT FOR CONSTRUCTION

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APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

PROPOSED DAM BREACH SECTION AND ELEVATION

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: AS NOTED

DRAWING: 6

FAULKNER MILLS COMPLEX

CONCORD RIVER

FAULKNER STREET

GRANITE SPILLWAY AND ADJACENT NORTHEAST ABUTMENTS REMOVED

PROPOSED GRADES ARE APPROXIMATE AND WILL FOLLOW BEDROCK UNDERLYING DAM STRUCTURES (VARIES/EXTENTS UNKNOWN)

STEPPED GRANITE BLOCKS TO REMAIN

GRANITE ABUTMENT TO REMAIN

PROPOSED BANK/OHW/MAHW (TYP)

EXISTING BANK/OHW/MAHW (TYP)

200' RIVERFRONT AREA

100' BANK/BVW BUFFER

OHE

100 103 104 105 110 120

30' 0 30' 60'

SCALE:1"=30'

LEGEND

- MINOR CONTOUR
- MAJOR CONTOUR
- PROPOSED CONTOUR
- PROPERTY BOUNDARY
- OVERHEAD ELECTRIC LINE
- TREE LINE
- EXISTING BANK/ORDINARY HIGH WATER (OHW)/MEAN ANNUAL HIGH WATER (MAHW)
- BORDERING VEGETATED WETLAND (BVW)
- WETLAND FLAG
- 100' BVW BUFFER
- RIVERFRONT AREA (200' BANK BUFFER)
- PROPOSED BANK/OHW/MAHW

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

DRAWN BY: MAM

CHECKED BY: JWG

APPROVED BY:

PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

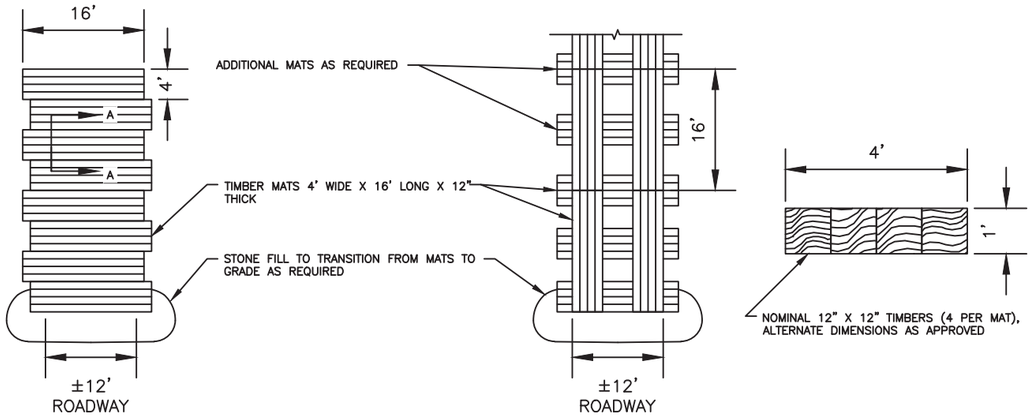
PROPOSED SITE PLAN

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

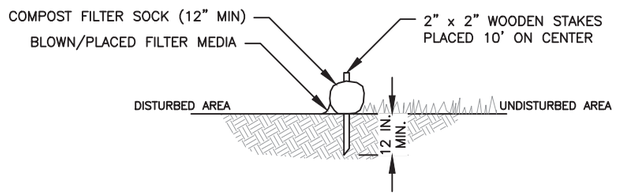
Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: 1" = 30'

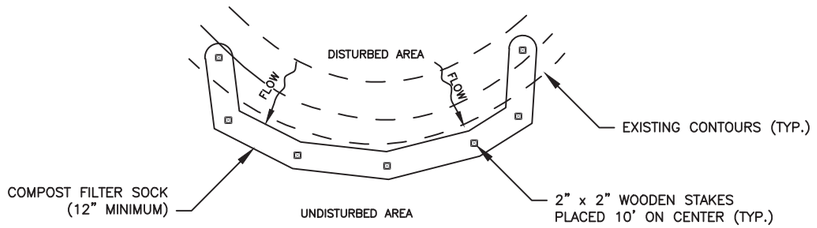
DRAWING: 7



CONSTRUCTION MATTING DETAIL
SCALE: NOT TO SCALE

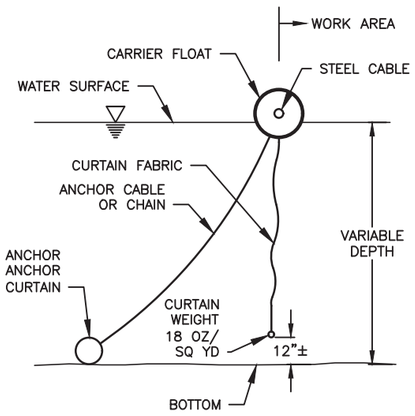


SECTION

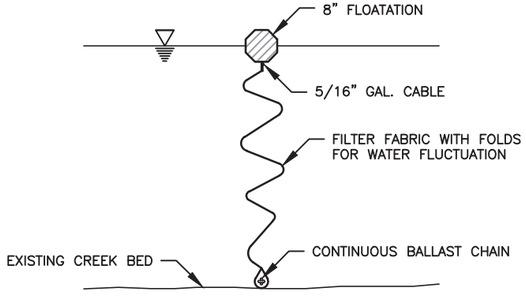


PLAN

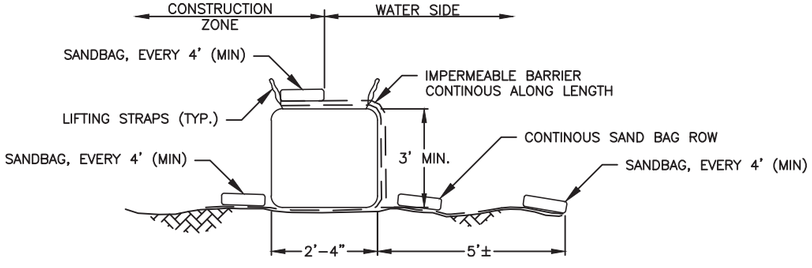
COMPOST FILTER SOCK DETAIL
SCALE: NOT TO SCALE



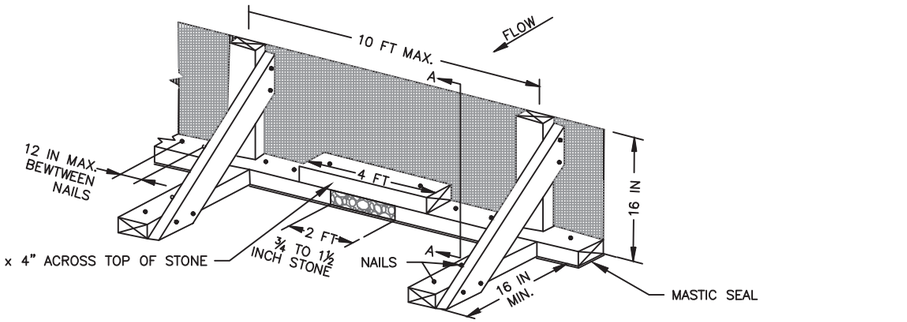
INVASIVE AQUATIC VEGETATION CONTAINMENT CURTAIN DETAIL
SCALE: NOT TO SCALE



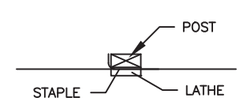
OIL BOOM SECTION DETAIL
SCALE: NOT TO SCALE



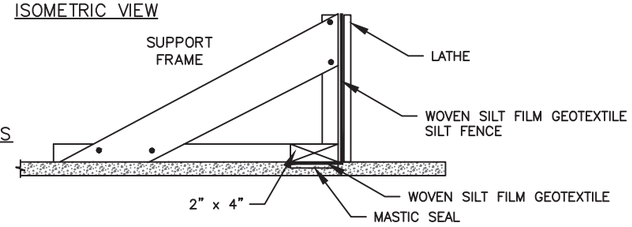
SUPER SACK DETAIL
SCALE: NOT TO SCALE



ISOMETRIC VIEW

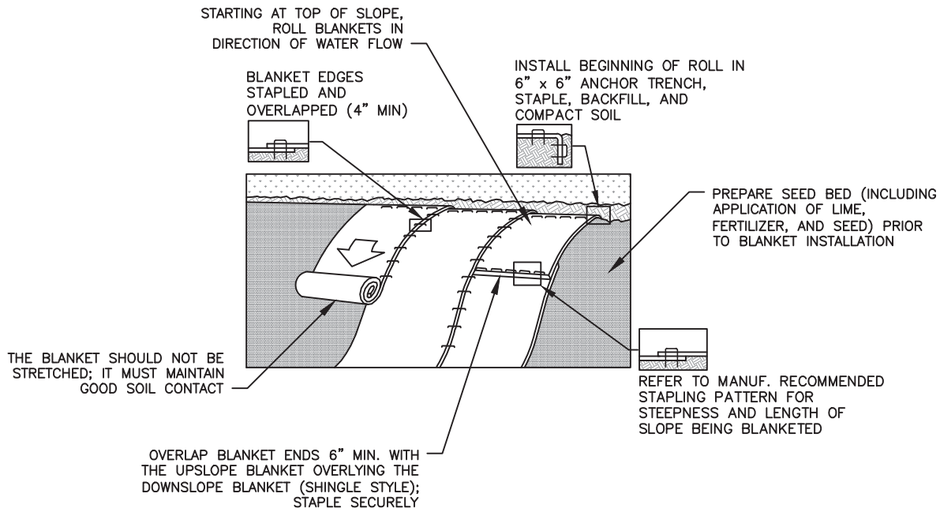


JOINING ADJACENT SECTIONS OF GEOTEXTILE



SECTION A–A

SILT FENCE ON PAVEMENT DETAIL
SCALE: NOT TO SCALE



ROLLED EROSION CONTROL BLANKET DETAIL
SCALE: NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

DATE	#	DESCRIPTIONS	BY	APP

DRAWN BY: MAM
CHECKED BY: JWG
APPROVED BY:
PROJECT NO. 02450 DATE: 06/15/2023

TALBOT MILLS DAM REMOVAL / CONCORD RIVER RESTORATION

EROSION AND SEDIMENT CONTROL DETAILS

Massachusetts Division of Ecological Restoration
251 Causeway Street, Suite 400
Boston, MA 02114

Gomez and Sullivan Engineers, D.P.C.
41 Liberty Hill Road
PO Box 2179
Henniker, NH 03242

SCALE: NONE
DRAWING: 8

Attachment 5 – Section 106 Correspondence

Note: This attachment is not included with hardcopies of the ENF unless specifically requested. It was included in the hardcopy sent to MHC. Electronic copies are available from: https://tinyurl.com/TalbotDamRemovalPublic*. Hardcopies may be requested by contacting Jill Griffiths of Gomez and Sullivan Engineers, DPC at jgriffiths@gomezandsullivan.com or (716) 402-6777.*

This attachment contains the following correspondence:

- 7/15/2022: MCC to NOAA – Response to Invitation to Join NHPA Section 106 Consultation
- 7/14/2022: BHC to NOAA – Response to Invitation to Join NHPA Section 106 Consultation
- 6/8/2022: NOAA – Invitation to Join NHPA Section 106 Consultation, to the following recipients:
    - Billerica Town Manager
    - Middlesex Canal Commission (MCC)
    - Middlesex Canal Association (MCA)
    - Billerica Historic Commission (BHC)
    - Billerica Historic District Commission (BHDC)
    - Wampanoag Tribe of Gay Head (Aquinnah)
    - Mashpee Wampanoag Tribe
    - Narragansett Indian Tribe
    - MA Commission on Indian Affairs (MCIA)
    - MA Board of Underwater Archaeological Resources
- 3/28/2016: GSE – Distribution of Historic and Archaeological Reconnaissance Survey, to the following recipients:
    - MA Dept. of Environmental Protection, Northeast Regional Office
    - MA Dept. of Conservation and Recreation, Office of Dam Safety
    - MA Board of Underwater Archaeological Resources
    - Billerica Historical Commission
    - Billerica Historic Districts Commission
    - Middlesex Canal Association
    - Middlesex Canal Commission
    - MA Div. of Marine Fisheries
    - NOAA Restoration Center
    - US Fish and Wildlife Service
    - Massachusetts Historical Commission
- 3/22/2016: PAL to MHC – Historic and Archaeological Reconnaissance Survey Final Report
- 2/16/2016: MHC to NOAA – Comments on Historic and Archaeological Reconnaissance Survey
- 1/19/2016: PAL to MHC – Historic and Archeological Reconnaissance Survey Draft Report
- 12/5/2014: NOAA to MHC – Confirmation of Lead Federal Agency
- 11/24/2014: MHC to PAL – Notification of Amendment to Permit #3511
- 11/20/2014: PAL to MHC – Revised Permit Application to Conduct Historic and Archeological Reconnaissance Survey
- 11/18/2014: MHC to NOAA – Response to PNF and Permit Application
- 11/17/2014: MCC to MHC – Response to PNF and Permit Application
- 11/10/2014: PAL to MHC – PNF and Permit Application to Conduct Historic and Archaeological Reconnaissance Survey

THE COMMONWEALTH OF MASSACHUSETTS

Middlesex Canal Commission

July 15, 2022

Mr. Eric Hutchins
National Marine Fisheries Service (NOAA)
Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

SENT CERTIFIED MAIL

RE: Response - Talbot Mills Dam - Invitation to Join NHPA Section 106 Consultation

Dear Mr. Hutchins:

Per your invitation letter of June 13, 2022, the Middlesex Canal Commission (MCC) wishes to participate in the above-referenced Section 106 process for the Talbot Mills Dam. Accordingly, please furnish the MCC with all correspondence, studies, etc., relevant to the Section 106 process.

As we have communicated to you and the dam removal proponents on June 29, 2022 (in Billerica) and otherwise, we have a direct interest in the preservation of unique and irreplaceable historic resources located in your project area. In addition, we have made a considerable financial investment in the design of the Middlesex Canal Heritage Park. Finally, we own real estate along the "summit pond" which is part of the potentially affected area.

We look forward to exercising our right and mission to advance historic preservation interests for the Middlesex Canal through the Section 106 process.

Sincerely yours,

Thomas W. Lincoln
MCC - Secretary

cc: MCC officers and members
Brona Smith, MHC
John Curran, Town Manager, Town of Billerica
J. J. Breen, MCA
Alex Ingerham, Billerica Historical Commission

Billerica Historical Commission
c/o Alec Ingraham, Chair
48 Mount Pleasant Street
North Billerica, MA 01862-1235

July 14, 2022

Eric W. Hutchins
Marine Habitat Resources Specialist
United States Department of Commerce
National Oceanic and Atmospheric Administration
Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2278

Dear Mr. Hutchins,

In response to your letter of June 8th regarding the Talbot Mill Dam Removal Project, the members of the Billerica Historical Commission wish to participate in the "Section 106 consultation process going forward." The Commission's interests in the project are reflected in the comments made on at the June 29th hearing by Middlesex Canal Commission member, Thomas Lincoln, and furthermore the significant role the dam has played in the early industrial development of the Town.

Sincerely,

Alec Ingraham

Alec Ingraham, Chair
Billerica Historical Commission

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. John Curran
Town Manager
Town of Billerica
365 Boston Road, Office #207
Billerica, MA 01821

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Curran:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the Town of Billerica to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. Leonard H. Harmon, Chairman
The Middlesex Canal Commission
c/o NMCOG
40 Church Street
Lowell, MA 01852

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Harmon:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

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This letter also serves as an invitation to the Middlesex Canal Commission to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

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Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. J. Jeremiah Breen
Middlesex Canal Association
71 Faulkner Street
North Billerica, MA, 10862

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Breen:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

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This letter also serves as an invitation to the Middlesex Canal Association to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

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GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. Alex Ingraham
Chairman
Billerica Historical Commission
365 Boston Road
Billerica, MA 01821

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Ingraham:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

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This letter also serves as an invitation to the Billerica Historical Commission to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

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We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

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Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
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55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

John J. McKenna
Chairman
Billerica Historical District Commission
365 Boston Road, Room 105
Billerica, MA 01821

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. McKenna:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the Billerica Historical District Commission to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Ms. Bettina Washington
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Ms. Washington:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the Wampanoag Tribe of Gay Head (Aquinnah) to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. David Weeden
Tribal Historic Preservation Officer
Mashpee Wampanoag Tribe
483 Great Neck Road South
Mashpee, MA 02649

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Weeden:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the Mashpee Wampanoag Tribe to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
4533 South County Trail
Charlestown, RI 02813

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Brown:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the Narragansett Indian Tribe to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 8, 2022

Mr. John Peters
Executive Director
MA Commission on Indian Affairs
100 Cambridge Street, Suite 300
Boston, MA 02114

Re: Talbot Mills Dam Removal Project, Billerica, MA
Invitation to Attend a Public Meeting and Join NHPA Section 106 Consultation

Dear Mr. Peters:

The National Oceanic and Atmospheric Administration (NOAA) and its project partners, including the United States Fish and Wildlife Service and the Massachusetts Divisions of Marine Fisheries and Ecological Restoration, are proposing to remove the Talbot Mills Dam in Billerica, Massachusetts (Project), as part of its effort to restore fish passage on the Concord River. The Talbot Mills dam currently blocks the upstream migration of diadromous fish species between the Atlantic Ocean and spawning and rearing habitat in over 130 miles of main-stem and tributary streams. The dam is identified as an intermediate size, Significant Hazard (Class II) structure in accordance with Massachusetts Dam Safety guidelines. The removal of the dam will serve several priority goals and objectives: increase public safety; remove the potential for downstream inundation due to dam failure; reduce upstream flooding; eliminate long-term maintenance cost; properly manage accumulated sediment; and restore riverine habitat and fish passage.

A feasibility study completed in 2014 considered several design alternatives, including the installation of a fish ladder and the removal of the dam. Dam removal was selected as the preferred alternative because it will provide both a fish passable channel and river access and visibility. This alternative involves breaching the dam between both abutments and allowing the stream channel to naturally restore itself through this section of boulders and bedrock. Preliminary design for the Project will be completed by the end of June 2022.

NOAA is providing technical support for the Project and is serving as the lead federal agency responsible for complying with Section 106 of the National Historic Preservation Act, as amended (36 CFR Part 800). NOAA has determined that the Project has the potential to cause adverse effects on historic properties, including the Talbot Mills Dam, which is listed in the National Register of Historic Places as a contributing resource to the Middlesex Canal Historic and Archaeological District. Consultation with the Massachusetts State Historic Preservation Officer was initiated in 2014 through the submittal of a Massachusetts Historical Commission (MHC) Project Notification Form for the Project. NOAA is currently in the process of gathering information to establish the area of potential effects (APE) for the Project and completing the identification of historic properties within the APE pursuant to 36 CFR § 800.4.

NOAA invites you and other members of your organization to attend a public meeting on June 29, 2022, at 6:30 pm at the Billerica Town Hall where the preliminary design will be presented, and status of the Project will be discussed (please see the enclosed flyer).

This letter also serves as an invitation to the MA Commission on Indian Affairs to participate in the Section 106 consultation process going forward. If you wish to participate, please notify me by letter by July 29th (30 days following the June 29th public meeting) and provide any comments you may have concerning the effects of the proposed Project on historic properties.

After we have received all responses, NOAA will forward to those parties who wish to participate in the consultation copies of correspondence and studies conducted to date relevant to the Section 106 review of the Project. In the meantime, if you have any questions, please contact me at 978-281-9313.

We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

Eric W. Hutchins
Marine Habitat Resources Specialist

Enclosure
Parties to receive letter:

John Curran, Town Manager, Town of Billerica
Leonard H. Harmon, Middlesex Canal Commission
J. Jeremiah Breen, Middlesex Canal Association
Alex Ingraham, Billerica Historical Commission
John J. McKenna, Billerica Historic Districts Commission
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
John Brown, Narragansett Indian Tribe
John Peters, Massachusetts Commission on Indian Affairs
David Robinson, MA BUAR

cc: Brona Smith, Executive Director, State Preservation Officer, MA Historic Commission
Paul Maniccia, Chief, Permits and Enforcement Branch A, Army Corps of Engineers
Robert Martin, Dam Owner
Benjamin Gahagan, MA DMF
Joseph Gould, MA DER
Molly Sperduto, US FWS
Rosemary Know, MA DEP
Michelle Craddock, MA DEP
John Battle, NOAA Federal Preservation Officer

GOMEZ AND SULLIVAN ENGINEERS

41 Liberty Hill Road • PO Box 2179 • Henniker, NH 03242 • Phone 603-428-4960 • Fax 603-428-3973

March 28, 2016

Re: Concord River Diadromous Fish Restoration Project, Talbot Mills Dam Feasibility Study, Faulkner and Pollard Street, Billerica, MA, MHC #RC.57226

To Whom It May Concern:

On behalf of the National Oceanic and Atmospheric Administration (NOAA) Restoration Center and its project partners, enclosed please find a CD containing an electronic copy of the technical report titled *Historic and Archaeological Reconnaissance Survey, Concord River Diadromous Fish Restoration Project, Talbot Mills Dam, Billerica, Massachusetts* for your review. This report was submitted to the Massachusetts Historical Commission (MHC) by the Public Archaeological Laboratory, Inc. (PAL) under State Archaeologist's permit number 3511 by letter dated March 22, 2016.

A public meeting was held to discuss the findings of the broader Concord River Diadromous Fish Restoration Feasibility Study (for which this historic and archaeological reconnaissance study was conducted) on February 23, 2016 at the Middlesex Canal Museum and Visitor Center. The meeting kicked off a six-week-long public comment period that ends on April 6, 2016. Copies of feasibility study have been made available to the general public online (http://tinyurl.com/ConcordRiverFishStudy) and in hardcopy at the Billerica Public Library, the Middlesex Canal Museum & Visitor Center, and the Lowell Parks & Conservation Trust. Public written comments on the project have been encouraged.

Please note that the enclosed report contains confidential information pertaining to the location of sensitive archaeological sites and is not for public distribution. If you have any questions or comments, please contact me at 603-428-4960 or jgriffiths@gomezandsullivan.com.

Sincerely,

Jill Griffiths, PE
Water Resources Engineer

Enclosure

cc: MA Dept. of Environmental Protection, Northeast Regional Office
Bill Salomaa, MA Dept. of Conservation and Recreation, Office of Dam Safety
Victor Mastone, Massachusetts Board of Underwater Archaeological Resources
Alec Ingraham, Billerica Historical Commission
Michael Rea, Jr., Billerica Historic Districts Commission
J. Jeremiah Breen, Middlesex Canal Association
Thomas Raphael, Middlesex Canal Commission
Ben Gahagan, Massachusetts Div. of Marine Fisheries (via email w/o encl.)
Eric Hutchins, NOAA Restoration Center (via email w/o encl.)
Michael Bailey, US Fish and Wildlife Service (via email w/o encl.)
Suzanne Cherau, PAL (via email w/o encl.)
Brona Simon, Massachusetts Historical Commission (w/o encl.)

Public Archaeology Laboratory

March 22, 2016

Brona Simon
State Archaeologist
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam, Billerica
Historic and Archaeological Reconnaissance Survey
PAL #2929, MHC #R.C. 57226

Dear Ms. Simon:

In response to your letter dated February 16, 2016, and on behalf of the National Oceanic and Atmospheric Administration (NOAA) and its project partners, enclosed please find two bound copies of the final technical report titled *Historic and Archaeological Reconnaissance Survey, Concord River Diadromous Fish Restoration Project, Talbot Mills Dam, Billerica, Massachusetts*, and a CD containing the technical report abstract and bibliographic information. Two bound copies are submitted because the final report contains minor corrections to chapter subheadings and a revised Figure 1-3 parcel ownership map that matches a similar figure included in the project proponent's public feasibility analysis study report. The final report is submitted to close out State Archaeologist's permit number 3511, which was granted an extension by your office on November 12, 2015.

If you have any questions or concerns, please do not hesitate to contact Suzanne Cherau, Principal Investigator, at your convenience.

Sincerely,

Deborah C. Cox, RPA
President

Enclosure

cc: Eric Hutchins, NOAA Restoration Center (w/o encl.)
Jill Griffiths, Gomez and Sullivan Engineers (w/o encl.)

26 Main Street Pawtucket, RI 02860 | 401.728.8780 Main | 401.728.8784 Fax
palinc.com

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

February 16, 2016

Eric Hutchins
National Oceanic and Atmospheric Administration
National Marine Fisheries Restoration Center
55 Great Republic Drive
Gloucester, MA 01930-2276

RE: Concord River Diadromous Fish Restoration Project, Talbot Mills Dam Feasibility Study, Faulkner and Pollard Street, Billerica, MA. MHC # RC.57226.

Dear Mr. Hutchins:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the technical report, *Historic and Archaeological Reconnaissance Survey, Concord River Diadromous Fish Restoration Project, Talbot Mills Dam, Billerica, Massachusetts*, prepared by the PAL, received January 20, 2016, for the project referenced above.

The MHC notes that the technical report includes several project alternatives, including installation of a fish ladder and demolition of the existing dam structure. The MHC looks forward to reviewing additional information for the project, including scaled proposed conditions project plans and NOAA's determinations and findings for the preferred project alternative, including determinations of the project area of potential effect, and potential effects to significant historic and archaeological resources.

The MHC will continue to consult with NOAA and other consulting parties to reach agreement to avoid, minimize or mitigate adverse effects to significant historic and archaeological resources as project planning proceeds.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 70-71), and/or MEPA (301 CMR 11). If you have questions, please contact Jonathan K. Patton at this office.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: Ben Gahagan, MA Div. of Marine Fisheries
DEP-NERO, Wetlands & Waterways
DCR, Office of Dam Safety
Victor Mastone, Massachusetts Board of Underwater Archaeological Resources
Billerica Historical Commission
Billerica Historic District Commission
Middlesex Canal Association
Middlesex Canal Commission
Deborah C. Cox, PAL, Attn: Suzanne Cherau
Jill Griffiths, Gomez & Sullivan Engineers

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

Public Archaeology Laboratory

January 19, 2016

Brona Simon
State Archaeologist
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam, Billerica
Historic and Archaeological Reconnaissance Survey
PAL #2929, MHC #R.C. 57226

Dear Ms. Simon:

On behalf of the National Oceanic and Atmospheric Administration (NOAA) and its project partners, enclosed please find a copy of the technical report titled *Historic and Archaeological Reconnaissance Survey, Concord River Diadromous Fish Restoration Project, Talbot Mills Dam, Billerica, Massachusetts*, for your review and comment. This report is submitted under State Archaeologist's permit number 3511, which was granted an extension by your office on November 12, 2015.

If you have any questions or concerns, please do not hesitate to contact Suzanne Cherau, Principal Investigator, at your convenience.

Sincerely,

Deborah C. Cox, RPA
President

Enclosure

cc: Eric Hutchins, NOAA Restoration Center (w/o encl.)
Jill Griffiths, Gomez and Sullivan Engineers (w/o encl.)

Note: Enclosure omitted from this Appendix due to sensitive archaeological site information

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

December 5, 2014

Ms. Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

SUBJECT: Concord River Diadromous Fish Restoration Project, Talbot Mills Dam Feasibility Study, Faulkner and Pollard Street, Billerica, MA MHC #RC.57226

Dear Ms. Simon:

As outlined in the Project Notification Form submitted to the Massachusetts Historic Commission on November 10, 2014, the MA Division of Marine Fisheries is leading a preliminary feasibility study to evaluate alternatives for fish passage at the Talbot Mills Dam in Billerica. NOAA, the US Fish and Wildlife Service and the MA Department of Environmental Protection are collaborating and supporting this study as part of the Restoration Plan and Environmental Assessment for the Nyanza Chemical Waste Dump Superfund Site. The NOAA Restoration Center appreciates your recent letter which provides preliminary identification of numerous historic and archaeological resources in close proximity to the Talbot Mills Dam, as well as recommending possible interested or consulting parties. The project team will be sure to reach out to these parties and others following the completion of this preliminary feasibility study. At this stage it is our expectation that NOAA will likely play the role as the lead federal agency when this project moves beyond the feasibility study phase (36 CFR 800.2(a)(2).

We appreciate the opportunity to work with your office on this complex and important project. If you have any questions, please contact Eric Hutchins at (978) 281-9313.

Sincerely,

John Catena
Northeast Regional Supervisor
NOAA Restoration Center

cc: Ben Gahagan, MA Division of Marine Fisheries
Molly Sperduto, US Fish and Wildlife Service
Tim Binzen, US Fish and Wildlife Service
Karen Adams, USACOE-NED Regulatory
Kate Atwood, USACOE-NED
DCR, Office of Dam Safety
Victor Mastone, MA Board of Underwater Archaeological Resources
Billerica Historical Commission
Billerica Historic District Commission
Middlesex Canal Association
Middlesex Canal Commission
Deborah Cox and Suzanne Cherau, PAL:
Jill Griffiths, Gomez and Sullivan Engineers MA Division of Ecological Restoration
NOAA Federal Preservation Officer, Robert McWilliams
Karen Pelto, MA DEP
Rosemary Knox, MADEP

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

November 24, 2014

Deborah C. Cox
PAL
210 Lonsdale Avenue
Pawtucket. RI 02860

Attn: Suzanne Cherau

RE: Concord River Diadromous Fish Restoration Project, Talbot Mills Dam Feasibility Study, Faulkner and Pollard Street, Billerica, MA. MHC # RC.57226. **PAL # 2929.**

Dear Deborah:

Thank you for submitting a revised State Archaeologist's permit application to the Massachusetts Historical Commission to amend State Archaeologist's Permit #3511, received November 21, 2014, for the project referenced above. The project has been revised to include a smaller archaeological survey area in the immediate vicinity of the existing Talbot Mills Dam in Billerica.

State Archaeologist's Permit #3511 has been amended and extended to expire on November 24, 2015, and I look forward to review of the results.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70). If you have any questions or need further information, please feel free to contact Jonathan K. Patton of my staff.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

Public Archaeology Laboratory

November 20, 2014

Brona Simon
State Archaeologist
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam, Billerica
Historic and Archaeological Reconnaissance Survey
PAL #2929

Dear Ms. Simon:

Enclosed please find a revised application for a State Archaeologist's permit to conduct a Historic and Archaeological Reconnaissance Survey for the Concord River Diadromous Fish Restoration Project-Talbot Mills Dam on the Billerica, Massachusetts USGS quadrangle in Billerica, Massachusetts. The revised permit application addresses concerns raised by the Middlesex Canal Commission regarding their landholdings around the perimeter of the Talbot Dam mill pond and previously identified historic and archaeological resources (see T. Raphael letter to you, dated November 17, 2014). The project partners including the National Oceanic and Atmospheric Administration (NOAA) and the Fish and Wildlife Service of the Department of the Interior (USFWS) have requested that PAL reduce its reconnaissance survey area to the dam site and adjacent lands where access has been secured from the owners of the dam. Also, please note that these agencies are working to investigate options for fish passage and associated river restoration that minimize impacts on historical and archaeological resources at this location as part of the current feasibility analysis for fish restoration.

If you have any questions or concerns, please do not hesitate to contact Suzanne Cherau, Principal Investigator, at your convenience.

Sincerely,

Deborah C. Cox, RPA
President

Enclosures

cc: Jill Griffiths, Gomez and Sullivan Engineers (w/o encl.)
Eric Hutchins, NOAA Restoration Center (w/o encl.)
Thomas Raphael, Middlesex Canal Commission (w/encl.)
J. Breen, Middlesex Canal Association (w/encl.)
Billerica Historical Districts Commission (w/encl.)

26 Main Street Pawtucket, RI 02860 | 401.728.8780 Main | 401.728.8784 Fax
palinc.com

950 CMR: DEPARTMENT OF THE STATE SECRETARY

APPENDIX B
COMMONWEALTH OF MASSACHUSETTS

SECRETARY OF STATE: MASSACHUSETTS HISTORICAL COMMISSION

PERMIT APPLICATION: ARCHAEOLOGICAL FIELD INVESTIGATION

A. General Information

Pursuant to Section 27(c) of Chapter 9 of the General Laws and according to the regulations outlined in 950 CMR 70.00, a permit to conduct a field investigation is hereby requested.

1. Name(s): Suzanne G. Cherau

2. Institution: The Public Archaeology Laboratory, Inc.

   Address: 26 Main Street
   Pawtucket, Rhode Island 02860

3. Project Location: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam
   see attached proposal

4. Town(s): Billerica

5. Attach a copy of a USGS quadrangle with the project area clearly marked.

   see attached

6. Property Owner(s): CRT Development Realty

7. The applicant affirms that the owner has been notified and has agreed that the applicant may perform the proposed field investigation.

8. The proposed field investigation is for a(n):

   a. Reconnaissance Survey
   b. Intensive Survey
   c. Site Examination
   d. Data Recovery

B. Professional Qualifications

1. Attach a personnel chart and project schedule as described in 950 CMR 70.11 (b).

   a. Personnel

Principal Investigator(s):	Suzanne Cherau
Senior Industrial Historian:	John Daly

   b. Schedule

Fieldwork:	December 2014
Analysis:	January – February 2015
Report:	March 2015

2. Include copies of curriculum vitae of key personnel (unless already on file with the State Archaeologist).

C. Research Design

1. Attach a narrative description of the proposed Research Design according to the requirements of 950 CMR 70.11.

2. The Applicant agrees to perform the field investigations according to the standards outlined in 950 CMR 70.13.

3. The Applicant agrees to submit a Summary Report, prepared according to the standards outlined in 950 CMR 70.14 by: June 30, 2015

4. The specimens recovered during performance of the proposed field investigation will be curated at:

   The Public Archaeology Laboratory, Inc.
   26 Main Street
   Pawtucket, Rhode Island 02860

SIGNATURE Suzanne J. Cherau
APPLICANT(S)

11/20/14
DATE

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Historical Commission

November 18, 2014

Eric Hutchins
National Oceanic and Atmospheric Administration
National Marine Fisheries Restoration Center
55 Great Republic Drive
Gloucester, MA 01930-2276

RE: Concord River Diadromous Fish Restoration Project, Talbot Mills Dam Feasibility Study, Faulkner and Pollard Street, Billerica, MA. MHC # RC.57226.

Dear Mr. Hutchins:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the Project Notification Form (PNF) and State Archaeologist's permit application to conduct a historic and archaeological reconnaissance survey, prepared by the PAL, received November 12, 2014, for the project referenced above. The proposed project consists of the preparation of a feasibility study for the modification or removal of the Talbot Mills Dam in Billerica. A copy of the feasibility study, including scaled existing and proposed conditions project plans, should be provided to the MHC when it is available.

The MHC notes that the project includes participation by federal agencies, including the National Oceanic and Atmospheric Administration (NOAA) and the US Fish & Wildlife Service. The project may also require permitting by the US Army Corps of Engineers. Please clarify if NOAA intends to act as the lead federal agency for the project (36 CFR 800.2(a)(2)).

Potentially interested or consulting parties include the Billerica Historical Commission, Billerica Historic District Commission, Middlesex Canal Association, and the Middlesex Canal Commission. The MHC recommends that NOAA contact them to ascertain their interest in reviewing and commenting on the project. Copies of any written comments on the project received from these bodies should also be provided to the MHC.

A State Archaeologist's permit has been issued to the PAL to conduct the historic and archaeological reconnaissance survey. The results of the survey should provide sufficient information for NOAA to offer a preliminary opinion of the project area of potential effect, and potential effects to significant historic and archaeological resources. Within the study area boundaries shown on the information submitted to the MHC, review of the MHC's Inventory of Historic and Archaeological Assets of the Commonwealth identified the following resources: the Billerica Mills Historic District (MHC # BIL.E/O) listed in the State and National Registers of Historic Places and a local historic district, and the Middlesex Canal (BIL.K/O/T) including multiple historic and archaeological resources, listed in the State and National Registers of Historic Places. Historic and archaeological resources within and adjacent to the project study area in these districts also include the Middlesex Canal Dam and Locks (MHC # BIL.900/BIL.HA.8), JR Faulkner Mills (BIL.77), Faulkner Street bridge (BIL.935), Middlesex Canal Guard Lock (BIL.951)Talbot Mill Lock and Dam (MHC # BIL.HA.9), Floating Tow Path Peninsula (BIL.953/BIL.HA.39), Floating Towpath Anchor Stone (BIL.HA.40), the Call/Talbia Mills Site (MHC # 19-MD-37), Billerica Falls (19-MD-897), and Wilson Street Site (19-MD-902).

The MHC looks forward to consultation with NOAA and with other consulting parties to reach agreement to avoid,

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www.sec.state.ma.us/mhc

minimize or mitigate adverse effects to significant historic and archaeological resources.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 70-71), and/or MEPA (301 CMR 11). If you have questions, please contact Jonathan K. Patton at this office.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc:
Ben Gahagan, MA Div. of Marine Fisheries
Tim Binzen, US Fish & Wildlife Service
Karen Kirk Adams, USACOE-NED Regulatory
Kate Atwood, USACOE-NED
DEP-NERO, Wetlands & Waterways
DCR, Office of Dam Safety
Nick Wildman, MADFG, Division of Ecological Restoration
Victor Mastone, Massachusetts Board of Underwater Archaeological Resources
Billerica Historical Commission
Billerica Historic District Commission
Middlesex Canal Association
Middlesex Canal Commission
Deborah C. Cox, PAL, Attn: Suzanne Cherau
Jill Griffiths, Gomez & Sullivan Engineers

THE COMMONWEALTH OF MASSACHUSETTS

Middlesex Canal Commission

November 17, 2014

Brona Simon
Massachusetts Historical Commission
229 Morrissey Boulevard
Boston, MA 02125

Re: Concord River Diadromous Fish Restoration Project
Billerica Historic and Archaeological Reconnaissance Survey, PAL #2929.

Dear MS Simon:
The Permit Application: "Archaeological Field Investigation" is incorrect in that Item 6, Property Owners, is missing the Middlesex Canal Commission (MCC) which owns three quarters of the peripheral land around the Talbot Dam mill pond. See attached documents. These are more recent changes than from any previous studies conducted by PAL and consequently, also makes Item 7 incorrect.

MCC has a Phase 1, Middlesex Canal Heritage Park, Mill Pond/ Canal Project, at the 25% design stage on the NMCG TIP for construction in 2018. There are five National Register Historic Features of this project:

1. The Talbot Mills Dam
2. The north Guard Lock
3. The south Guard Lock
4. The floating towpath anchor stone
5. The floating towpath peninsular

The construction and use of these features are predicated on maintaining the water at the historical level, as marked on a metal gauge imbedded in a stone near the Faulkner Mill property.

Thus, of the three options being considered, removal of the historic dam is not an option. In addition, the option of constructing a fish way, could not alter the structure nor appearance of the historic dam, nor alter the water flow over the dam or the water level. There may be a way to design a fish way while meeting these conditions The MCC would be glad to be consulted and consider any options.

The purpose of the Field Investigation however, considering all the previous would appear to be redundant.

Sincerely,

Thomas Raphael, CEO
666 Main Street, S412
Winchester, MSA 01890
Tel: 781-729-3215
thomrap@comcast.net

Enclosures, (4)

Exhibit A, , Other Properties
(Formerly Easement Area 4)

On March 16 2011, Leggett & Platt gave to the Middlesex Canal Commission, the floating towpath peninsular, on the northeast side of the Talbot Mill Dam mill pond.

In addition to the peninsular, the gifted properties included the 50 ft. strip of land on both sides of the mill pond to the Pollard Bridge, thus accounting for about 74% of the land perimeter of the mill pond. (See Exhibit A), the total known as “The Other Properties”.

The Granter’s Title Deed is recorded in Book 22265 Page 216, and the Grantee’s Title Deed in Book 24911 Page 61, pages 1-3 at the Middlesex North Registry of Deeds,

The History of the Talbot Mills Dam (Attached) explains the sequence of exchanges of ownership of these properties.

Thomas Raphael, Chairman
Executive Committee

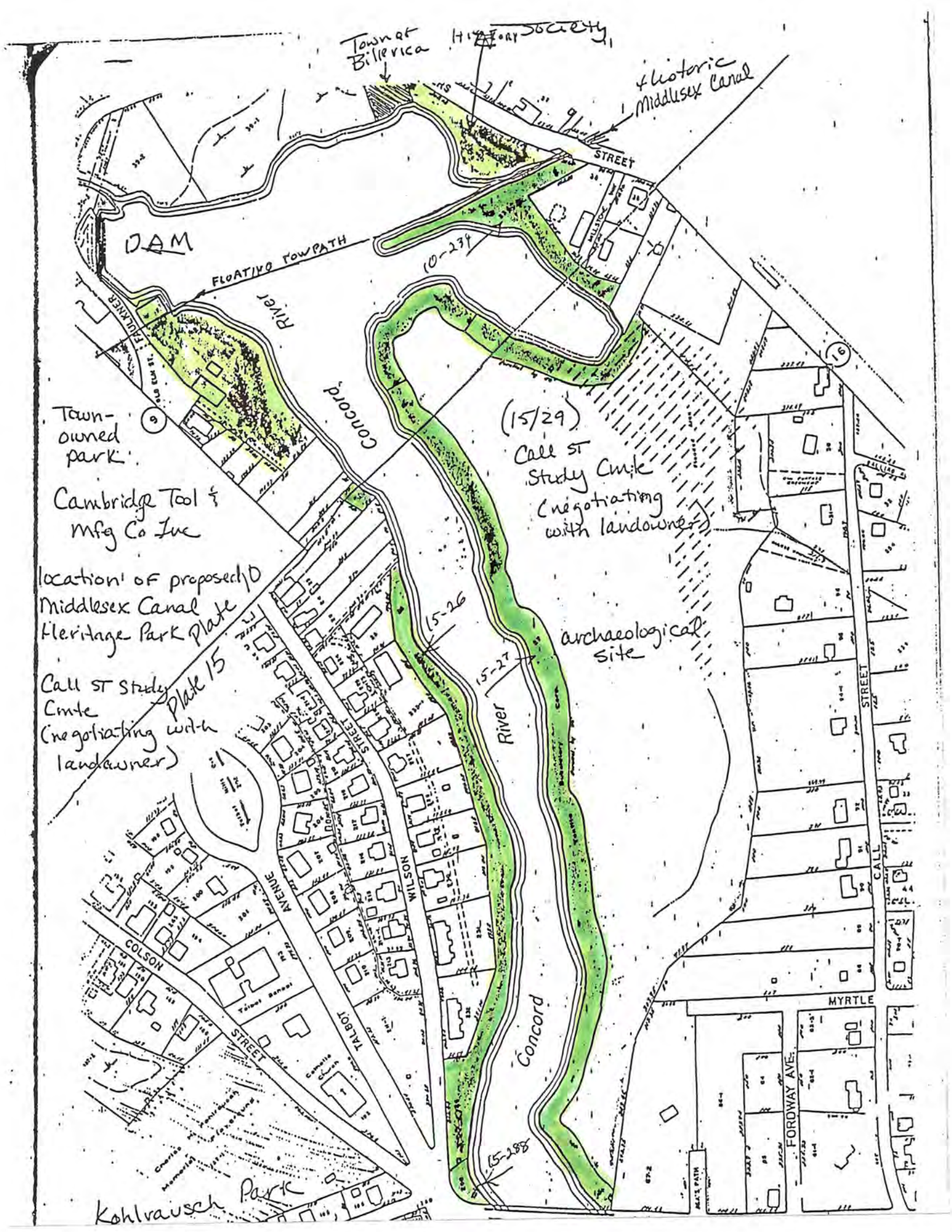
666 Main Street, S-412
Winchester, MA 01890
781-729-3215
thomrap@comcast.net

TR111314

Other Properties, Perimeter Owners

(Approximate)

Owner	**%**
MCC, Other Properties	74.0%
MCC Perpetual Easement Area	4.5%
MCA, New Museum	2.8%
Billerica Historical Society	7,1%
Town of Billerica	1.0%
Faulkner Mills	10.6%


Town of Billerica
Historic Middlesex Canal
STREET
DAM
FLOATING TOWPATH
River
Concord
(15/29)
Call ST Study Cmte
(negotiating with landowner)
Town-owned park
Cambridge Tool & Mfg Co Inc
location of proposed 10 Middlesex Canal Heritage Park Plate
Call ST Study Cmte (negotiating with landowner)
Plate 15
15-26
15-27
15-28B
archaeological site
WILSON STREET
AVENUE
TALBOT
COLSON
STREET
CALL STREET
MYRTLE
FOROWAY AVE.
Concord River
Kohlrausch Park

HISTORY OF THE TALBOT MILLS DAM

NAT ID# MA 00774

DCR DAM # 4-9-31-1

A stone crib was originally constructed, in the Concord River in North Billerica, in 1711 by Charles Osgood, under a grant for water power rights with the requirement that he maintain a corn mill.

In 1793, the Massachusetts Legislature chartered the Middlesex Canal Company Inc. and granted it water power rights. Needing a good supply of waters at the summit of the canal, the company purchased the old dam, its water power and mill privileges from Osgood' successor.

The old dam was completely rebuilt in 1798. Later, in 1828, an entirely new granite block dam was constructed just downstream of the old dam, which is submerged upstream of the new dam.

The last toll was collected in 1851. When the canal company was liquidated, the dam, land and water rights were sold to the Talbot brothers. The Talbots expanded the mills using water power for processing woolen cloth until the advent of steam power.

The Cambridge Tool and Manufacturing Co. Inc., in 1975, purchased the complete Talbot mills properties, including the dam, the water rights and property around the mill pond and used the water for processing, until town water became available. Cambridge Tool and Manufacturing Co. Inc. was sold to Pace Industries and they in turn were sold to Leggett & Platt***, excluding*** the dam and water rights, but somehow i***ncluding*** the property around the mill pond. Leggett & Platte then gave the 50' property around the mill pond to the Middlesex Canal Commission.

The dam and water rights are still held by the original owners of Cambridge Tool and Manufacturing Co. Inc., dba, CRT Development, with Robert Martin, designated as dam caretaker.

The Town of Billerica is taking water from the river for public use under an agreement with CRT Development.

The dam has been inspected by the Office of Dam Safety of the Department of Conservation and Recreation (formerly DEM) on two occasions, with inspection reports submitted May 20, 1999 and May 15, 2003.

Thomas Raphael
Dam History, 011409

Public Archaeology Laboratory

November 10, 2014

Brona Simon
State Archaeologist
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

Re: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam, Billerica
Historic and Archaeological Reconnaissance Survey
PAL #2929

Dear Ms. Simon:

Enclosed please find a Project Notification Form and application for a State Archaeologist's permit to conduct a Historic and Archaeological Reconnaissance Survey for the Concord River Diadromous Fish Restoration Project-Talbot Mills Dam study area in Billerica, Massachusetts. The study area is located on the Billerica, Massachusetts USGS quadrangle. We would like to begin investigations as soon as possible. Thank you in advance for your time and attention to this matter.

If you have any questions or concerns, please do not hesitate to contact Suzanne Cherau, Principal Investigator, at your convenience.

Sincerely,

Deborah C. Cox, RPA
President

Enclosures

cc: Jill Griffiths, Gomez and Sullivan Engineers (w/o encl.)
Eric Hutchins, NOAA Restoration Center (w/o encl.)
Thomas Raphael, Middlesex Canal Commission (w/encl.)
J. Breen, Middlesex Canal Association (w/encl.)
Billerica Historical Districts Commission (w/encl.)

Note: PNF omitted from this Appendix due to sensitive archaeological site information

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Concord River Diadromous Fish Restoration Project – Talbot Mills Dam

Location / Address: Faulkner Street to Pollard Street

City / Town: Billerica

Project Proponent

Name: Ben Gahagan, Massachusetts Division of Marine Fisheries

Address: Annisquam River Marine Fisheries Station, 30 Emerson Avenue,

City/Town/Zip/Telephone: Gloucester, MA 01930 / (978) 282-0308 x140

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name:	Type of License or funding (specify)
Massachusetts Division of Marine Fisheries	Project lead
NOAA Restoration Center	Project support
US Fish and Wildlife Service	Project support
MA Department of Environmental Protection	Project support
Nyanza Natural Resource Damages Settlement	Project funding

Project Description (narrative):

The Massachusetts Division of Marine Fisheries, with support from the National Oceanic and Atmospheric Administration (NOAA) Restoration Center, the US Fish and Wildlife Service (USFWS), and the Massachusetts Department of Environmental Protection (DEP), and funding from the Nyanza Natural Resource Damages Settlement, is evaluating the feasibility of restoring populations of diadromous, fish to the upper Concord River watershed. The restoration of diadromous species is important to the larger Merrimack River watershed, as they provide forage to many species of fish and wildlife, as well as recreational and cultural benefits to citizens who value fish runs for food, bait, and as a sign of a healthy river.

Currently, the primary impediment to fish passage in the Concord River is the Talbot Mills Dam in North Billerica, MA. If the restoration project proceeds beyond the feasibility phase, this privately-owned structure may need to be removed or modified to provide fish passage. The current project is a feasibility study including the preparation of conceptual plans for fish passage alternatives based on three options at Talbot Mill Dam: no change; structural fishway; or dam removal. Gomez and Sullivan Engineers, DPC has been contracted to conduct the feasibility study, which will involve a review of existing information, hydrologic and hydraulic analyses, structural assessment, evaluation of impounded sediments, cultural resources analysis, conceptual design of fish passage options, feasibility report, and final public meeting. The Public Archaeology Laboratory (PAL) has been subcontracted to conduct the cultural resources analysis.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

The current feasibility phase of this project does not involve any demolition. If the project proceeds beyond feasibility, one option for fish passage may involve demolition of part or all of the Talbot Mills Dam.

Does the project include rehabilitation of any existing building? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

As currently envisioned, the project would not involve reahabilitation of any existing buildings in current or future phases.

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

The current feasibility phase of this project does not involve any new construction. If the project proceeds beyond feasibility, one option for fish passage may involve construction of a structural fishway at Talbot Mills Dam. Plans and elevations will be developed as part of the current feasibility study.

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

The feasiblity study involves conceptual fish passage restoration options that could involve the removal or modification of Talbot Mills Dam (aka Middlesex Canal Dam or Lock Chamber and Dam), recorded in the *Inventory of Historic and Archaeological Assets of the Commonwealth* (MHC No. BIL.900), and included in the Billerica Mills Historic District, MHC Nos. BIL.O and BIL.E, listed in the National Register of Historic Places. The dam was constructed in 1828-1829 and occupies a site that was dammed as early as the 1700s to provide waterpower for grain or textile mills. Water reserved by the present structure was utilized by two mill complexes in the nineteenth century: the Faulkner Mill founded in 1811 on the eastern bank and the Talbot Mill founded in 1857 on the western bank (also both included in the Billerica Mills National Register Historic District). The historic Middlesex Canal (MHC Nos. BIL.P, BIL.T, BIL.8, listed in the National Register), was built near the dam in 1794 and used the mill impoundment water as a source to fill the canal. The study area for the dam impoundment contains the Middlesex Canal Talbot Mill Lock and Dam archaeological site (MHC No. BIL.HA.9) along with several other canal features including a floating towpath peninsula (MHC No. BIL.HA.39) and floating towpath anchor stone (MHC No. BIL.HA.40). These historic archaeological resources are included in the Middlesex Canal Historic and Archaeological District (MHC No. BIL.T), listed in the National Register. Pre-contact archaeological sites in or close to the upstream and downstream reaches of the dam site and project study area to either side of Faulkner Street consist of 19-MD-35, 19-MD-37, 19-MD-897, and 19-MD-902.

What is the total acreage of the project area? *(approximate values given for proposed survey area)*

Woodland	0	acres	Productive Resources:		
Wetland	21	acres	Agriculture	0	acres
Floodplain	14	acres	Forestry	0	acres
Open Space	0	acres	Mining	0	acres
Developed	1	acres	Total Project Acreage	36	acres

What is the acreage of the proposed new construction? < 1 acre

What is the present land use of the project area?

Open space (river/banks near mill complex)

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

Attached.

APPENDIX A (continued)

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submiting this form Lyane J. Claau Date: 11/7/14

Name: The Public Archaeology Laboratory, Inc.

Address: 26 Main Street

City / Town: Pawtucket, Rhode Island 02860

Telephone: 401-728-8780

REGULATORY AUTHORITY

930CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St.1988, c.254.

Figure 1. Location of the Concord River Diadromous Fish Restoration Project – Talbots Mill Dam study area on the Billerica, MA, USGS topographic quadrangle, 7.5 minute series.

950 CMR: DEPARTMENT OF THE STATE SECRETARY

APPENDIX B
COMMONWEALTH OF MASSACHUSETTS

SECRETARY OF STATE: MASSACHUSETTS HISTORICAL COMMISSION

PERMIT APPLICATION: ARCHAEOLOGICAL FIELD INVESTIGATION

A. General Information

Pursuant to Section 27(c) of Chapter 9 of the General Laws and according to the regulations outlined in 950 CMR 70.00, a permit to conduct a field investigation is hereby requested.

1. Name(s): Suzanne G. Cherau

2. Institution: The Public Archaeology Laboratory, Inc.

   Address: 26 Main Street
   Pawtucket, Rhode Island 02860

3. Project Location: Concord River Diadromous Fish Restoration Project-Talbot Mills Dam
   see attached proposal

4. Town(s): Billerica

5. Attach a copy of a USGS quadrangle with the project area clearly marked.

   see attached

6. Property Owner(s): Faulkner Mills Acquisition Corp., Concord River Trust, Town of Billerica, Billerica Historical Society, Pace Industries (L&P Aluminum Holdings LLC and L&P Acquisition LLC), and CRT Development Realty.

7. The applicant affirms that the owner has been notified and has agreed that the applicant may perform the proposed field investigation.

8. The proposed field investigation is for a(n):

   a. Reconnaissance Survey
   b. Intensive Survey
   c. Site Examination
   d. Data Recovery

B. Professional Qualifications

1. Attach a personnel chart and project schedule as described in 950 CMR 70.11 (b).

a. Personnel

Principal Investigator(s):	Suzanne Cherau
Senior Industrial Historian:	John Daly

b. Schedule

Fieldwork:	November – December 2014
Analysis:	January – February 2015
Report:	March 2015

2. Include copies of curriculum vitae of key personnel (unless already on file with the State Archaeologist).

C. Research Design

1. Attach a narrative description of the proposed Research Design according to the requirements of 950 CMR 70.11.

2. The Applicant agrees to perform the field investigations according to the standards outlined in 950 CMR 70.13.

3. The Applicant agrees to submit a Summary Report, prepared according to the standards outlined in 950 CMR 70.14 by: June 30, 2015

4. The specimens recovered during performance of the proposed field investigation will be curated at:

The Public Archaeology Laboratory, Inc.
26 Main Street
Pawtucket, Rhode Island 02860

SIGNATURE Suzanne G. Cherau
APPLICANT(S)

November 7, 2014
DATE

Attachment 6 – Climate Resilience Design Standards Tool Report

Note: This attachment is not included with hardcopies of the ENF unless specifically requested. Electronic copies are available from: https://tinyurl.com/TalbotDamRemovalPublic*. Hardcopies may be requested by contacting Jill Griffiths of Gomez and Sullivan Engineers, DPC at jgriffiths@gomezandsullivan.com or (716) 402-6777.*

Climate Resilience Design Standards Tool Project Report

Talbot Mills Dam Removal
Date Created: 6/15/2023 5:49:33 AM
Created By: jgriffiths
Date Report Generated: 6/15/2023 6:23:24 AM
Tool Version: Version 1.2
Project Contact Information: Jill Griffiths (jgriffiths@gomezandsullivan.com)

Project Summary

Link to Project

Estimated Capital Cost: $930000.00
End of Useful Life Year: 2025
Project within mapped Environmental Justice neighborhood: Yes

Ecosystem Service Benefits	Scores
Project Score	High
Exposure	**Scores**
Sea Level Rise/Storm Surge	Not Exposed
Extreme Precipitation - Urban Flooding	High Exposure
Extreme Precipitation - Riverine Flooding	High Exposure
Extreme Heat	Moderate Exposure

Asset Preliminary Climate Risk Rating Summary

Number of Assets: 1

Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Urban Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
Concord River	—— Natural Resource project assets do not receive a preliminary climate risk rating. ——			

Climate Resilience Design Standards Summary

	Target Planning Horizon	Intermediate Planning Horizon	Percentile	Return Period	Tier
Sea Level Rise/Storm Surge					
Concord River					
Extreme Precipitation					
Concord River	2030				Tier 1
Extreme Heat					
Concord River	2030		th		Tier 1

Scoring Rationale - Project Exposure Score

The purpose of the Exposure Score output is to provide a preliminary assessment of whether the overall project site and subsequent assets are exposed to impacts of natural hazard events and/or future impacts of climate change. For each climate parameter, the Tool will calculate one of the following exposure ratings: Not Exposed, Low Exposure, Moderate Exposure, or High Exposure. The rationale behind the exposure rating is provided below.

Sea Level Rise/Storm Surge

This project received a "Not Exposed" because of the following:

- Not located within the predicted mean high water shoreline by 2030
- No historic coastal flooding at project site
- Not located within the Massachusetts Coast Flood Risk Model (MC-FRM)

Extreme Precipitation - Urban Flooding

This project received a "High Exposure" because of the following:

- Historic flooding at the project site
- No increase to impervious area
- Maximum annual daily rainfall is within 6 to 10 inches within the overall project's useful life
- Existing impervious area of the project site is between 10% and 50%

Extreme Precipitation - Riverine Flooding

This project received a "High Exposure" because of the following:

- Project site has a history of riverine flooding
- Part of the project is within a mapped FEMA floodplain, outside of the Massachusetts Coast Flood Risk Model (MC-FRM)
- Part of the project is within 100ft of a waterbody
- Project is not likely susceptible to riverine erosion

Extreme Heat

This project received a "Moderate Exposure" because of the following:

- Existing impervious area of the project site is between 10% and 50%
- 10 to 30 day increase in days over 90 deg. F within project's useful life
- Located within 100 ft of existing water body
- No increase to the impervious area of the project site
- No tree removal

Scoring Rationale - Asset Preliminary Climate Risk Rating

A Preliminary Climate Risk Rating is determined for each infrastructure and building asset by considering the overall project Exposure Score and responses to Step 4 questions provided by the user in the Tool. Natural Resource assets do not receive a risk rating. The following factors are what influenced the risk ratings for each asset.

Asset - Concord River
Primary asset criticality factors influencing risk ratings for this asset:

No score available

Project Climate Resilience Design Standards Output

Climate Resilience Design Standards and Guidance are recommended for each asset and climate parameter. The Design Standards for each climate parameter include the following: recommended planning horizon (target and/or intermediate), recommended return period (Sea Level Rise/Storm Surge and Precipitation) or percentile (Heat), and a list of applicable design criteria that are likely to be affected by climate change. Some design criteria have numerical values associated with the recommended return period and planning horizon, while others have tiered methodologies with step-by-step instructions on how to estimate design values given the other recommended design standards.

Asset: Concord River — Natural Resources

Sea Level Rise/Storm Surge

Applicable Design Criteria

Projected Tidal Datums: NOT APPLICABLE

Projected Water Surface Elevation: NOT APPLICABLE

Projected Wave Action Water Elevation: NOT APPLICABLE

Projected Wave Heights: NOT APPLICABLE

Return Period Recommendations for natural resource assets and subsequent projected values are provided as a consideration for users, not a formal standard. Users should follow industry best practices for designing natural resource assets in coordination with the appropriate regulatory agencies.

Projected Duration of Flooding: NOT APPLICABLE

Projected Design Flood Velocity: NOT APPLICABLE

Projected Scour & Erosion: NOT APPLICABLE

Extreme Precipitation

Target Planning Horizon: 2030

LIMITATIONS: The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. In the Northeast, short-duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

The projected values, standards, and guidance provided within this Tool may be used to inform plans and designs, but they do not provide guarantees for future conditions or resilience. The projected values are not to be considered final or appropriate for construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

Applicable Design Criteria

Tiered Methodology: Tier 1

Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Concord River	2030	25-Year (4%)	7.0	Downloadable Methodology PDF

Return Period Recommendations for natural resource assets and subsequent projected values are provided as a consideration for users, not a formal standard. Users should follow industry best practices for designing natural resource assets in coordination with the appropriate regulatory agencies.

ATTENTION: This is a Tier 1 project. It is advised to compare the extreme precipitation output values to the NOAA+ methodology to calculate total precipitation depth for 24-hr design storms.

This methodology can be found in the following PDF. (Link).

Projected Riverine Peak Discharge & Peak Flood Elevation: APPLICABLE
Methodology to Estimate Projected Values : Tier 1

Extreme Heat

Target Planning Horizon: 2030
Percentile: Does not apply

Applicable Design Criteria

Tiered Methodology: Tier 1

Projected Annual/Summer/Winter Average Temperatures: APPLICABLE
Methodology to Estimate Projected Values : Tier 1

Projected Heat Index: NOT APPLICABLE

Projected Growing Degree Days: NOT APPLICABLE

Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F: NOT APPLICABLE

Projected Number of Heat Waves Per Year & Average Heat Wave Duration: NOT APPLICABLE

Projected Cooling Degree Days & Heating Degree Days (base = 65°F): NOT APPLICABLE

Project Inputs

Core Project Information

Name:	Talbot Mills Dam Removal
Given the expected useful life of the project, through what year do you estimate the project to last (i.e. before a major reconstruction/renovation)?	2025
Location of Project:	Billerica
Estimated Capital Cost:	$930,000
Who is the Submitting Entity?	Private Other Gomez and Sullivan Engineers, DPC Jill Griffiths (jgriffiths@gomezandsullivan.com)
Is this project being submitted as part of a state grant application?	No
Which grant program?	
What stage are you in your project lifecycle?	Permitting
Is climate resiliency a core objective of this project?	Yes
Is this project being submitted as part of the state capital planning process?	No
Is this project being submitted as part of a regulatory review process or permitting?	Yes
Brief Project Description:	The owner of the Talbot Mills Dam on the Concord River in Billerica is seeking dam removal as the best alternative to restore migratory fish passage and connectivity for resident aquatic species; decommission aging infrastructure; eliminate ongoing maintenance and repair obligations; reduce flood hazards and increase resilience; and improve water quality, habitat, and natural river functions. The proposed dam removal project is an Ecological Restoration Project that will improve climate change resilience by 1) reducing upstream flooding (by lowering water levels and increasing available floodplain storage) and 2) eliminating the risk of a catastrophic dam failure that could result in downstream flooding, property damage, and/or loss of life. The following permits and regulatory reviews are anticipated to be required or potentially required for this project: MEPA Expanded Environmental Notification Form (EENF) and Environmental Impact Report (EIR); DEP Ch. 91 Waterways Dredge Permit; DEP 401 Water Quality Certification (WQC); USACE Preconstruction Notice (PCN); Section 106 Consultation; Billerica Notice of Intent (NOI) for an Ecological Restoration Project; and Billerica Building Permit for Demolition.
Project Submission Comments:	

Project Ecosystem Service Benefits

Factors Influencing Output

- ✓ This is an ecological restoration project
- ✓ Project provides flood protection through nature-based solutions
- ✓ Project reduces storm damage
- ✓ Project protects public water supply
- ✓ Project improves water quality
- ✓ Project protects fisheries, wildlife, and plant habitat
- ✓ Project provides recreation
- ✓ Project provides oxygen production
- ✓ Project provides cultural resources/education

Factors to Improve Output

- ✓ Incorporate strategies that reduce carbon emissions
- ✓ Incorporate nature-based solutions that sequester carbon carbon
- ✓ Incorporate vegetation that provides pollinator habitat
- ✓ Identify opportunities to remediate existing sources of pollution
- ✓ Mitigate atmospheric greenhouse gas concentrations and other toxic air pollutants through nature-based solutions

Is the primary purpose of this project ecological restoration?

Yes

Project Benefits

Provides flood protection through nature-based solutions	Yes
Reduces storm damage	Yes
Recharges groundwater	No

Protects public water supply	Yes
Filters stormwater using green infrastructure	No
Improves water quality	Yes
Promotes decarbonization	Maybe
Enables carbon sequestration	Maybe
Provides oxygen production	Yes
Improves air quality	Maybe
Prevents pollution	No
Remediates existing sources of pollution	Maybe
Protects fisheries, wildlife, and plant habitat	Yes
Protects land containing shellfish	No
Provides pollinator habitat	Maybe
Provides recreation	Yes
Provides cultural resources/education	Yes
Project Climate Exposure	
Is the primary purpose of this project ecological restoration?	Yes
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events (unrelated to water/sewer damages)?	Yes
Does the project site have a history of riverine flooding?	Yes
Does the project result in a net increase in impervious area of the site?	No
Are existing trees being removed as part of the proposed project?	No
Project Assets	
Asset: Concord River	
Asset Type: Wetland Resource Area - Inland	
Asset Sub-Type: Land under Water Bodies or Waterways	
Construction Type: Dam Removal	
Construction Year: 2024	
Monitoring Frequency: 1	

Report Comments

N/A

Attachment 7 – EJ Screening Form

Note: This attachment is not included with hardcopies of the ENF unless specifically requested. Electronic copies are available from: https://tinyurl.com/TalbotDamRemovalPublic*. Hardcopies may be requested by contacting Jill Griffiths of Gomez and Sullivan Engineers, DPC at jgriffiths@gomezandsullivan.com or (716) 402-6777.*

Environmental Justice Screening Form

Project Name	Talbot Mills Dam Removal
Anticipated Date of MEPA Filing	May 31, 2023
Proponent Name	Robert Martin, CRT Development Realty, LLC
Contact Information (e.g., consultant)	Jill Griffiths, PE Gomez and Sullivan Engineers PO Box 2179 | Henniker, NH 03242 O: (603) 428-4960 | D: (716) 402-6777 jgriffiths@gomezandsullivan.com
Public website for project or other physical location where project materials can be obtained (if available)	Project Website: https://merrimack.org/talbotmills/ Project StoryMap: https://storymaps.arcgis.com/stories/17ef93aeba194b1a84fbf0fef86b19f9
Municipality and Zip Code for Project (if known)	Billerica (01862)
Project Type* (list all that apply)	Dam Removal; Ecological Restoration; Resiliency
Is the project site within a mapped 100-year FEMA flood plain? Y/N/ unknown	Yes
Estimated GHG emissions of conditioned spaces (click **here** for GHG Estimation tool)	N/A

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

In partnership with multiple state and federal agencies and local watershed organizations, the owner of the Talbot Mills Dam is seeking dam removal as the best alternative to restore migratory fish passage, decommission aging infrastructure, eliminate ongoing maintenance and repair obligations, reduce flood hazards and increase resilience, and improve water quality, habitat, and natural river functions. The dam is located on the Concord River in North Billerica, just upstream of Faulkner Street. The project has been awarded status as a Priority Project by the Massachusetts Division of Ecological Restoration. Feasibility studies were conducted in 2014-16 and 2021, a conceptual design was developed in 2022, and preliminary design is currently underway. Numerous public outreach efforts and meetings have been conducted (recorded on the project website linked to above) and additional public comment opportunities will be available during permitting. It is anticipated that permit applications for the project will be submitted beginning in late May 2023 and construction is slated for summer/fall of 2024.

The area of direct disturbance due to temporary access/staging and demolition activities is anticipated to be less than one acre. Work will involve 1) removal of the approximately 127-foot-

long, 10-foot-high existing granite masonry spillway and concrete right abutment, 2) documentation and removal of a former timber dam assumed to be submerged just upstream (if found), and 3) grading of sediment immediately upstream of the dam. Sediment within the dam impoundment will be allowed to move downstream naturally over time and restore sediment-deprived areas, since it has been deemed relatively clean compared to reference levels and the amount that would likely mobilize is a small percentage of the watershed's annual sediment load. During dewatering of the impoundment and construction, turbidity curtains will be temporarily installed along the edges of invasive water chestnut growth areas, which coincide with major sediment deposits, to allow sediment to stabilize in place and to dry out the water chestnut so that it is no longer viable. Engineering studies have demonstrated that significant changes in water levels upstream of the dam will be limited to the lower impoundment downstream of the Pollard Street bridge. Upstream of the bridge, water level changes will be no more than 5 inches depending on flow. Following dam removal, it is anticipated that the lower impoundment will be restored to a series of cascading waterfalls that were formerly present at the site and were important fishing grounds used extensively by Native Americans.

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

- structural alteration of an existing dam that causes any decrease in impoundment capacity
- alteration of 500 or more linear feet of bank along a fish run or inland bank
- alteration of 5,000 or more sf of bordering or isolated vegetated wetlands
- alteration of one half or more acres of any other wetlands
- demolition of all or any exterior part of any Historic Structure listed in or located in any Historic District listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth
- environmental impacts within 1 mile of an Environmental Justice population

3. List all anticipated state, local and federal permits needed for the project (if known)

- US Army Corps of Engineers – Section 404/Section 10 Preconstruction Notice
- National Historic Preservation Act Section 106 Consultation
- MA Dept. of Environmental Protection – Combined Permit for Chapter 91 Waterways & Section 401 Water Quality Certification
- MA Dept. of Conservation & Recreation – Chapter 253 Dam Safety Permit
- Town of Billerica – Notice of Intent for an Ecological Restoration Project
- Town of Billerica – Building Permit (for demolition)

Note that any project meeting the eligibility criteria for an Ecological Restoration Project set forth in 310 CMR 10.13 is not be required to undergo MEPA review, provided the requirements of 301 CMR 11.01(2)(b)4 are met. It is anticipated that the proposed dam removal project will qualify as an Ecological Restoration Project. However, the project team recognizes the public interest in this project and has elected to proactively undergo MEPA review to maximize the opportunities for public review and comment on the project.

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from EJ Maps Viewer in lieu of narrative)

See attached maps. No air quality impacts are anticipated for this project, so a map of EJ populations within 1 mile of the site is provided in Figure 1. A map of EJ populations within 5 miles of the site is

also provided for reference. No EJ populations with English isolation are identified within 1 mile of the project site. However, the project team has proactively translated a project summary and FAQ document into Spanish and Portuguese based on input from local community organizations about languages other than English that may be spoken in the vicinity of the project.

5. Identify any municipality or census tract meeting the definition of "vulnerable health EJ criteria" in the DPH EJ Tool located in whole or in part within a 1 mile radius of the project site.

Billerica meets the Vulnerable Health EJ criterion for low birth weight.

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation.

No public health impacts are anticipated due to this project. Because this is an Ecological Restoration Project, any environmental impacts will be temporary in nature and will result in a net overall environmental benefit due to the project. Temporary environmental impacts due to construction disturbance will be avoided, minimized, and/or mitigated as appropriate using best management practices.

7. Identify project benefits, including "Environmental Benefits" as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

The project is anticipated to provide many environmental and public benefits, including: restore migratory fish passage; reduce flood hazards; increase resiliency; improve water quality, habitat, and natural river functions; and enhance recreational opportunities. The project will provide environmental benefits as defined in 301 CMR 11.02 by improving access to clean natural, water resources.

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting . Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

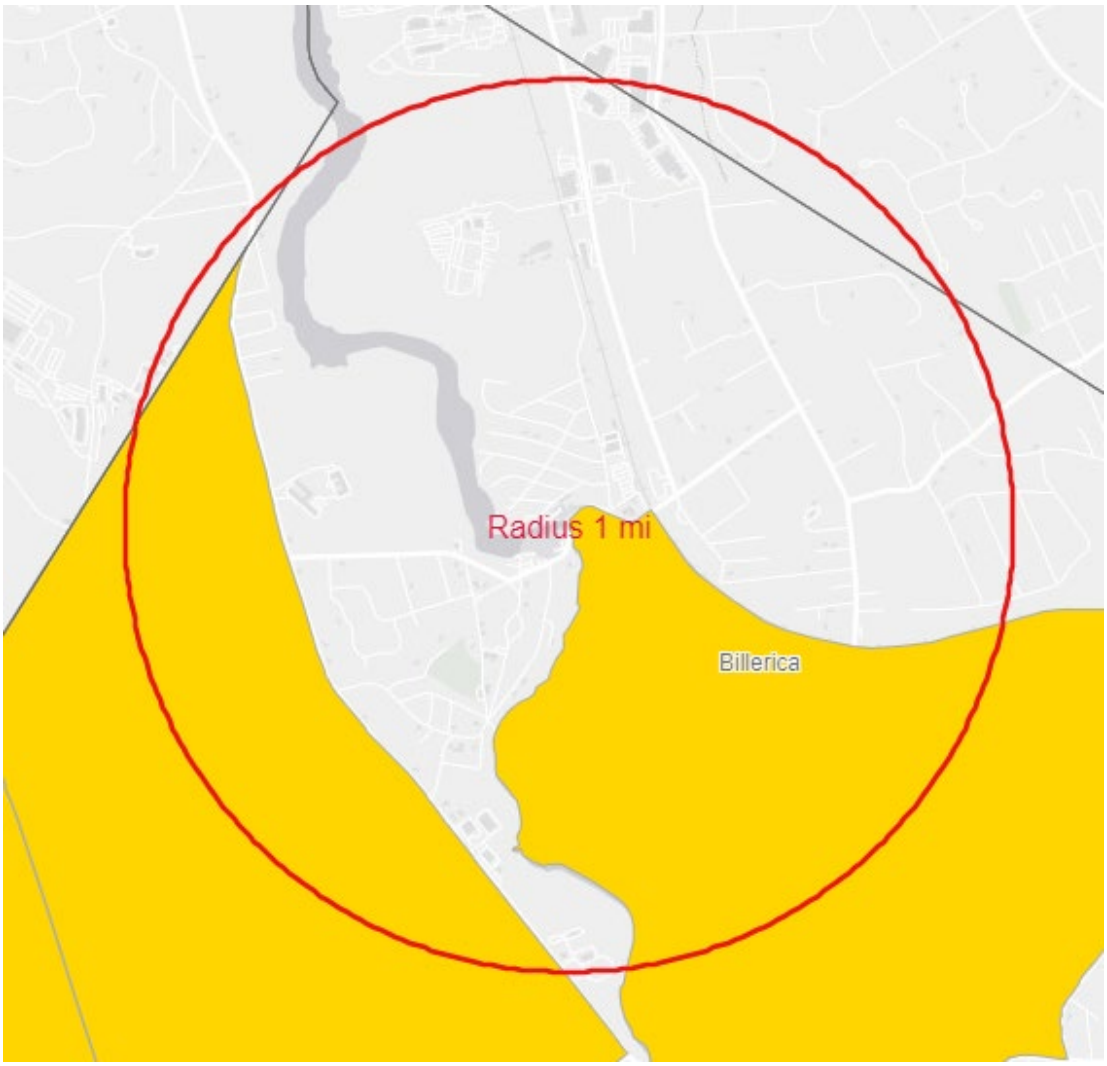
The general point of contact for project inquiries is

OARS for the Sudbury, Assabet and Concord Rivers
Alison Field-Juma | afieldjuma@oars3rivers.org | 978-369-3956

For requests in Spanish or Portuguese, contact:

Merrimack River Watershed Council
Spanish: Susie Bresney | susie@merrimack.org | 978-655-4742 x 703
Portuguese: Matthew Cranney | mcranney@merrimack.org | 978-655-4742
NOAA Restoration Center
Portuguese: Helena Torres | helena.torres@noaa.gov | 978-281-9183

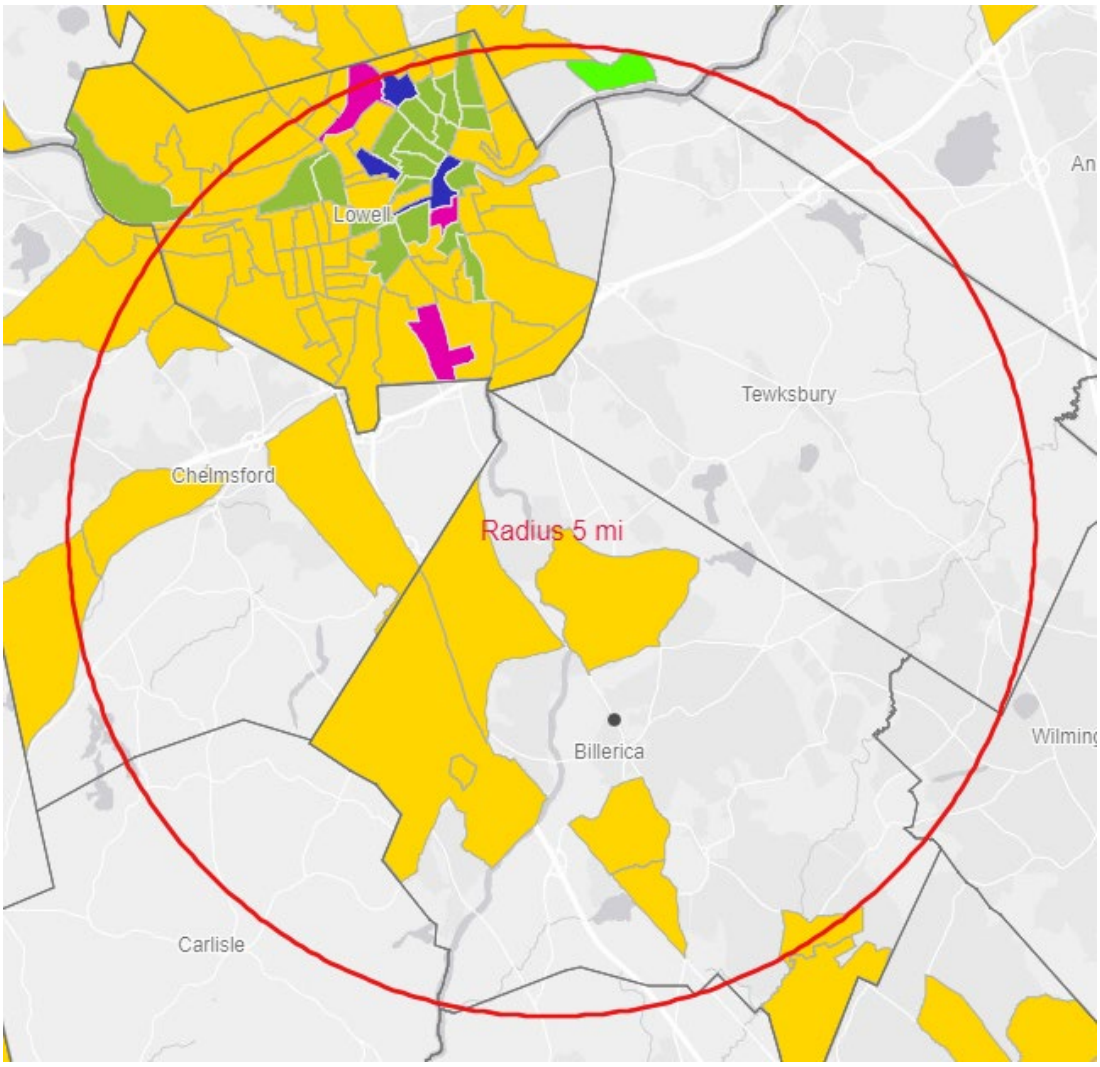
Figure 1: Environmental Justice Populations within 1 Mile of Project Site



Legend

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Figure 2: Environmental Justice Populations within 5 Miles of Project Site



Legend

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Formulario de evaluación de justicia ambiental

Nombre del proyecto	Talbot Mills Dam Removal (Remoción de la presa de Talbot Mills)
Fecha prevista de presentación ante MEPA	31 de Mayo de 2023
Nombre del proponente	Robert Martin, CRT Development Realty, LLC
Información de contacto (p. ej., consultor)	Jill Griffiths, PE Gomez and Sullivan Engineers PO Box 2179 | Henniker, NH 03242 O: (603) 428-4960 | D: (716) 402-6777 jgriffiths@gomezandsullivan.com
Sitio web público para el proyecto u otra ubicación física donde se pueden obtener materiales del proyecto (si está disponible)	Sitio web del proyecto: https://merrimack.org/talbotmills/ StoryMap del proyecto: https://storymaps.arcgis.com/stories/17ef93aeba194b1a84fbf0fef86b19f9
Municipio y código postal del proyecto (si se conoce)	Billerica (01862)
Tipo de proyecto* (indique todos los que correspondan)	Remoción de presas; Restauración Ecológica; Resiliencia
¿Se encuentra el sitio del proyecto dentro de un terreno inundable dentro de 100 años mapeado por la FEMA? S/N/Se desconoce	Sí
Emisiones estimadas de GEI de los espacios acondicionados (haga clic **aquí** para acceder a la herramienta de estimación de GEI)	N/A

Descripción del proyecto

1. Proporcione una breve descripción del proyecto, incluido el tamaño total del sitio del proyecto y los pies cuadrados de los edificios y estructuras propuestos, si se conocen.

En asociación con múltiples agencias estatales y federales y organizaciones locales de cuencas hidrográficas, el propietario de la presa Talbot Mills está buscando la eliminación de la presa como la mejor alternativa para restaurar el paso de peces migratorios, desmantelar la infraestructura obsoleta, eliminar las obligaciones continuas de mantenimiento y reparación, reducir los peligros de inundación y aumentar la resiliencia, y mejorar la calidad del agua, el hábitat y las funciones naturales del río. La presa se encuentra en el río Concord en North Billerica, justo río arriba de Faulkner Street. El proyecto ha sido galardonado como Proyecto Prioritario por la División de Restauración Ecológica de Massachusetts. Los estudios de factibilidad se realizaron en 2014-16 y

2021, se desarrolló un diseño conceptual en 2022 y el diseño preliminar está actualmente en curso. Se han llevado a cabo numerosos esfuerzos y reuniones de divulgación pública (registrados en el sitio web del proyecto vinculado anteriormente) y habrá oportunidades adicionales de comentarios públicos disponibles durante la obtención de permisos. Se anticipa que las solicitudes de permisos para el proyecto se presentarán a partir de finales de mayo de 2023 y la construcción está programada para el verano / otoño de 2024.

Se prevé que el área de perturbación directa debido a las actividades temporales de acceso/puesta en escena y demolición será inferior a un acre. El trabajo implicará 1) la eliminación del aliviadero de mampostería de granito existente de aproximadamente 127 pies de largo y 10 pies de altura y el pilar derecho de concreto, 2) la documentación y eliminación de una antigua presa de madera que se supone que está sumergida justo río arriba (si se encuentra), y 3) la nivelación de sedimentos inmediatamente río arriba de la presa. Se permitirá que los sedimentos dentro del embalse de la presa se muevan río abajo de forma natural con el tiempo y restauren las áreas privadas de sedimentos, ya que se ha considerado relativamente limpio en comparación con los niveles de referencia y la cantidad que probablemente movilizaría es un pequeño porcentaje de la carga anual de sedimentos de la cuenca. Durante la deshidratación del embalse y la construcción, se instalarán temporalmente cortinas de turbidez a lo largo de los bordes de las áreas invasivas de crecimiento de castañas de agua, que coinciden con los principales depósitos de sedimentos, para permitir que el sedimento se estabilice en su lugar y seque la castaña de agua para que ya no sea viable. Los estudios de ingeniería han demostrado que los cambios significativos en los niveles de agua río arriba de la presa se limitarán al embalse inferior río abajo del puente de la calle Pollard. Río arriba del puente, los cambios en el nivel del agua no serán más de 5 pulgadas dependiendo del flujo. Después de la remoción de la presa, se anticipa que el embalse inferior se restaurará a una serie de cascadas que anteriormente estaban presentes en el sitio y eran importantes zonas de pesca utilizadas ampliamente por los nativos americanos.

2. Indique los niveles de revisión anticipada de MEPA (301 CMR 11.03) (si se conocen).

   - alteración estructural de una presa existente que cause cualquier disminución en la capacidad de embalse
   - alteración de 500 o más pies lineales de banco a lo largo de un sendero de peces o un banco interior
   - Alteración de 5.000 o más pies cuadrados de humedales con vegetación limítrofes o aislados
   - alteración de la mitad o más acres de cualquier otro humedal
   - demolición de todo o parte exterior de cualquier estructura histórica listada o ubicada en cualquier distrito histórico listado en el Registro Estatal de Lugares Históricos o el Inventario de Activos Históricos y Arqueológicos del Estado Libre Asociado
   - impactos ambientales dentro de 1 milla de una población de Justicia Ambiental

3. Enumere todos los permisos estatales, locales y federales previstos necesarios para el proyecto (si se conocen).

   - US Army Corps of Engineers – Sección 404/Sección 10 Aviso previo a la construcción
   - Consulta de la Sección 106 de la Ley Nacional de Preservación Histórica
   - MA Dept. of Environmental Protection - Permiso combinado para el Capítulo 91 Vías Fluviales y la Sección 401 Certificación de calidad del agua
   - MA Dept. of Conservation & Recreation - Capítulo 253 Permiso de seguridad de presas
   - Billerica – Aviso de intención para un proyecto de restauración ecológica

- Billerica – Permiso de construcción (para demolición)

Tenga en cuenta que cualquier proyecto que cumpla con los criterios de elegibilidad para un Proyecto de Restauración Ecológica establecidos en 310 CMR 10.13 no está obligado a someterse a la revisión de MEPA, siempre que se cumplan los requisitos de 301 CMR 11.01 (2) (b) 4. Se anticipa que el proyecto de remoción de presas propuesto calificará como un Proyecto de Restauración Ecológica. Sin embargo, el equipo del proyecto reconoce el interés público en este proyecto y ha elegido someterse proactivamente a la revisión de la MEPA para maximizar las oportunidades de revisión pública y comentarios sobre el proyecto.

4. Identifique las poblaciones y características de justicia ambiental (EJ) (minoría, ingresos, aislamiento inglés) dentro de las 5 millas del sitio del proyecto (puede adjuntar un mapa que identifique un radio de 5 millas desde la opción Visor de mapas de EJ en lugar de texto)

Ver mapas adjuntos. No se anticipan impactos en la calidad del aire para este proyecto, por lo que en la Figura 1 se proporciona un mapa de las poblaciones de EJ dentro de 1 milla del sitio. También se proporciona un mapa de las poblaciones de EJ dentro de las 5 millas del sitio como referencia. No se identifican poblaciones de JM con aislamiento en inglés dentro de 1 milla del sitio del proyecto. Sin embargo, el equipo del proyecto ha traducido proactivamente un resumen del proyecto y un documento de preguntas frecuentes al español y portugués basado en los aportes de las organizaciones comunitarias locales sobre idiomas distintos del inglés que se pueden hablar en las cercanías del proyecto.

5. Identifique cualquier municipio o sección censal que cumpla con la definición de "criterios de población de EJ con salud vulnerable" en la Herramienta de EJ del Departamento de Salud Pública (DPH) ubicado en su totalidad o en parte dentro de un radio de 1 milla del sitio del proyecto.

Billerica cumple con el criterio de EJ de salud vulnerable para bajo peso al nacer.

6. Identifique los potenciales impactos a corto y largo plazo sobre el ambiente y la salud pública que pueden afectar a las poblaciones de EJ y cualquier mitigación prevista.

No se anticipan impactos en la salud pública debido a este proyecto. Debido a que este es un Proyecto de Restauración Ecológica, cualquier impacto ambiental será de naturaleza temporal y resultará en un beneficio ambiental general neto debido al proyecto. Los impactos ambientales temporales debido a perturbaciones en la construcción se evitarán, minimizarán y / o mitigarán según corresponda utilizando las mejores prácticas de manejo.

7. Identifique los beneficios del proyecto, incluidos los "beneficios ambientales", tal como se definen en 301 CMR 11.02, que pueden mejorar las condiciones ambientales o la salud pública de la población de EJ.

Se prevé que el proyecto proporcione muchos beneficios ambientales y públicos, entre ellos: restaurar el paso de peces migratorios; reducir los riesgos de inundación; aumentar la resiliencia; mejorar la calidad del agua, el hábitat y las funciones naturales de los ríos; y mejorar las oportunidades recreativas. El proyecto proporcionará beneficios ambientales como se define en 301 CMR 11.02 al mejorar el acceso a recursos hídricos naturales limpios.

8. Describa cómo la comunidad puede solicitar una reunión para analizar el proyecto y cómo la comunidad puede solicitar servicios de interpretación de lenguaje oral en la reunión. Especifique cómo solicitar otras adaptaciones, incluidas reuniones fuera del horario laboral y en lugares cercanos al transporte público.

El punto de contacto general para consultas de proyectos es

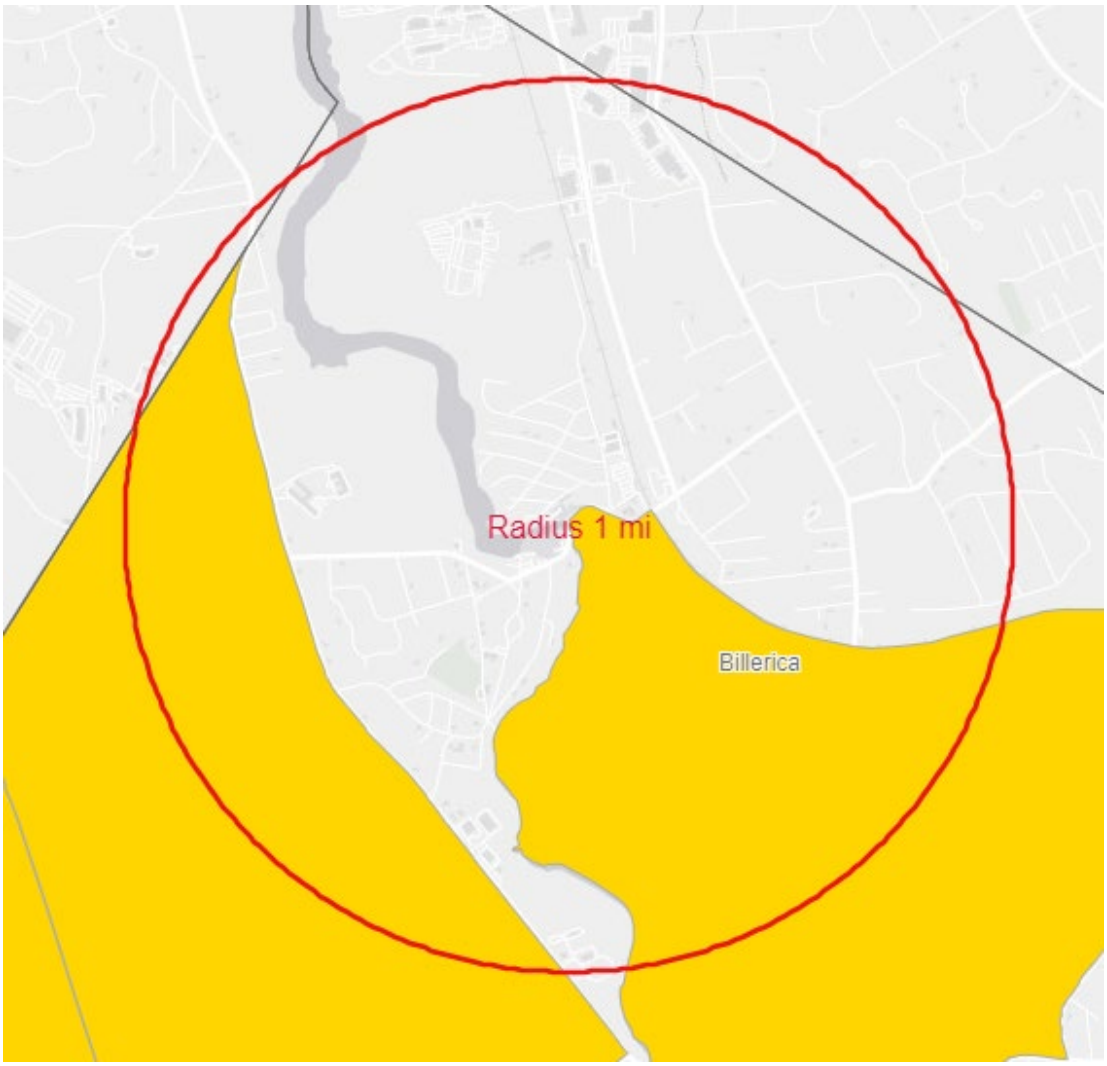
OARS for the Sudbury, Assabet and Concord Rivers
Alison Field-Juma | afieldjuma@oars3rivers.org | 978-369-3956

Para solicitudes en español o portugués, póngase en contacto con:

Merrimack River Watershed Council
Español: Susie Bresney | susie@merrimack.org | 978-655-4742 x 703
Portugués: Matthew Cranney | mcranney@merrimack.org | 978-655-4742

NOAA Restoration Center
Portugués: Helena Torres | helena.torres@noaa.gov | 978-281-9183

Figura 1: Poblaciones de justicia ambiental dentro de 1 milla del sitio del proyecto



Leyenda

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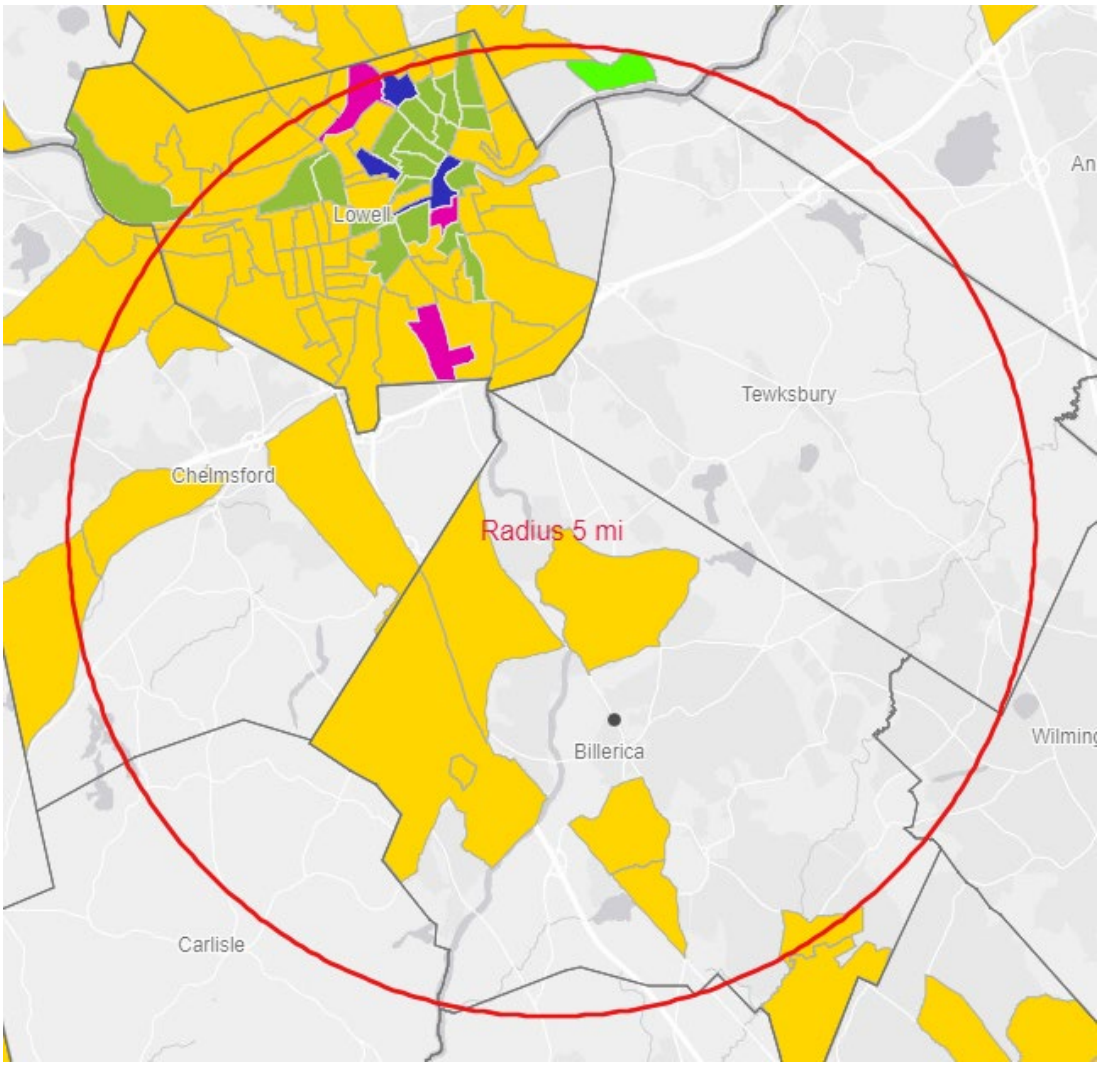
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Figura 2: Poblaciones de justicia ambiental dentro de 1 milla del sitio del proyecto



Leyenda

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
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- Minority and Income
- Minority and English isolation
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Formulário de avaliação de Justiça ambiental

Nome do projeto	Remoção de Barragem de Talbots Mills
Data prevista de protocolo do MEPA	31 de Maio, 2023
Nome do proponente	Robert Martin, CRT Development Realty, LLC
Informações de contato (por exemplo, consultor)	Jill Griffiths, PE Gomez and Sullivan Engineers PO Box 2179 | Henniker, NH 03242 O: (603) 428-4960 | D: (716) 402-6777 jgriffiths@gomezandsullivan.com
Site público do projeto ou outro local físico onde os materiais do projeto podem ser obtidos (se disponíveis)	O site do projeto: https://merrimack.org/talbotmills/ O StoryMap do projeto: https://storymaps.arcgis.com/stories/17ef93aeba194b1a84fbf0fef86b19f9
Município e código postal do Projeto (se souber)	Billerica (01862)
Tipo de projeto* (liste todos os que se aplicam)	Remoção de Barragem, Restauração Ecológica
O local do projeto está dentro de uma planície de inundação de 100 anos mapeada do FEMA? S/N/Não sei	Sim
Emissões estimadas de GEE de espaços condicionados (clique **aqui** para acessar uma ferramenta de estimativa de GEE)	N/A

Descrição do projeto

1. Forneça uma breve descrição do projeto, incluindo o tamanho geral do local do projeto e a metragem quadrada dos prédios e estruturas propostos, se souber

Em parceira com agencias do estado, agencias federais, e ONGs ambientais locais, o dono da barragem de Talbot Mills quer remover a barragem como o melhor alternativo para restaurar a passagem de peixes migratórios, desativar infraestrutura velha, eliminar a obrigação de manter e reparar, diminuir o risco de enchente, crescer resiliência, e melhorar a qualidade da água, o habitat e a função natural do rio. A barragem está no Rio Concord no North Billerica, acima do Faulkner Street. O projeto recebeu status de Projeto de Prioridade pela Divisão de Restauração Ecológica do Massaschusetts. Estudas de viabilidade foi condutado em 2014-2016 e em 2021, o desenho conceptual foi devolvido em 2022, e o desenho preliminar está fazendo agora. O time do projeto tem feito vários tipos de ações para engajar o publico (um recordo duma reunião pública está no link em cima), e vai ser oportunidades adicionais quando o publica pode dar mais comentários durante o processo de permites. É previsto que as

aplicações de permites pelo projeto vai ser submetido começando no fim do maio 2023, e a construção vai começar no verão/outono de 2024.

A área perturbada direta pela causa de acesso/preparação temporária é previsto ser menos de 1 acre. O trabalho vai envolver 1) a remoção do desaguadouro de alvenaria que é 127' de comprimento, e 10' de alto, e o contraforte de concreto ao lado direito, 2) documentar e remover a antiga barragem de berço de madeira que está submergido imediatamente em cima do rio (se for encontrado), e 3) a nivelação dos sedimentos imediatamente em cima do rio. Vai deixar os sedimentos dentro reservatório passar no rio naturalmente e vai restaurar as áreas sem sedimentos, porque os sedimentos estão limpos em comparação de níveis de referência, e também a porção provavelmente seria uma percentagem pequena da quantidade anual dos sedimentos do rio. Durante o escoando da represa e a construção, vai instalar umas cortinas de turvação nos limites do crescimento das castanhas de água, que coincide com os maiores depósitos de sedimentos, pelo estabelecer o sedimento no mesmo lugar, e secar as castanhas de água até eles ficar inviáveis. As estudas de engenheiros tem mostrado que mudanças significadas aos níveis da água em cima da barragem vão ser limitada até a represa em baixa da ponte de Pollard Street. Em cima da ponte, aos níveis de água não vão mudar mais do que 5" dependendo no fluxo. Depois da remoção, é antecipado que a reservatório em baixa vai ser restaurado numa serie de cachoeiras que estava presente no site e foi um importante lugar de pescar usado extensivamente pelos povos indígenas da região.

2. Liste os limites previstos de revisão do MEPA (301 CMR 11.03) (se souber)

- Alterações estruturais à barragem que diminuir a capacidade a represar.
- Alteração igual ou mais do que 500' de margem do rio ao longo de corrida de peixes ou margem interior.
- Alteração igual ou mais do que 5000 sf de pântanos fronteiriços ou isolados.
- Alteração igual ou mais do que 0.5 acres de outros tipos de pântanos.
- Demolição de tudo ou parte do exterior de qualquer Estruturas Históricas listado ou localizado em qualquer Distrito Histórico no Registro do Estado de Lugares Históricos ou no Inventario de Recursos Históricos e Arqueológicos do Commonwealth.
- Impactos ambientais dentro de 1 milha de uma população de justiça ambiental.

3. Liste todas as autorizações estaduais, locais e federais previstas necessárias para o projeto (se souber)
   - US Army Corps of Engineers (Corpo de Engenheiros do Exército de EU) – Seção 404/ Seção 10 Noticias de Pre Construção
   - Ato Nacional de Preservação Histórica Consulta de Seção 106
   - MA Dept. of Environmental Protection (Departamento de Proteção Ambiental do MA) – Permite combinado pelo Capitulo 91 das Hidrovias & Seção 401 Certificação de Qualidade da Água
   - MA Dept. of Conservation & Recreation (Departamento de Conservação e Recreação do MA) – Capitulo 253 Permite de Segurança das Barragens
   - A Vila de Billerica- Noticia de intento pelo projeto de restauração ecológica
   - A Vila de Billerica- Prevista de Construção (pela demolição)

Anota que qualquer reunião do projeto realizado o critério pelo Projeto de Restauração Ecológica descrevido em 310 CMR 10.13 não é mandatório pela avaliação MEPA, contanto que as obrigações de 301 CMR 11.01(2)(b)4 estão cumpridos. É antecipado que o projeto de remoção proposta vai qualificar como um Projeto de Restauração Ecológica. Contudo, o time do projeto reconhece que o interesse do publico nesse projeto e escolhe proativamente a fazer a avaliação MEPA para maximizar as oportunidades pela revista pública e comentário no projeto.

4. Identifique as populações e características de Justiça ambiental (minoria, renda, falta de conhecimento de inglês) dentro de 5 milhas (8 km) do local do projeto (você pode anexar um mapa que mostre o raio de 5 milhas a partir do Visualizador de mapas de Justiça ambiental em vez de descrever por escrito)

Veja os mapas anexos. Não é antecipado que o projeto vai afeitar a qualidade do ar, por isso o mapa das populações JA dentro de 1 milha do site está fornecido na Figura 1. O mapa das populações JA dentro de 5 milhas do site está fornecido também. Nenhumas populações JA que estão isoladas pelo inglês estão identificadas dentro de 1 milha do site do projeto. Contudo, o time do projeto tinha traduzido proativamente um sumário do projeto e um FAQ documento para o português e o espanhol por causa de recomendações das organizações comunitárias locais sobre os idiomas outro de inglês que gente fala perto do site do projeto.

5. Identifique qualquer município ou setor censitário que atenda à definição de "critérios de saúde de vulneráveis de Justiça ambiental" pela Ferramenta de Justiça ambiental localizado totalmente ou parcialmente dentro do raio de 1 milha (1,6 km) do local do projeto

Billerica cumpre o critério de Saúde de Vulneráveis de JÁ pelo de baixo peso de nascimento.

6. Identifique potenciais impactos ambientais e de saúde pública de curto e longo prazo que podem afetar as Populações de Justiça ambiental e qualquer mitigação prevista

Não é antecipado que o projeto vai ter impactos negativos à saúde pública. Porque o projeto é um Projeto de Restauração Ambiental, quaisquer impactos ambientes seriam temporária e resultariam num impacto ambiental positivo depois do fim do projeto. Os impactos ambientes temporária causada da construção evitariam, minimizariam, ou mitigariam no jeito apropriado usando as melhores práticas.

7. Identifique os benefícios do projeto, incluindo os "Benefícios ambientais", conforme definido no 301 CMR 11.02, que podem melhorar as condições ambientais ou a saúde pública da População de Justiça ambiental

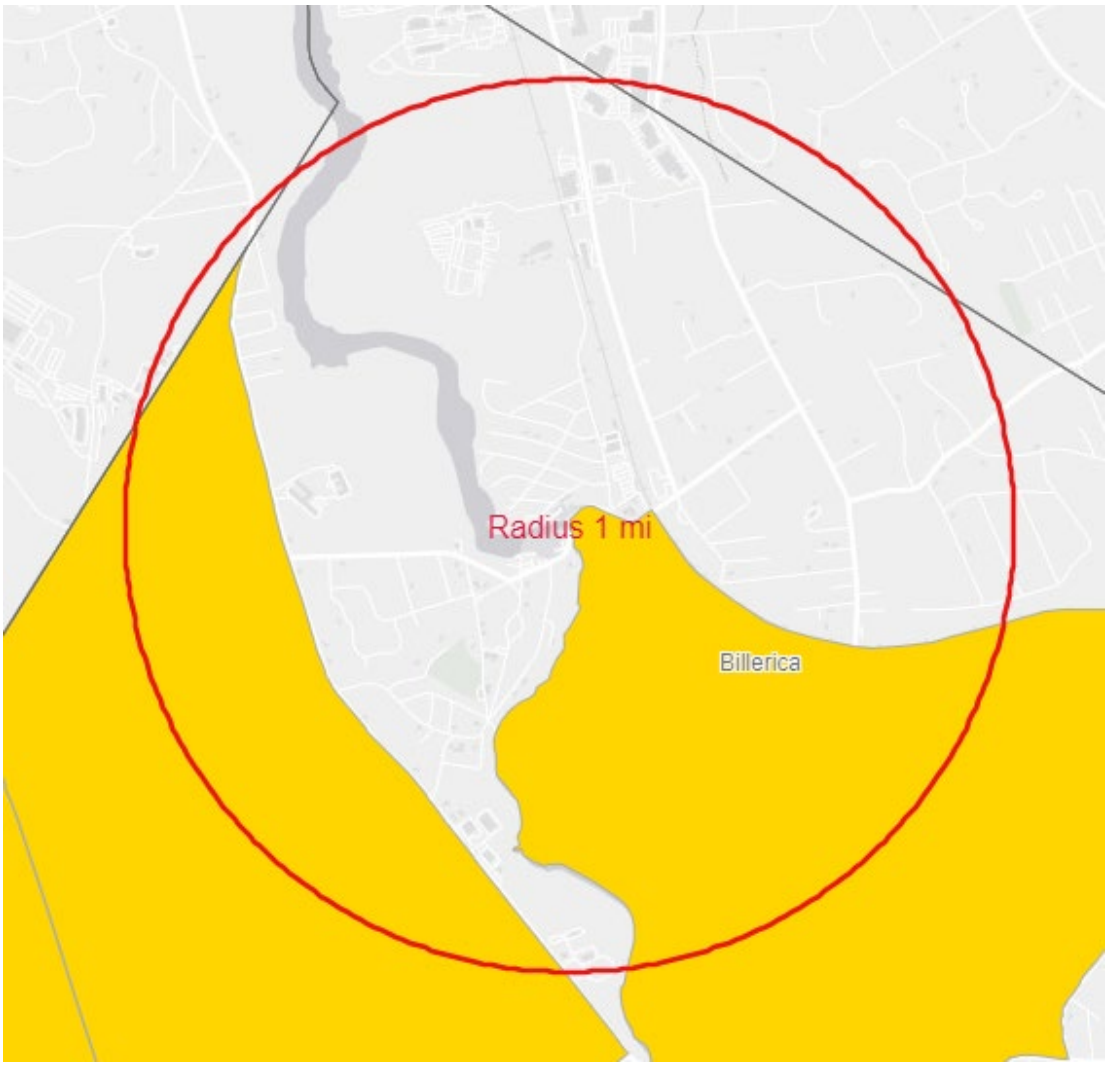
É antecipado que o projeto vai ter muitos benefícios públicos e ambientes, incluindo: restauração de passagem de peixes migratórios; redução dos riscos de enchentes, aumentar resiliência, melhorar a qualidade de água, habitat, e os processos naturais do rio; e melhorar as oportunidades de recreação. O projeto vai fornecer benefícios ambientes como está definido no 301 CMR 11.02 pela melhoria do acesso aos recursos de água limpo e natural.

8. Descreva como a comunidade pode organizar uma reunião para discutir o projeto e como a comunidade pode solicitar serviços de interpretação para a reunião. Especifique como solicitar outras acomodações, incluindo reuniões fora do horário comercial e em locais próximos a transportes públicos

O ponto de contato general pelos inquéritos pelo projeto é:
OARS for the Sudbury, Assabet and Concord Rivers
Alison Field-Juma | afieldjuma@oars3rivers.org | 978-369-3956

Pelos pedidos em Espanhol ou Português, contate:
Merrimack River Watershed Council
Espanhol: Susie Bresney | susie@merrimack.org | 978-655-4742 x 703
Português: Matthew Cranney | mcranney@merrimack.org | 978-655-4742 x 710
NOAA Restoration Center
Português: Helena Torres | helena.torres@noaa.gov | 978-281-9183

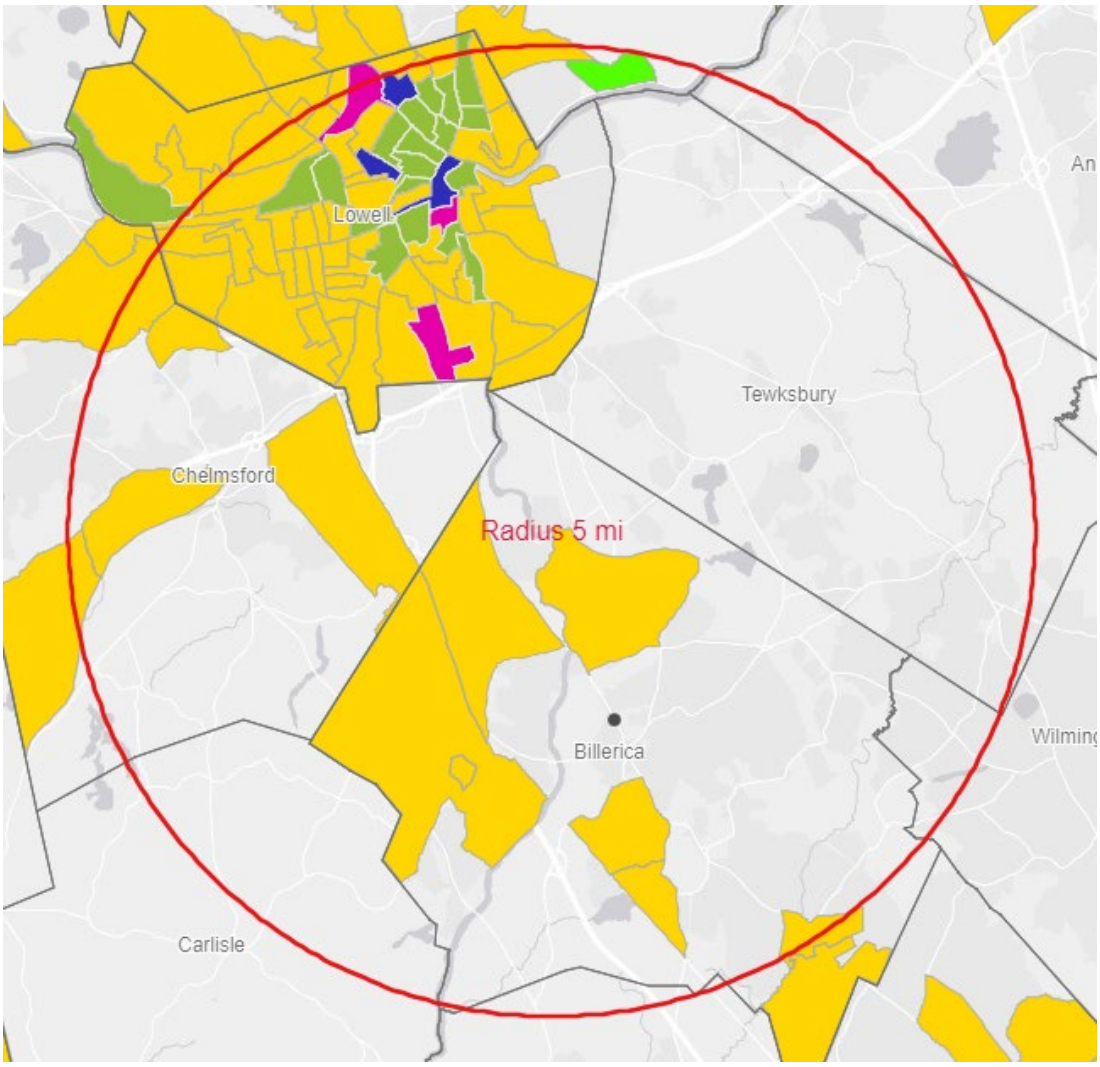
Figura 1: Populações de Justiça Ambiental dentro de 1 milha do local do projeto



Legenda

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Figura 2: Populações de Justiça Ambiental dentro de 5 milha do local do projeto



Legenda

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Income and English isolation
- Minority, Income and English isolation

Attachment 8 – EJ Reference List

Table 8-1: Talbot Mills Dam Removal - Environmental Justice Reference List

Organization	First Name	Last Name	Title	Phone	Email
Statewide EJ Community Based Organizations					
Mass Rivers Alliance	Julia	Blatt	Executive Director	617-714-4272	juliablatt@massriversalliance.org
Neighbor to Neighbor	Elvis	Mendez	Associate Director	508-505-6748	elvis@n2nma.org
Environment Massachusetts	Ben	Hellerstein	MA State Director	617-747-4368	ben@environmentmassachusetts.org
Unitarian Universalist Mass Action Network	Claire	B.W. Muller	Movement Building Director	508 308-9261	claire@uumassaction.org
Clean Water Action	Cindy	Luppi	New England Director	617-338-8131	cluppi@cleanwater.org
Sierra Club MA	Deb	Pasternak	Director, MA Chapter	617-423-5775	deb.pasternak@sierraclub.org
Appalachian Mountain Club	Heather	Clish	Dir. of Conservation & Recreation Policy	617-523-0655	hclish@outdoors.org
Mass Audubon	Heidi	Ricci	Director of Policy	Not Provided	hricci@massaudubon.org
The Trust for Public Land	Kelly	Boling	MA & RI State Director	617-367-6200	kelly.boling@tpl.org
Browning the GreenSpace	Kerry	Bowie	Board President	Not Provided	kerry@msaadapartners.com
Environmental League of MA	Nancy	Goodman	Vice President for Policy	Not Provided	ngoodman@environmentalleague.org
Ocean River Institute	Rob	Moir	Executive Director	Not Provided	rob@oceanriver.org
Mass Land Trust Coalition	Robb	Johnson	Executive Director	978-443-2233	robb@massland.org
Conservation Law Foundation	Staci	Rubin	Senior Attorney	617 350-0990	srubin@clf.org
Community Action Works	Sylvia	Broude	Executive Director	617 292-4821	sylvia@communityactionworks.org
Indigenous Organizations					
Chappaquiddick Tribe of the Wampanoag Nation	Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddickwampanoag.org
Nipmuc Nation (Hassanamisco Nipmucs)	Cheryll	Toney Holley	Chair	774-317-9138	crwritings@aol.com
MA Commission on Indian Affairs	John	Peters, Jr.	Executive Director	617-573-1292	john.peters@mass.gov
Chaubunagungamaug Nipmuck Indian Council	Kenneth	White	Council Chairman	508-347-7829	acw1213@verizon.net
Herring Pond Wampanoag Tribe	Melissa	Ferretti	Chair	(508) 304-5023	melissa@herringpondtribe.org
Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan	Patricia	D. Rocker	Council Chair	Not Provided	rockerpatriciad@verizon.net
North American Indian Center of Boston	Raquel	Halsey	Executive Director	617-232-0343	rhalsey@naicob.org
Pocassett Wampanoag Tribe	Cora	Pierce	Not Provided	Not Provided	Coradot@yahoo.com
Massachusetts Tribe at Ponkapoag	Elizabeth	Soloman	Not Provided	Not Provided	Solomon.Elizabeth@gmail.com
Federally Recognized Tribes					
Wampanoag Tribe of Gay Head (Aquinnah)	Bettina	Washington	Tribal Historic Preservation Officer	508-560-9014	thpo@wampanoagtribe-nsn.gov
Mashpee Wampanoag Tribe	Brian	Weeden	Chair	774-413-0520	Brian.Weeden@mwtribe-nsn.gov
Local Organizations & Departments					
Coalition for a Better Acre	Cecilia	Gutierrez-Yapur	Director of Programs	978-452-7523	cecilia.gutierrezyapur@cbacre.org
Lowell Parks & Conservation Trust	Jane	Calvin	Executive Director	978-934-0030	jcalvin@lowelllandtrust.org
OARS: For the Sudbury, Assabet, and Concord Rivers	Alison	Field-Juma	Executive Director	978-369-3956	afieldjuma@oars3rivers.org
Merrimack River Watershed Council	Matthew	Cranney		978-655-4742	mcranney@merrimack.org
MA Association of Portuguese Speakers (Lowell)	Alessandra	Fisher	Dir. of Immigrant Integration & Elder Svcs.	978-970-1250	afisher@maps-inc.org
Billerica Cultural Council				617-453-8999	culturalcouncil@town.billerica.ma.us
Billerica Council on Aging	Melissa	Paolicelli	Activities and Events Coordinator	978-671-0916	mpaolicelli@town.billerica.ma.us
Billerica Conservation Commission	Isabel	Tourkantonis	Director of Environmental Affairs	978-671-0966	itourkantonis@town.billerica.ma.us
Billerica Planning and Community Dev. Dept.	Erika	Oliver Jerram	Director	978-671-0962	ejerram@town.billerica.ma.us
Billerica Board of Health	Kristel	Bennett	Director	978-671-0931	kbennett@town.billerica.ma.us

Attachment 9 – EJ Correspondence

Note: This attachment is not included with hardcopies of the ENF unless specifically requested. Electronic copies are available from: https://tinyurl.com/TalbotDamRemovalPublic*. Hardcopies may be requested by contacting Jill Griffiths of Gomez and Sullivan Engineers, DPC at jgriffiths@gomezandsullivan.com or (716) 402-6777.*

Jill Griffiths

From: Jill Griffiths
Sent: Thursday, June 15, 2023 5:32 AM
To: 'MEPA-EJ@mass.gov'
Cc: 'juliablatt@massriversalliance.org'; 'elvis@n2nma.org'; 'ben@environmentmassachusetts.org'; 'claire@uumassaction.org'; 'cluppi@cleanwater.org'; 'deb.pasternak@sierraclub.org'; 'hclish@outdoors.org'; 'hricci@massaudubon.org'; 'kelly.boling@tpl.org'; 'kerry@msaadapartners.com'; 'ngoodman@environmentalleague.org'; 'rob@oceanriver.org'; 'robb@massland.org'; 'srubin@clf.org'; 'sylvia@communityactionworks.org'; 'tribalcouncil@chappaquiddickwampanoag.org'; 'crwritings@aol.com'; 'john.peters@mass.gov'; 'acw1213@verizon.net'; 'melissa@herringpondtribe.org'; 'rockerpatriciad@verizon.net'; 'rhalsey@naicob.org'; 'Coradot@yahoo.com'; 'Solomon.Elizabeth@gmail.com'; 'thpo@wampanoagtribe-nsn.gov'; 'Brian.Weeden@mwtribe-nsn.gov'; 'cecilia.gutierrezyapur@cbacre.org'; 'jcalvin@lowelllandtrust.org'; 'afieldjuma@oars3rivers.org'; 'mcranney@merrimack.org'; 'afisher@maps-inc.org'; 'culturalcouncil@town.billerica.ma.us'; 'mpaolicelli@town.billerica.ma.us'; 'itourkantonis@town.billerica.ma.us'; 'ejerram@town.billerica.ma.us'; 'kbennett@town.billerica.ma.us'
Subject: RE: Talbot Mills Dam Removal Project - Advance Notice of MEPA Review
Attachments: FAQ Talbot Mills Dam Removal 4-4-23_English.pdf; FAQ Talbot Mills Dam Removal 4-4-23 _Spanish.pdf; FAQ Talbot Mills Dam Removal 4-4-23_Portuguese.pdf; FAQ Talbot Mills Dam Removal 4-4-23_Khmer.pdf

Good morning,

We would like to update you on the Talbot Mills Dam removal project and ask you to inform your constituency by publicly posting and/or emailing the attached information. As you may know, the owner of the Talbot Mills Dam in North Billerica plans to remove the dam. This is also a state and federal priority to improve freshwater and marine fisheries and improve water quality in the Concord River. The project team wants to ensure that the project is carefully planned and meets all regulatory requirements.

The project team has translated a Frequently Asked Questions (FAQ) document with a project summary into Spanish, Portuguese, and Khmer (attached and available on the project website). This document provides a clear description of the project and its potential impacts and includes responses to questions raised by the public to date. We have been distributing these documents to relevant community organizations and town offices and hope that you can assist with this effort. Hardcopies were provided to the Billerica main and branch libraries, the Conservation Commission, the Planning Department, and the Billerica Council on Aging. The project team has also made informal presentations to the public at Billerica Town Hall (hybrid), the Planning Board (hybrid and BATV), and Conservation Commission, as well as to local community groups. A list of formal presentations with links to recordings and/or slides is provided on the project website.

The first stage in the permitting process is to submit an Expanded Environmental Notification Form (EENF) that fully describes the project to MEPA. The EENF is anticipated to be filed with MEPA on June 15, 2023 and published in the *Environmental Monitor* on June 23, 2023. The *Environmental Monitor* will provide a link to download the EENF and the deadline for submitting public comments. Notice of any site visit or remote meeting that may be scheduled by MEPA will be circulated to this list. MEPA does not issue a permit; rather, MEPA review is intended to ensure that the information on environmental impacts is sufficient for the permitting agencies to properly review the project. We encourage the public to review the ENF and submit comments on the project.

We appreciate your assistance with distributing these project documents and updates. Please let me know if you have any suggestions for additional contacts to add to this distribution list. If you have any questions, feel free to contact me at 716-402-6777 or jgriffiths@gomezandsullivan.com.

Thank you,
Jill

Jill Griffiths, PE
Water Resources Engineer
Gomez and Sullivan Engineers, DPC
PO Box 2179 | Henniker, NH 03242
O: (603) 428-4960 | D: (716) 402-6777
jgriffiths@gomezandsullivan.com

From: Jill Griffiths
Sent: Friday, April 14, 2023 4:55 PM
To: MEPA-EJ@mass.gov
Cc: juliablatt@massriversalliance.org; elvis@n2nma.org; ben@environmentmassachusetts.org; claire@uumassaction.org; cluppi@cleanwater.org; deb.pasternak@sierraclub.org; hclish@outdoors.org; hricci@massaudubon.org; kelly.boling@tpl.org; kerry@msaadapartners.com; ngoodman@environmentalleague.org; rob@oceanriver.org; robb@massland.org; srubin@clf.org; sylvia@communityactionworks.org; tribalcouncil@chappaquiddickwampanoag.org; crwritings@aol.com; john.peters@mass.gov; acw1213@verizon.net; melissa@herringpondtribe.org; rockerpatriciad@verizon.net; rhalsey@naicob.org; Coradot@yahoo.com; Solomon.Elizabeth@gmail.com; thpo@wampanoagtribe-nsn.gov; Brian.Weeden@mwtribe-nsn.gov; cecilia.gutierrezyapur@cbacre.org; jcalvin@lowelllandtrust.org; Alison Field-Juma <afieldjuma@oars3rivers.org>; Susie Bresney <susie@merrimack.org>
Subject: Talbot Mills Dam Removal Project - Advance Notice of MEPA Review

Good afternoon,

Please find attached notification of an upcoming Massachusetts Environmental Policy Act (MEPA) filing for the proposed **Talbot Mills Dam Removal / Concord River Ecological Restoration Project in Billerica, MA**. In partnership with multiple state and federal agencies and local watershed organizations, the dam owner is seeking removal as the best alternative to restore migratory fish passage, decommission aging infrastructure, eliminate ongoing maintenance and repair obligations, reduce flood hazards and increase resilience, and improve water quality, habitat, and natural river functions. It is anticipated that an Environmental Notification Form will be submitted for the project by May 31, 2023.

Community-based organizations and tribal organizations are receiving this notification in accordance with the MEPA Public Involvement Protocol for Environmental Justice Populations, which took effect on January 1, 2022. More information is available on the MEPA website.

More information about the project can be found on the project website or StoryMap. The attached notice and an FAQ document (available on the project website) have been translated into several languages based on feedback received from community partners. Information can be translated into additional languages upon request.

Please feel free to reach out to me or any of the other contacts designated in the attached notice with questions or comments.

Thank you,
Jill

Attachment 10 – Expanded EJ Analysis

Talbot Mills Dam Removal Project – Expanded Environmental Justice Analysis

The following Expanded Environmental Justice Analysis is provided in accordance with the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations (effective January 1, 2022) for projects seeking to qualify as an "Ecological Restoration Project" under the Wetlands Protection Act and implementing regulations at 310 CMR 10.00.

Describe any existing unfair or inequitable environmental burdens and public health consequences impacting the EJ population, with primary focus on whether the EJ population is located within a census tract or municipality meeting "vulnerable health EJ criteria" in the DPH tool, and whether the project site is located in an EJ population and subject to "High" climate risks in the RMAT tool

The Designated Geographic Area (DGA) for the project (a 1-mile buffer from the Talbot Mills Dam) includes the community of Billerica and very small portions of the adjoining communities of Chelmsford and Tewksbury. Four vulnerable health EJ criteria are tracked in the Department of Public Health (DPH) tool: heart attack, childhood blood lead, low birth weight, and childhood asthma. Of these, Billerica meets vulnerable health EJ criteria for low birth weight, and Chelmsford and Tewksbury do not meet any vulnerable health EJ criteria. Viewed by census tract rather than community, Tract 25,017,316,500, in which the project is located, as well as adjoining tracts to the east and southeast, also meet vulnerable health criteria for low birth weight.

The Climate Resilience Design Standards tool indicates that the project is in an area of "High Exposure" for extreme precipitation (both urban and riverine flooding) and "Moderate Exposure" for heat.

Describe all potential adverse environmental and public health impacts of the project on the EJ populations (e.g., construction period, elimination of tree cover or recreational opportunity) and include quantitative measures to the extent practicable

No adverse effects have been identified for EJ populations within 1 mile of the project site. There will be an aesthetic change as the dam and impounded reach are replaced with natural falls. There will be a change in recreational opportunities from flatwater paddling on a broad impoundment that largely becomes choked with water chestnut in the summer, impeding boat access, to a free-flowing reach with natural falls that will provide opportunities for walking along the river banks, scrambling on rocks and cooling off in the water during periods of lower flow, fishing from the banks, and possible whitewater boating.

The project will not materially exacerbate any existing unfair or inequitable environmental burden and related public health consequences impacting the identified EJ populations, and will not result in a disproportionate adverse effect or increased climate change effects on such EJ populations.

Discuss how the project will benefit the EJ populations to reduce the potential for unfair or inequitable effects, including whether the project will confer "Environmental Benefits" so as to further "Environmental Justice Principles" as defined in 301 CMR 11.02.

The project will provide the following "Environmental Benefits" as defined in 301 CMR 11.02: access to clean natural resources, including water resources, air, and open space. Other project benefits that may specifically affect EJ populations include:

- Reduction of upstream flood hazards and increased climate resiliency
- Elimination of the potential for a catastrophic dam failure resulting in downstream

flooding/property damage
- Improvement of water quality (increased flow velocity and dissolved oxygen, reduced water temperature and stagnation)
- Improved public access to the river and new recreational activities (e.g., through-paddling, whitewater boating, fishing in fast-moving flow conditions, viewing of natural falls)

Discuss whether the project is likely to exacerbate any climate risks identified in the RMAT tool in a manner that affects the identified EJ population, including any potential for increased flooding risks.

The proposed will not exacerbate climate risks, but rather will improve climate change resilience by 1) reducing upstream flooding (by lowering water levels and increasing available floodplain storage) and 2) eliminating the risk of a catastrophic dam failure that could result in downstream flooding, property damage, and/or loss of life. Hydraulic modeling has demonstrated that dam removal will not increase downstream flooding as the dam provides no flood storage (see 2022 Downstream Impacts Memo).

The project will improve the listed climate risks identified in the RMAT tool as follows:

- Extreme Precipitation – Dam removal will reduce upstream flooding and eliminate the risk of a catastrophic dam failure that would result in downstream flooding.
- Extreme Heat – The proposed project will improve access to the river and the natural falls that are anticipated to develop through the former impoundment once the dam is removed will provide a recreational opportunity for residents to cool off during periods of extreme heat.

Describe efforts to involve EJ populations in decision-making for the project and any project alternatives that were considered to reduce impacts to EJ populations or address specific concerns raised by or on behalf of EJ populations

The project team developed and translated a Frequently Asked Questions (FAQ) document into Spanish, Portuguese, and Khmer. This document provides a very clear description of the project and its potential impacts and includes questions raised by the public to date. Copies have been distributed to relevant community organizations and municipal offices with a request for them to be circulated widely. Hardcopies were provided to the Billerica main and branch libraries, the Conservation Commission, the Planning Department, and the Billerica Council on Aging. They are also available on the Project Website.

The project team has also made informal presentations to the public at Billerica Town Hall (hybrid), the Planning Board (hybrid and BATV), and Conservation Commission, as well as to local community groups. A list of formal presentations with links to recordings and/or slides is provided in the Project Description section of this ENF.

An alternatives analysis is provided in the Project Description section of this EENF. The No Action and Technical Fishway alternatives would involve keeping the dam in place, which would continue to present climate risks to EJ populations, including increased upstream flooding as well as the risk of a dam failure resulting in downstream flooding and property damage. The selected alternative would improve (upstream flooding) or eliminate (dam failure) these climate risks.

No specific concerns have been raised by or on behalf of EJ populations to date to the knowledge of the project team.