Town of Shutesbury
Community Preservation Committee

FY 2026 Application for Community Preservation Funding

Submit to: cpc@shutesbury.org by February 9, 2026

Instructions to Applicant: *Please complete all sections as are relevant per the instructions in each question. If a particular section is not applicable, please note that. This application must be submitted to the CPC no later than February 9, 2026 for the project to be included in the warrant at the next Annual Town Meeting. Applicants must be prepared to appear before the CPC on Thursday, February 19 to answer questions about the application from the CPC. Applications are expected to be voted upon by the CPC on Thursday, March 19.*

Project Name: Lake Wyola Dam: Emergency Repair Construction Phase

Applicant Organization: Town of Shutesbury

Address: 1 Cooleyville Road, Shutesbury, MA 01072

Contact Person: Hayley Bolton

Phone: (413) 259-1214

Email: townadmin@shutesbury.org

CPA Category: ***YOU MUST CHECK A MINIMUM OF ONE CATEGORY***, but may identify more than one if applicable to your project.

- **Open Space** ☐
- **Historic Preservation** ☐
- **Community Housing** ☐
- **Recreation** ☐

Total Project Cost	CPA Funds Requested	Matching Contribution	Match Percent of total
$ 72,700	$ 72,700	$41,325 (Awarded via EEA Dam and Seawall Grant for permitting and design)	%

Attach a copy of the Assessor's Map(s) with the project parcel outlined (if appropriate for your project)

Assessor's Map Number		Assessor's Lot/Parcel Number	
Deed Book Number		Deed Page Number	

Attach separate sheet if more than one lot/parcel/deed book/deed page number.

PROJECT DESCRIPTION:

- ***All of the following sections MUST be completed.***
- Applications will be returned if all relevant requested information is not provided.
- Include supporting materials and exhibits as necessary.
- Please refer to Shutesbury's Community Preservation Plan in completing this application.

1. **Describe the project.**

The project involves an expedited response to a critical leakage event at the Lake Wyola Dam (MA00510) first observed on November 28, 2025. Significant deficiencies were discovered, including holes in the upstream embankment and sediment discharge from the low-level outlet resulting in the dam being deemed 'unsafe'. Work includes drawing down the pond to expose the work area, installing a temporary sandbag cofferdam, excavating the compromised upstream slope, lining the area with heavy-duty filter fabric, and backfilling with 1.5-inch crushed stone armored by 8-inch riprap. Work to be performed by GZA Engineering.

2. **Goals:**

a. What are the goals of the proposed project?

To provide an expedited response to leakage conditions and stabilize the structure so that lake levels can be restored for fire protection and residential use while a permanent rehabilitation solution is planned and upgrade the status of the dam from 'unsafe'.

b. Who will benefit and why?

The Town of Shutesbury residents, emergency services (for fire protection water sourcing), and local property owners.

c. How will success be measured?

Success will be measured by the cessation of observed leakage and the ability to safely restore the pond to winter or summer pool levels.

3. **Community Preservation Committee Criteria**

a. How does the project fulfill the General and Specific Evaluation Criteria (see the Shutesbury Community Preservation Plan, pages 10–12)?

The project fulfills criteria by preserving a significant open space and recreational resource (Lake Wyola) and addressing an immediate threat to public safety and environmental integrity. Additionally, the dam represents historical significance for the town.

4. **Community Need**

a. If applicable, explain how this project addresses needs identified in existing Town plans? (Such as the Open Space and Recreation Plan, Community Plan, etc.)

The project addresses an Emergency Level One condition and an Immediate Emergency Action Dam Safety Order issued by the DCR Office of Dam Safety on December 3, 2025.

5. **Community Support**

a. What is the nature and level of support? Attach letters of support from any Town boards or community groups that have endorsed the project.

The project has immediate support from the Town Fire Chief and Emergency Management Director, who activated the Emergency Action Plan, the Town Administrator, Select Board, Conversation Commission, and MA Office of Dam Safety.

6. **Budget**

Budget Summary

Total Project Cost	CPA Funds Requested	Other Funds Total	Other Funds: % of Total
$ 72,700	$72,700	$	%

Budget Details (Please provide as much detail as possible and leave any category blank if not applicable to your project)

	CPA FUNDS	OTHER FUNDS	TOTAL
Professional Services (Design,	$0	$37,500	$37,500

Permitting, and Oversight)			
Construction (Mobilization, Earthwork, Site Prep)	$72,700	$3,825	$76,525
TOTAL	$72,000	$41,325	$114,025

Equipment is generally defined as an item with a useful life expectancy of more than one year.
Supplies are defined as an item with a useful life of less than one year.
Construction means all types of work done on a particular property or building including erecting, altering, or remodeling.

7. **Other Funding**

a. Identify the amount of other (non-CPA) funds for this project. Sources include private, federal, state, or local government, or any other sources. Attach commitment letters from any organization providing a financial contribution.

Organization	Item	Amount	Type (cash, in-kind, etc.)
Dam and Seawall Grant		$41,325	grant

b. Are any Other Funds in-kind contributions? If yes, describe how the value of the in-kind contribution was derived. ("In-kind contributions" are a contribution of services or property, donated equipment, buildings or land, or donated supplies.)

8. **Timeline**

a. Provide a timeline for project implementation, including start and end dates for major tasks and project completion.

- **Emergency Response/Coordination:** Nov–Dec 2025
- **Emergency Repair Design:** Dec 2025
- **Permitting & Construction:** Jan 2026
- **Completion Reporting:** Feb 2026

9. **Project Management**

a. Project Manager Contact Information (if other than the applicant)

Project manager name	Hayley Bolton, Town Administrator

Daytime Phone	(413) 259-1214
Evening Phone	
Email	townadmin@shutesbury.org

10. **Maintenance** (Please note IF NOT APPLICABLE TO YOUR PROJECT)

a. If ongoing maintenance is required, who will be responsible for it?

N/A

b. How will it be funded?

Maintenance Budget

Year one	*Year two*	*Year three*	*Year four*	*Year five*
$	***$***	***$***	***$***	***$***

11. **Site Documentation**

Attach documentation that you have control over the site, such as a Purchase and Sale Agreement, option, or deed. If documentation is not available, please explain.

12. **Project Documentation**

Attach any applicable engineering plans, architectural drawings, site plans, and any other relevant renderings.

13. **Other Information**

Attach any additional information that might benefit the CPC in consideration of this project or that will elaborate on any of the responses given above.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL INFORMATION IN THIS APPLICATION IS TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE INDIVIDUAL OR GOVERNING BODY OF THE APPLICANT.

Typed named of authorized representative as signature:

Date:

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GEOTECHNICAL
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ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

1350 Main Street
Suite 1400
Springfield, MA 01103
T: 413.726.2100
F: 413.732.1249
www.gza.com

December 17, 2025
15.0167283.02

Ms. Hayley Bolton, Town Administrator
Town of Shutesbury
1 Cooleyville Road
Shutesbury, MA 10172

Re: Emergency Repair Opinion of Potential Construction Costs
Lake Wyola Dam
Shutesbury, Massachusetts

Dear Ms. Bolton:

GZA GeoEnvironmental, Inc. (GZA) is pleased to provide this opinion of potential costs for the construction of the Lake Wyola Dam Emergency Repair. GZA has based this expedited estimate on GZA's Preliminary Design for the work. GZA's cost estimate (**Attachment B**) is subject to the attached Limitations (**Attachment A**) and was based on the following:

- Plan entitled Lake Wyola Dam Emergency Repair Preliminary Design, Shutesbury, Massachusetts, prepared by GZA, dated December 12, 2025 (**Attachment C**);
- "Site Work & Landscape Cost Data", R.S. Means, 2025;
- MassDOT Weighted Bid Prices –District 2 – 12/2024 – 12/2025;
- "Construction Cost Index" (CCI), *Engineering News Record*, various historical values including current values; and,
- Historical information of similar projects performed in the region.

Please note that GZA's assignment did not include any detailed design beyond the preliminary level. As such, this opinion of potential construction costs should be considered "order of magnitude" and used for budgeting and comparison purposes only. The actual cost may vary and may be higher or lower than this estimate.

Thank you for the opportunity to provide this opinion of costs. If you have any questions, please do not hesitate to call Nat Arai at 413-726-2120.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Nathaniel Y. Arai, P.E.
Sr. Civil Engineer

Chad W. Cox
Principal-in-Charge

Nathaniel L. Russell, P.E.
Consultant/Reviewer

Attachments:

Attachment A – Limitations
Attachment B – Opinion of Potential Construction Costs
Attachment C – Project Plans

USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the contract documents, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. If conditions other than those described in this report are found at the subject location(s), or the design has been altered in any way, GZA shall be so notified and afforded the opportunity to revise the report, as appropriate, to reflect the unanticipated changed conditions.

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein which were made available to GZA at the time of our evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Site-specific evaluation of groundwater levels has not been made. Fluctuations in the level of the groundwater should be anticipated to occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The water table encountered in the course of the work may differ from that indicated in the Report.

7. GZA's services did not include an assessment of the presence of oil or hazardous materials at the project location. Consequently, we did not consider the potential impacts (if any) that contaminants in soil or groundwater may have on construction activities, or the use of structures on the property.

COMPLIANCE WITH CODES AND REGULATIONS

8. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.

COST ESTIMATES

9. Unless otherwise stated, our cost estimates are only for comparative and general planning purposes. These estimates may involve approximate quantity evaluations. Note that these quantity estimates are not intended to be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over either when the work will take place or the labor and material costs required to plan and execute the anticipated work, our cost estimates were made by relying on our experience, the experience of others, and other sources of readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

10. Cost opinions presented in the Report are based on a combination of sources and may include published RS Means Cost Data; past bid documents; cost data from federal, state or local transportation agency web sites; discussions with local experienced contractors; and GZA's experience with costs for similar projects at similar locations. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation. Actual costs will likely vary depending on the quality of materials and installation; manufacturer of the materials or equipment; field conditions; geographic location; access restrictions; phasing of the work; subcontractors mark-ups; quality of the contractor(s); project management exercised; and the availability of time to thoroughly solicit competitive pricing. In view of these limitations, the costs presented in the Report should be considered "order of magnitude" and used for budgeting and comparison purposes only. Detailed quantity and cost estimating should be performed by experienced professional cost estimators to evaluate actual costs. The opinions of cost in the Report should not be interpreted as a bid or offer to perform the work. Unless stated otherwise, all costs are based on present value.

11. The opinion of costs is based only on the quantity and/or cost items identified in the Report, and should not be assumed to include other costs such as legal, administrative, permitting or others. The estimate also does not include any costs with respect to third-party claims, fines, penalties, or other charges which may be assessed against any responsible party because of either the existence of present conditions or the future existence or discovery of any such conditions.

ADDITIONAL SERVICES

12. GZA recommends that we be retained to provide services during any future: site observations, design, implementation activities, construction and/or property development/redevelopment. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

City/Town: Shutesbury, MA
Project Name: Lake Wyola Dam Emergency Repair
Project Location: Locks Pond Road, Shutesbury, MA

TASK DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENSION	TASK TOTAL
CONSTRUCTION - MOBILIZATION / DEMOBILIZATION / ENG. LAYOUT					**$7,600**
MOBILIZATION / DEMOBILIZATION / ENG. LAYOUT / BOND	1	LS	$7,600	$7,600	
CONSTRUCTION - SITE PREPARATION & DEMOLITION					**$25,313**
SEDIMENTATION & EROSION CONTROL	60	LF	$10	$600	
SANDBAG COFFERDAM	110	CY	$25	$2,750	
CONTROL OF WATER (PUMP DIVERSION)	14	DAY	$1,500	$21,000	
REMOVE & DISPOSE EXISTING LOW-LEVEL OUTLET TRASHRACK	1	LS	$500	$500	
REMOVE AND STORE EXISTING RIP	9	CY	$50	$463	
CONSTRUCTION - EARTHWORK					**$23,245**
EMBANKMENT EXCAVATION	125	CY	$60	$7,500	
UNREGULATED SOIL DISPOSAL	125	CY	$50	$6,250	
FILTER FABRIC	110	SY	$12	$1,320	
1 1/2 INCH CRUSHED STONE - M2.01.3	125	CY	$45	$5,625	
REPLACE STORED RIP RAP	9	CY	$100.00	$900	
8-INCH RIP RAP BORROW	11	CY	$150	$1,650	
CONSTRUCTION - LOW-LEVEL OUTLET IMPROVEMENTS					**$2,000**
INSTALL NEW LOW-LEVEL OUTLET TRASH RACK	1	LS	$2,000	$2,000	
			SUB-TOTAL =	$58,158	
			CONSTRUCTION CONTINGENCY (25%±) =	$14,538	
			DECEMBER 2025 TOTAL ESTIMATED PROJECT COSTS =	$72,696	
			SAY,	**$72,700**	

Notes:
1. Quantities were based on DRAFT Lake Wyola Dam Emergency Repair Preliminary Design, Shutesbury, Massachusetts by GZA, Inc. dated 12/12/2025, for the Town of Shutesbury.
2. Construction costs include labor at prevailing wage rates, overhead, & profit.
3. Construction costs include necessary erosion & sedimentation controls, site preparation and demolition, furnishing and installation of site features, earthwork, and site restoration.
4. GZA's Opinion of Probable Project Costs is subject to the assumptions and limitations stated in our correspondence accompanying this cost opinion.

LAKE WYOLA EMERGENCY REPAIR PRELIMINARY DESIGN

December 12, 2025

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W E
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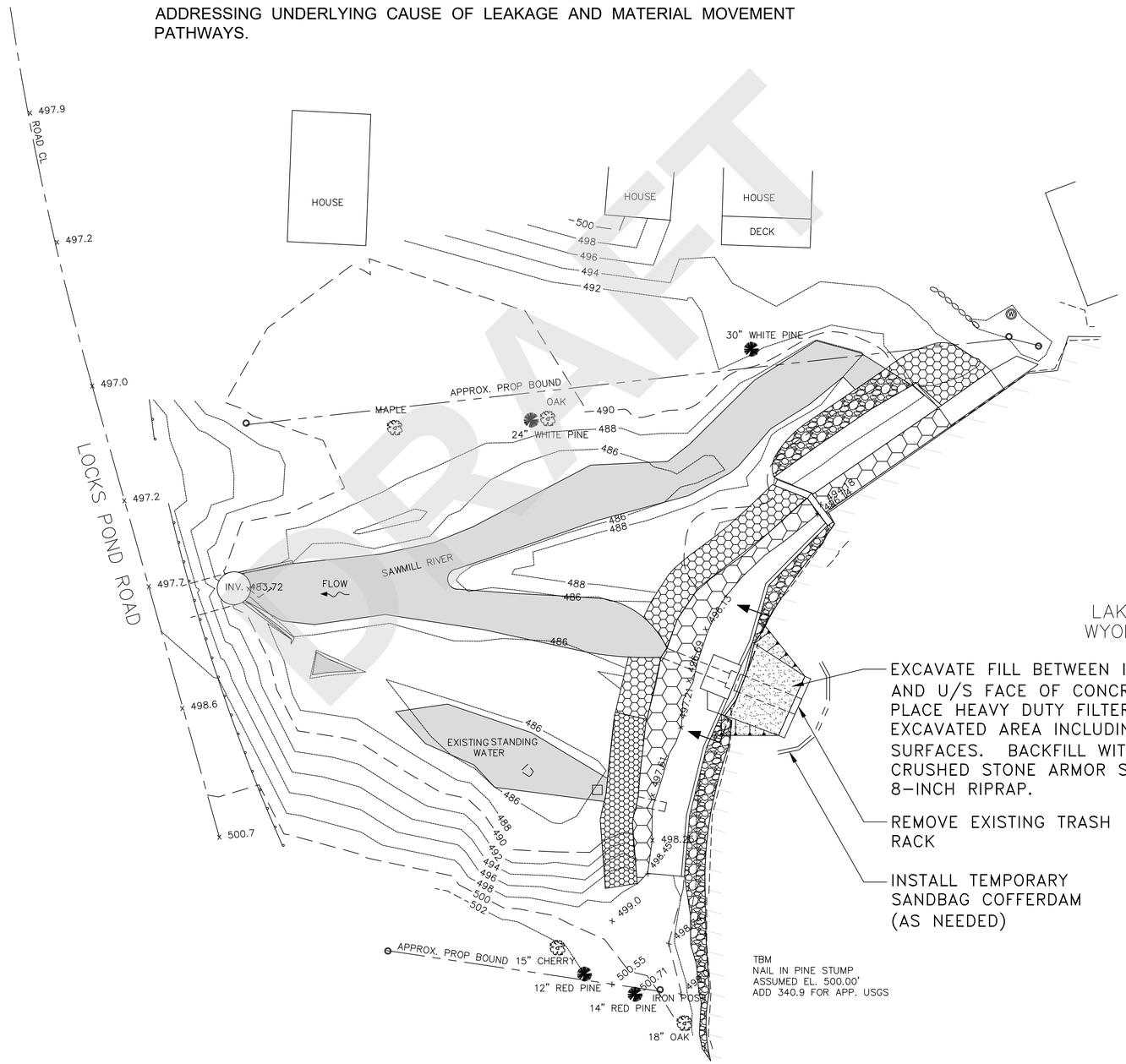
PROPOSED EMERGENCY REPAIRS

PURPOSE: TO PROVIDE AN EXPEDITED RESPONSE TO LEAKAGE CONDITIONS RESULTING IN LOSS OF EMBANKMENT MATERIAL FROM UPSTREAM SLOPE SUCH THAT LAKE LEVEL CAN BE PARTIALLY OR FULLY RESTORED AS A FIRE PROTECTION SOURCE WHILE PERMANENT REHABILITATION SOLUTION IS PLANNED AND IMPLEMENTED.

INTENT: REPLACE COMPROMISED EMBANKMENT SECTION WITH COARSE CRUSHED STONE OVER FILTER FABRIC TO STABILIZE STRUCTURE PRIOR TO ADDRESSING UNDERLYING CAUSE OF LEAKAGE AND MATERIAL MOVEMENT PATHWAYS.



CONSTRUCTION SEQUENCE

1. DRAWDOWN POND TO MAXIMUM ALLOWABLE LEVEL OF DRAWDOWN TO FULLY EXPOSE WORK AREA.
2. INSTALL TEMPORATY SANDBAG COFFERDAM A NEEDED AND PROVIDE BYPASS PIPE OR PUMP TO MAINTAIN OUTFLOW TO SAWMILL RIVER.
3. REMOVE EXISTING TRASH RACK.
4. CAREFULLY EXCAVATE UPSTREAM SLOPE AROUND EXISTING DRY LAID STONE COBBLE SLUICEWAY FROM HEADWALL/UPSTREAM END OF PIPE DOWNSTREAM TO FACE OF CONCRETE CUTOFF WALL. TAKE CARE TO AVOID UNDERMINING CUTOFF WALL AND ORIGINAL STONE MASONRY.
5. LINE EXCAVATION BOTTOM AND SIDES, INCLUDING ALL VERTICAL AND HORIZONTAL MASONRY SURFACES, WITH HEAVY DUTY FILTER FABRIC (MIRAFI FILTERWEAVE 700 OR EQUIVALENT). CAREFULLY KEY IN EDGES OF FILTER FABRIC AT LIMITS OF EXCAVATION.
6. BACKFILL SLOPE AND BOTTOM OF EXCAVATION WITH 1-1/2 INCH CRUSHED STONE TO ORIGINAL LINES AND GRADES OF EMBANKMENT FILL.
7. ARMOR CRUSHED STONE SLOPE SURFACE WITH 8-INCH RIPRAP.
8. REMOVE TEMPORARY COFFERDAM AND WATER CONTROLS.
9. INSTALL NEW ENGINEERED TRASH RACK AT INTAKE END OF LOW-LEVEL OUTLET LINER PIPE.
10. SLOWLY RAISE POND LEVEL BACK TO WINTER DRAWDOWN POND LEVEL (2-FEET BELOW SPILLWAY/NORMAL POOL LEVEL).
11. TEST OPERATE OUTLET GATE IN PRESENCE OF ENGINEER TO OBSERVE STABILITY OF INTERIM REPAIRS.

NOTES

1. BASE MAP DEVELOPED FROM DRAWING ENTITLED "LAKE WYOLA DAM REPAIR, SITE PLAN", PREPARED BY ROOT ENGINEERING, REVISED AS-BUILT CONDITIONS DATED AUGUST 14, 2009.
2. HORIZONTAL DATUM: UNKNOWN.
3. VERTICAL DATUM: ASSUMED DATUM OF EL. 500.00 FEET AT TEMPORARY BENCHMARK (TBM) LOCATED AT LEFT ABUTMENT.
4. WETLAND RESOURCE BOUNDARIES NOT DELINEATED. LIMITS OF LAND UNDER WATER ESTIMATED BASED ON WATER LEVELS OBSERVED DURING PREPARATION OF ORIGINAL BASE PLAN.
5. PROPERTY LINES APPROXIMATE ONLY.

LEGEND:

- x 499.0 — SPOT ELEVATION
- — —500— — — 10-FOOT CONTOUR
- ----------498---------- 2-FOOT CONTOUR
- EXISTING TREE
- EXISTING STONE FILL
- EXISTING CAPSTONE
- EXISTING RIPRAP
- GUARDRAIL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMIT OF LAND UNDERWATER

0 10 20 40 60
SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

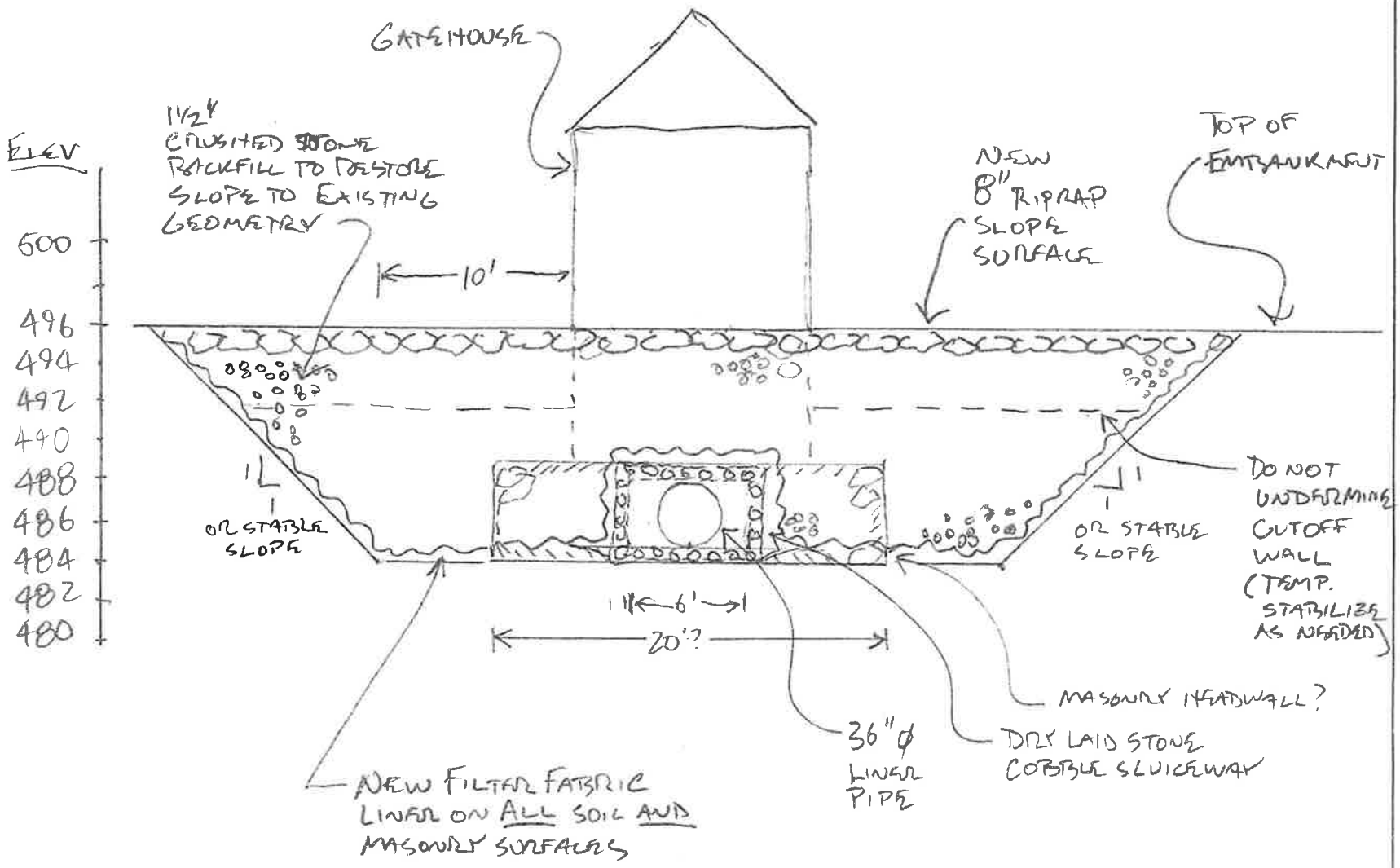
LAKE WYOLA DAM (MA00510)
SHUTESBURY, MASSACHUSETTS

EMERGENCY REPAIR PRELIMINARY DESIGN

PREPARED BY:	PREPARED FOR:
GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com	TOWN OF SHUTESBURY 1 COOLEYVILLE ROAD SHUTESBURY, MA 10172

PROJ MGR:	ARD	REVIEWED BY:	NLR	CHECKED BY: NYA	FIGURE 5
DESIGNED BY:	CWC	DRAWN BY:	EDM	SCALE: AS SHOWN	
DATE: 12/12/2025		PROJECT NO. 15.0167283.02		REVISION NO. -	

LAKE WYOLA DAM EMERGENCY REPAIRS



SECTION THROUGH EMBANKMENT AT U/S FACE OF DAM FACING DOWNSTREAM

GZA GeoEnvironmental, Inc.
249 Vanderbilt Avenue
Norwood, MA 02062
(781) 278-3700
Fax (781) 278-5701
http://www.gza.com
Engineers and Scientists

JOB LAKE WYOLA DAM
SHEET NO 1 OF 1
Calculated By E COX Date 12/5/25
Checked By Date
Scale 1" = 8' (APPROX)

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Suite 1400
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www.gza.com

December 15, 2025
GZA Proposal No. 15.P000160.26

Ms. Hayley Bolton
Town Administrator
Town of Shutesbury
1 Cooleyville Road
Shutesbury, MA 10172

Re: ***Proposal for Change Order No. 2 for Professional Consulting Services***
Lake Wyola Dam Emergency Action Repairs
Shutesbury, Massachusetts

Dear Ms. Bolton:

In accordance with your request, GZA GeoEnvironmental, Inc. (GZA) is pleased to submit this proposal for a change order to provide dam engineering services related to current leakage event on the Lake Wyola Dam first observed by GZA with the Town on November 28, 2025. GZA has been providing services since that date and proposes to assist the Town of Shutesbury (Town, Client) in preparing an emergency repair design and assisting with execution of the repair that will stabilize the dam such that the lake level may be restored to winter or, possibly, summer pool levels until a permanent repair can be made.

In April 2025, on behalf of the Town, GZA prepared and filed a grant application to the MA Executive Office of Energy and Environmental Affairs' (EEA) Dam, Levee and Seawall Repair and Removal Program seeking Fiscal Year 2026 (Dam and Seawall Grant) funding for design and permitting of the dam repairs identified in the *Conceptual Dam Repair Program*. The Town was awarded a design and permitting grant in August 2025 and requested that GZA prepare a proposal for professional services to assist the Town with the design and permitting of the repairs needed to the Lake Wyola Dam. That proposal was submitted to the Town on October 22, 2025, but a contract has not been executed. This proposal is intended to provide a scope of services that will repurpose the EEA grant funding awarded to respond to the emergency situation and design, permit, and support construction of the emergency repairs. Please note that this proposal supersedes the proposal provided to the Town by GZA on October 22, 2025, for the Maintenance Repairs Design and Permitting originally intended to be funded by the EEA grant awarded to the Town.

BACKGROUND

Lake Wyola Dam (National Identification Number (NID) No. MA0051), is located on the Sawmill River in Shutesbury, Massachusetts. Lake Wyola Dam is a stone wall – earth embankment dam that is approximately 11.5 feet high and 150 feet long with a 78-foot-long concrete spillway. It is classified as a High (Class 1) Hazard dam and impounds the 124-acre Lake Wyola, which is an enhanced Great Pond.

On Friday November 28, 2025, GZA was summoned to the dam site by the Town of Shutesbury Fire Chief and Emergency Management Director, Leonard Czerwonka, who reported that one or more holes had formed in the upstream embankment slope of the dam within the lake and that sandy sediment material was observed discharged to the outlet stream from the low-level outlet pipe downstream of

the dam. Chief Czerwonka activated the Town's Emergency Action Plan (EAP) for the Lake Wyola Dam, declaring an "Emergency Level One", accordingly.

A GZA engineer met with Chief Czerwonka, Mr. Howard Kinder, the Dam Operator/Caretaker, and Mr. Walter Tibbets, former Fire Chief and Emergency Management Director, at the dam later that day. Upon arrival, GZA observed what appeared to be three holes in the upstream face of the dam embankment located about 6 feet offshore from the upstream interface of the dam and lake. The lake had been lowered earlier in the fall to the winter drawdown pool level, approximately 2 feet below the primary spillway crest (normal/summer pool level), and the low-level outlet slide gate was in the open position to maintain base flow to the Sawmill River downstream of the dam. Debris was observed being drawn into the holes, indicating water flow through the holes. The gate chamber within the gatehouse was inspected from the gatehouse floor where floating debris was moving around on the surface of the water in the chamber and sandy material was observed in the bottom of the chamber. GZA confirmed that similar sandy material was also observable in the outlet stream downstream of the dam.

Mr. Kinder closed the gate at GZA's request so that conditions within the holes in the embankment, within the gate chamber, and at the downstream end of the low-level outlet pipe could be observed. Debris introduced by hand to the holes in the upstream slope of the embankment below water level was not drawn into the holes, water within the gate chamber became still, and no water could be observed discharging from either inside or outside of the PVC liner pipe at the downstream face of the dam.

Lake Wyola Dam was inspected in May of 2023 by Root Engineering (2023 Inspection) and was found to be in FAIR condition. Subsequently, under separate contract to the Town, GZA performed a Phase I Dam Inspection in May of 2025 (2025 Inspection). Routine inspection of high hazard dams is required by the State Dam Safety Regulations once every two years and the next inspection is due in 2027.

In GZA's report of the 2025 Inspection, six deficiencies were identified which included deteriorated and missing grout surrounding the PVC liner pipe in the stone masonry low-level outlet sluiceway. Steady leakage flow was observed discharging from around the outside annulus of the liner pipe. During review of prior inspection reports and photographs, GZA observed that flow around the outside of the PVC liner pipe was greatly reduced if not entirely ceased when the low-level outlet slide gate was in the closed position, indicating that the area around the upstream end of the pipe annulus was not sealed and water would flow both through and around the outside of the liner pipe when the slide gate was moved to the open position.

During the November 28, 2025, emergency site visit, Mr. Tibbets reported that the trash rack installed during repairs conducted in 2008 frequently blinds up and becomes clogged with leaves and debris. However, flow continues to enter the gate chamber and discharges through and around the liner pipe when the low-level outlet slide gate is opened. GZA believes that the holes in the upstream embankment formed due to the slide gate being open while the trash rack became clogged with debris causing a pressure differential between the lake and the gate chamber that forced water through existing voids and loose soil materials of the embankment. The full extent of leakage pathways through the dam embankment and the potential for development of new leakage pathways is unknowable and GZA concluded that such conditions pose a potential failure mode that could lead to a breach of the dam.

GZA recommended that the Town lower the lake an additional 3 feet from the winter pool level, but that lowering must be done after the trash rack is either cleaned or removed. Chief Czerwonka reported later on Saturday November 29, 2025, that upon arrival at the dam to clean the trash rack, a small whirlpool was observed over the largest hole in the embankment and that he believed the hole was enlarged overnight, but that the trash rack was then cleaned and the

whirlpool dissipated with a new one forming over the intake to the low-level outlet pipe. GZA's engineer met Mr. Czerwonka at the dam on Monday December 1, 2025, and confirmed that flow no longer appeared to be passing into the holes in the embankment and was primarily passing through the low-level outlet pipe.

GZA reported observations and made recommendations to the Town and to the Massachusetts Department of Conservation and Recreation Office of Dam Safety (ODS) who issued an *Immediate Emergency Action Dam Safety Order and Certificate of Non*-Compliance (Order) dated December 3, 2025, requiring the Town to lower the lake level and work with an engineer to monitor conditions and develop a temporary stabilization repair plan. Following the onset of the current leakage event, GZA contacted EEA to report the current leakage and emergency status of the dam and asked that the grant fund awarded to the dam be repurposed for design, permitting, and construction of the emergency stabilization repair. EEA has indicated they will allow the repurposing of the funds and requested a new proposed scope of work and cost estimate for this effort. GZA offers the following proposed scope of services to assist the Town in designing, permitting, and facilitating construction of immediate emergency stabilization repairs to the Lake Wyola Dam.

SCOPE OF SERVICES

Task 1 – Emergency Response:

GZA responded to the emergency call from the Town Emergency Management Director (EMD) on November 28, 2025. A GZA engineer visited the site, observed conditions reported, discussed with the Massachusetts Department of Conservation and Recreation Office of Dam Safety (ODS), and made a recommendation to lower the lake level. A GZA Engineer has visited the site on two additional occasions, December 1, 2025, and December 6, 2025, meeting at the site with the EMD to evaluate status of the drawdown and overall conditions of the dam. GZA has provided written communication to the Town and ODS, met with the Town Administrator (virtually), and has continued to check-in with the EMD to get status reports on the dam condition and lake level.

Task 2 - Coordination and Response with the Office of Dam Safety:

GZA will represent the Town in providing required plans, communications, and responses relative to the *Immediate Emergency Action Dam Safety Order* issued to the Town by ODS on December 3, 2025. Per the *Immediate Emergency Action Dam Safety Order,* no Chapter 253 Permit is required for the emergency repairs on the dam.

Task 3 – Inspection and Emergency Repair Design:

GZA visited the dam again on December 13, 2025, and met with the EMD to check on the status of the drawdown. The lake level was at the target depth of 5 feet below the primary spillway and stabilized, and GZA's engineer was able to conduct an inspection of the exposed portions of the dam embankment, the previously observed holes in the embankment, visible portions of the low-level outlet liner pipe, trash rack, and gate chamber. GZA will utilize information obtained during the December 13 inspection to prepare a preliminary plan including sketches of a probable temporary repair and specifications to stabilize the dam, allow for the safe passage of water through the dam, and potentially allow for raising the lake level back to the winter drawdown pool level or higher. GZA will provide an estimate of engineering oversight required during construction and a probable construction schedule.

Task 4 - Emergency Repair Permitting Assistance:

GZA will coordinate with the following regulatory agencies to file for emergency authorizations to make the emergency repairs as follows:

a. The Town of Shutesbury Conservation Commission – Emergency Certification
b. The Massachusetts Natural Heritage and Endangered Species Program – Project Review Checklist
c. The Massachusetts Department of Environmental Protection Waterways Division – Emergency Certification and subsequent Request for Administrative Opinion
d. The U.S. Army Corps of Engineers – Self-Verification Notification Form (SVNF) Emergency General Permit.

Assumptions:

- GZA assumes that the Shutesbury Conservation Commission will not require a post-construction Notice of Intent filing;
- GZA will attend one in-person site visit and one virtual hearing attendance with the Conservation Commission in support of the Emergency Certification;
- GZA will prepare and submit the NHESP MESA Checklist through the Heritage HUB system and has included the $300 filing fee in this task;
- GZA will respond in writing to up to two rounds of requests for information from the Natural Heritage Endangered Species Program;
- After submitting the Chapter 91 Emergency Certification, GZA will file a Request for Administrative Opinion that the emergency repair work qualifies as a minor modification to the dam and that no Chapter 91 License is required;
- No effort to prepare a Chapter 91 License is included in this task, should one be required by the Chapter 91 Program, that will be discussed with you;
- No MEPA review is required unless a State Permit is required for the emergency response and temporary repairs, which is most probable to be a Chapter 91 License;
- GZA will prepare and submit a Project Notification Form (PNF) to be submitted to the State Historic Preservation Office and the Tribal Historic Preservation Officers, and an Information for Planning and Consultation correspondence to be submitted to the U.S. Fish and Wildlife Service in support of the U.S. Army Corps of Engineers SVNF Emergency General Permit; and
- No post-construction observations or ecological monitoring reports are included in this task.

Task 5 - Designer Services During Construction:

GZA will assist the Town in selecting a qualified contractor, if needed, and will review the contractor pricing proposal against an opinion of probable cost prepared by GZA. GZA will assist in coordinating its Contractor by reviewing the overall emergency repair approach including the design, probable construction sequence, and permit compliance requirements. GZA will review construction submittals from the Contractor, will respond to contractor requests for information, and will provide an engineering field representative to be on-site to observe the work.

Task 6 - Completion and Compliance Reporting:

GZA will work with the Contractor to prepare an As-Built Plan of the repair work and provide completion and compliance reporting as required by ODS, other regulatory agencies, the EEA Dam and Seawall Grant program, and other grant issuing agencies requiring such reporting.

COST ESTIMATE AND BASIS OF BILLINGS

GZA's budget estimate for the Scope of Services described above is **thirty-seven thousand five hundred dollars ($37,500.00)**. The estimated cost for each task is detailed in **Table 1,** below. GZA's billings will be based upon actual accrued time and expenses charged in accordance with the attached Schedule of Fees (SPR-CY25-2.37L).

Table 1. Budget Estimate

Task	Estimated Budget [1,2]
Task 1 – Emergency Response	$5,700.00
Task 2 – Coordination and Response with the Office of Dam Safety	$3,400.00
Task 3 – Inspection and Emergency Repair Design	$5,600.00
Task 4 – Emergency Repair Permitting Assistance	$6,100.00
Task 5 – Designer Services During Construction	$13,800.00
Task 6 – Completion Reporting	$2,900.00
Total:	***$37,500.00***

Notes:

1. Estimated budgets are based on the assumptions listed under the Scope of Services for each Task described above.
2. Actual costs for each task may be higher or lower than the estimate provided herein based on the actual level of effort required.

The above-described Scope of Services and budget estimate represents our current understanding and best judgment at this time as to the effort required to achieve the stated objectives. It must be recognized that clarifications to the Project scope from Client, and unforeseen conditions which become evident during the Project, may alter or increase the effort required. Payment for GZA's services is not contingent upon permit approvals by federal, state, or local agencies.

Invoices for our services will be emailed to you. Should the electronic mail address change or if you would like invoices transmitted differently, please notify the undersigned so that appropriate changes can be made.

SCHEDULE

We will coordinate with the Town to develop a mutually acceptable schedule for performance of the scope of services described above that meets your requirements for the Project. We are prepared to initiate work upon Notice-to-Proceed (receipt of a signed contract). All tasks will be performed over the next several weeks with completion of all Emergency Action Repair work anticipated by the end -January of 2026 (weather permitting and barring any permitting delays) and completion reporting finished by the end of February 2026.

We will maintain regular communication with you so that issues and concerns are addressed on a timely basis.

CONDITIONS OF ENGAGEMENT

Conditions of engagement will be in accordance with the attached standard Terms and Conditions for Professional Services (08/25-Edition/05-9010). This proposal, and the attached Terms and Conditions, shall constitute the entire agreement between the parties.

ACCEPTANCE

This proposal is valid for 30 days from the date of issuance and may be accepted by signing in the appropriate spaces and returning one copy to us. Our schedule assumes a Notice to Proceed by December 19, 2025. At later authorization date may affect the schedule discussed above. The executed agreement must be received prior to the initiation of the services described above. Issuance of a purchase order implicitly acknowledges acceptance of the Terms and Conditions referenced above.

CLOSING

We appreciate the opportunity to submit this proposal and look forward to continuing our professional relationship with the Town of Shutesbury on this Project. Please do not hesitate to contact the undersigned should you have any questions or need additional information when reviewing this proposal.

Very truly yours,
GZA GEOENVIRONMENTAL, INC.

Adrienne Dunk, WPIT
Project Manager

Chad W. Cox, P.E.
Principal-in-Charge

Nathaniel Y. Arai, P.E.
Consultant / Reviewer

Attachments:

- Schedule of Fees (SPR-CY25-2.37L)
- Terms and Conditions for Professional Services (08/25-Edition/05-9010)

This Proposal for Services and the Terms and Conditions are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that they have the full authority to act for, in the name, and on behalf of Client. Issuance of a purchase order assumes that you accept the attached terms and conditions.

TOWN OF SHUTESBURY

By:_____ Title:_____

Typed Name:_____ Date:_____

TERMS AND CONDITIONS

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

These Terms and Conditions, together with GZA's Proposal, make up the Agreement between GZA and You, the Client, named in the Proposal. If the attached GZA Proposal is styled as a Master Services Agreement, then these Terms and Conditions will apply to any and all Services ordered by you and performed by GZA.

BEFORE SIGNING THE PROPOSAL, BE SURE YOU READ AND UNDERSTAND THE PARAGRAPHS ENTITLED "INDEMNIFICATION", "LIMITATION OF REMEDIES" AND "DISPUTES" WHICH DEAL WITH THE ALLOCATION OF RISK BETWEEN YOU AND GZA.

1) **Services.** GZA will perform the services set forth in its Proposal and any amendments or change orders authorized by you (the "Services"). Any request or direction from you that would require extra work or additional time for performance or would result in an increase in GZA's costs will be the subject of a negotiated amendment or change order. All Services performed by GZA will be governed by this Agreement, even if performed prior to your execution of the Proposal.
2) **Term.** If the attached GZA proposal is styled as a Master Services Agreement, then the term of this Agreement will begin on the date of execution of the proposal (the "Effective Date"), and either party may terminate this Agreement for convenience upon thirty (30) days' written notice, provided that GZA will be paid for all services performed through the date of termination.
3) **Standard of Care; Warranties.**
   a) GZA will perform professional Services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality. GZA's sole responsibility with regard to Services which do not meet the foregoing standard of care is to reperform such Services, at GZA's expense, but only if you provide GZA written notice of such non-conformity within ninety (90) days after completion of the Services.
   b) **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY GZA'S PROPOSAL OR BY ANY OF GZA'S REPORTS OR OTHER CONDUCT.**
   c) GZA assigns to you any manufacturers' warranties of equipment or materials purchased from others, to the extent they are assignable, and your sole recourse will be against the manufacturer. Full risk of loss of materials and equipment will pass to you upon delivery to the Site, and you will be responsible for insuring and otherwise protecting them against theft and damage.
4) **Payment.**
   a) Except as otherwise stated in the Proposal, you will compensate GZA for the Services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
   b) Any retainer specified in GZA's Proposal shall be due prior to the start of Services and will be applied to the final invoice for Services.
   c) GZA will submit invoices periodically, and payment will be due within 20 days from invoice date. You will notify GZA in writing of any invoice disputes within 10 days of the invoice date, and if no written notice of dispute is received, the invoice will be deemed approved in full. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. GZA may terminate the Services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all Services through termination, plus termination costs. You will reimburse GZA's costs of collecting overdue invoices, including reasonable attorneys' fees (including costs for time expended by in-house counsel, which will be charged to you at the prevailing market rate for attorneys of similar experience practicing in the jurisdiction). Any amounts paid by you to GZA will be applied first to interest and costs incurred by GZA, and then to the principal balance.
5) **Your Responsibilities**.
   a) If the Services involve entry onto a third-party property or otherwise require access to property you do not own or control, you will secure the access agreements, approvals, permits, licenses and consents necessary for performance of the Services, without GZA becoming a party to or otherwise being required to sign any such agreements, approvals, permits, licenses and consents. If you are the owner or operator of the Site, you will provide GZA with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the Site (including, if applicable, asbestos containing materials ["ACM"]) and other information that may be pertinent to the Services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to GZA. GZA is entitled to rely on the accuracy and completeness of documents and information you provide. You acknowledge that the quality of the Services provided by GZA is directly related to the accuracy and completeness of the information and data that you furnish to GZA.
   b) If you use the services of a contractor or construction manager at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the contractor or construction manager provisions obligating the latter:
      i) to defend, indemnify and hold harmless, to the fullest extent permitted by law, GZA, its affiliates and subsidiaries, and each of their officers, directors, members, partners, agents, insurers, employees, and subconsultants (the "GZA Indemnitees") and you, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, the construction manager, or any of their subcontractors or any engineer engaged by them;
      ii) to name you and GZA as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor or construction manager, or any of their subcontractors, and to ensure that such policies are primary and noncontributory with regard to the above indemnity obligations; and
      iii) to require that all of their subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
   c) In the event that you are unable to secure such provisions in the agreement(s) with the contractor or construction manager, you shall promptly (but in any event prior to the commencement of the Services) notify GZA and GZA shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections. Failure to provide such notice will be a material breach of this Agreement.
   d) To the extent you are entitled to indemnification (either contractual or at common law) or are otherwise indemnified by the contractor or construction manager and/or their subcontractors, you agree to waive any claim (including without limitation indemnification or insurance claims) against GZA.
6) **Right of Entry; Site Restoration.** You grant GZA and its subcontractor(s) permission to enter the Site to perform the Services. If you do not own the Site, you represent and warrant that the owner has granted permission for GZA to enter the Site and perform the Services; you will provide reasonable verification on request; and you will indemnify the GZA Indemnitees for any claims by the Site owner related to alleged trespass by GZA or its subcontractors. Although GZA will exercise reasonable care to limit damage to landscaping, paving, systems and structures at the Site, you acknowledge that some damage may occur even with the exercise of due care and you agree to compensate GZA for any restoration it is asked to perform, unless otherwise indicated in the Proposal.

7) **Underground Facilities.** GZA's only responsibility under this Agreement will be to provide proper notification to the applicable state utility "Call-Before-You-Dig" program. You further agree to assume responsibility for and to defend, indemnify and hold harmless GZA with respect to personal injury and property damages due to GZA's interference with subterranean structures including but not limited to utilities, conduits, pipes, and tanks:
   a) that are not correctly shown on any plans and information you or governmental authorities provide to GZA; or
   b) that are not correctly marked by the appropriate utility.

8) **Reliance.** The services, information, and other data furnished by you shall be at your expense, and GZA may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the Services provided by GZA is directly related to the accuracy and completeness of the information and data that you furnish to GZA**. GZA's REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO GZA. YOU SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE GZA INDEMNITEES FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING ATTORNEYS' FEES, ARISING OUT OF OR RESULTING FROM ANY USE, REUSE, OR MODIFICATION OF THE DOCUMENTS WITHOUT WRITTEN VERIFICATION, COMPLETION, OR ADAPTATION BY GZA AND SUCH LIMITED LICENSE TO YOU SHALL NOT CREATE ANY RIGHTS IN THIRD PARTIES.** However, in GZA's sole discretion, which may be withheld for any reason whatsoever, if you request that GZA extend reliance to a third party, then such reliance will be conditioned upon the third party's acceptance of such reliance on GZA's standard reliance terms and you will be obligated to pay GZA a reliance fee calculated as 10% of GZA's original fee for the report upon which reliance is being extended.

9) **Lab Tests and Samples**. GZA is entitled to rely on the results of laboratory tests using generally accepted methodologies. GZA may dispose of samples in accordance with applicable laws 30 days after submitting test results to you unless you request in writing for them to be returned to you or to be held longer, in which case you will compensate GZA for storage and/or shipping beyond 30 days.

10) **GZA Professionals**. GZA employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, Certified Hazardous Materials Managers, or Certified Industrial Hygienists, collectively referred to in this section as "GZA Professionals"), whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the Services of GZA or other contractor/consultant(s), which audit may require additional Services, even though GZA and such GZA Professionals have each performed such Services in accordance with the standard of care set forth herein. You agree to compensate GZA for all Services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

11) **Hazardous Materials; GZA "Not a Generator".** Before any hazardous or contaminated materials, including, if applicable, ACMs (the "Wastes") are removed from the Site, you will sign manifests naming you as the generator of the Wastes (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any Wastes are taken. GZA will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any Wastes at or removed from the Site. GZA will not have responsibility for or control of the Site or of operations or activities at the Site other than its own. GZA will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any Wastes at or removed from the Site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold the GZA Indemnitees harmless for any costs or liability incurred by GZA in defense of or in payment for any legal actions in which it is alleged that GZA is the owner, generator, treater, storer or disposer of any Wastes.

12) **Limits on GZA's Responsibility.** GZA will not be responsible for the acts or omissions of contractors or others at the Site, except for its own subcontractors and employees. GZA will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall GZA's professional activities nor the presence of GZA or its employees and subcontractors be construed to imply that GZA has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by GZA of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

13) **Changed Conditions.**
   a) You recognize the uncertainties related to the Services (including, without limitation, environmental and geotechnical Services), which often require a phased or exploratory approach, with the need for additional Services becoming apparent during the Services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.
   b) If changed or unanticipated conditions or delays make additional Services necessary or result in additional costs or time for performance, GZA will notify you and the parties will negotiate appropriate changes to the scope of Services, compensation and schedule.
   c) If no agreement can be reached, GZA will be entitled to terminate the Services and to be equitably compensated for the Services already performed. GZA will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part, or any other causes beyond GZA's reasonable control, and you will compensate GZA for any resulting increase in its costs.

14) **Documents and Information.** All documents, data, calculations and work papers prepared or furnished by GZA are instruments of service and will remain GZA's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to GZA. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to GZA. Any technology, methodology or technical information learned or developed by GZA will remain its property. Provided GZA is not in default under this Agreement, GZA's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

15) **Electronic Media.** In accepting and utilizing any drawings, reports and data on any form of electronic media generated by GZA, you covenant and agree that all such electronic files are instruments of service of GZA, who shall be deemed the author and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by GZA and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of GZA will be at the user's sole risk and without any liability to GZA.

16) **Confidentiality; Subpoenas.** Information about this Agreement and GZA's Services and information you provide to GZA regarding your business and the Site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as GZA reasonably believes is necessary: (a) to perform the Services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws, regulations, court orders and professional obligations. GZA will make reasonable efforts to give

you prior notice of any disclosure under (b) or (c) above. Information available to the public and information acquired from third parties will not be considered confidential. You will reimburse GZA for responding to any subpoena or governmental inquiry or audit related to the Services, at the rates set forth in the applicable Proposal, amendment or change order (including, without limitation, for outside counsel expenses incurred by GZA and/or time expended by in-house counsel, which will be charged to you at the prevailing market rate for attorneys of similar experience practicing in the jurisdiction). Notwithstanding the foregoing, GZA shall be entitled to use your name and a general description of the Services in promotional materials.

17) **Insurance.** During performance of the Services, GZA will maintain workers' compensation, commercial general liability, automobile liability, and professional liability/contractor's pollution liability insurance. GZA will furnish you certificates of such insurance on request.

18) **Indemnification.** You agree to hold harmless, indemnify, and defend the GZA Indemnitees against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the Services, except to the extent they are caused by GZA's negligence or willful misconduct The duty to defend will be triggered upon a claim, suit, fine and/or penalty being alleged or threatened, and will only terminate when and to the extent GZA's proportion of negligence is finally adjudicated by a court of competent jurisdiction. If the foregoing indemnification is determined to be void or unenforceable as a matter of law, then it shall be automatically reformed to apply the original intent of the clause to the maximum extent permissible by law.

19) **Limitation of Remedies.**

a) To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of GZA and its affiliates, parents and subsidiaries and subcontractors and each of their employees, insurers, principals, officers, directors, partners and agents (collectively referred to in this paragraph as "GZA") for all claims (arising in tort, by contract or otherwise, and specifically including any indemnification or contribution obligation owed by GZA, arising under contract or at common law, if any) arising out of this Agreement or in any way related to GZA's Services is limited to $50,000 or, if greater, 10% of the compensation received by GZA under this Agreement.

b) You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.

c) Any claim (as described in 19(a)) against GZA related in any way to the Services provided pursuant to this Proposal, or the terms herein, is waived unless suit is commenced in a proper jurisdiction within one year of substantial completion of GZA's Services. This waiver may not be construed to extend any applicable statute of limitations.

d) GZA will not be liable for lost profits, loss of use of property, delays, contractual penalties or other special, indirect, incidental, consequential, punitive, exemplary, liquidated, or multiple damages. This includes but is not limited to fines and/or penalties and/or sanctions imposed by any local, state, or federal government, agency, or regulatory body.

e) GZA will not be liable to you or the Site owner for injuries or deaths suffered by GZA's or its subcontractors' employees.

f) You will look solely to GZA for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any GZA principal, officer, employee or agent. To the extent damages are covered by property insurance or any other insurance, both you and GZA waive all rights against each other and against the contractors, consultants, agents, and employees of the other, for damages, except such rights as they may have to the proceeds of such insurance as set forth in this Agreement. You or GZA, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.

20) **Disputes.**

a) Subject to the provisions of 20(d) below, all disputes between you and GZA shall be subject to non-binding mediation.

b) Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.

c) The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.

d) No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitations period or the one-year waiver period described in 19(c) above would expire if suit were not filed prior to such forty-five (45) days after service of notice. However, where non-payment of an invoice has occurred and GZA sends you a final demand letter for payment, your failure to remit payment in full (including interest, costs, attorneys fees and all other charges permitted by Section 4(c)) within ten (10) days of receipt (or, for certified mail, the date of the first attempt to deliver the letter to your address of record if you ultimately do not accept receipt of the letter or the letter is otherwise undeliverable to your address of record with GZA or with the Secretary of State in the jurisdiction where you are organized) of such letter will be deemed to be a waiver of your right to enforce this mediation clause and GZA may immediately file suit to enforce the terms of this Agreement.

e) In the event GZA commences litigation to recover payment of an unpaid invoice, you shall not be permitted to interpose any counterclaim. Any claim against GZA which remains viable under the terms of this Agreement must instead be brought in a separate action against GZA, subject to the terms of this Agreement, including, without limitation, the pre-suit certification requirement contained in Section 20(g).

f) You agree to pay reasonable attorneys' fees and all other costs and expenses (including, but not limited to reasonable investigative expenses and expert and consultant expenses) which may be incurred by GZA in the enforcement of this Agreement in the event that (a) it is finally adjudicated by a court of competent jurisdiction that you have breached this Agreement; or (b) where you allege that GZA has breached this Agreement or otherwise acted negligently and it is finally adjudicated by a court of competent jurisdiction that GZA did not in fact breach this Agreement or act negligently. If for any reason it is adjudicated that the foregoing provision is in violation of applicable law, is subject to a state statute automatically converting this clause to be reciprocal between the parties, is contrary to public policy or is unconscionable or a contract of adhesion, then the foregoing clause will be null and void and of no effect. Under no circumstances shall the foregoing clause be replaced with a reciprocal clause.

g) You shall make no claim against GZA for professional negligent acts, errors, omissions and/or alleged breach of contract either directly, indirectly, as a counterclaim or crossclaim, or in a third party claim, unless you have first provided GZA with a written certification executed by an independent professional practicing in the same discipline as GZA and licensed in the jurisdiction in which GZA provided you its Services. This certification must (i) identify the name and license of the certifier, (ii) specify each and every act or omission that the certifier contends is a violation of the standard of care expected of professional performing professional services under similar circumstances; and (iii) state in complete detail the basis for certifier's opinion that each such act or omission constitutes a violation of the standard of care. This certificate must be provided to GZA no less than thirty (30) days prior to the submission of a formal claim.

h) With regard to Sections 5, 6, 8, 19 and 20 of this Agreement, the terms "claim", "any claim" and "all claims" shall be defined as broadly as legally possible, including without limitation any and all claims arising in contract (including indemnification obligations owed by GZA, if any), tort or by any other legal theory or argument.

21) Miscellaneous.

a) This Agreement and all claims relating thereto shall be governed by the substantive and procedural laws of the Commonwealth of Massachusetts, as they presently exist or may hereafter be amended, without regard to principles of conflict of laws.

b) The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the Services under this Agreement and the termination of the contract for any reason.

c) Any amendment to these Terms and Conditions must be in writing and signed by both parties. No modification of these Terms and Conditions will be binding against GZA unless specifically approved in writing by a principal of GZA.

d) Having received these Terms and Conditions, your oral authorization to commence Services, your acceptance of performance of the Services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.

e) This Agreement supersedes any contract terms, purchase orders or other documents issued by you, even if signed by an authorized representative of GZA.

f) Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.

g) Your failure or the failure of your successors or assigns to receive payment, reimbursement, insurance proceeds or grant funds from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to GZA under this agreement.

h) These Terms and Conditions shall govern over any inconsistent terms in GZA's Proposal.

i) Any provision of this Agreement later held to be unenforceable for any reason shall be deemed void, and all remaining provisions shall continue in full force and effect on the parties, who agree that the Agreement shall be reformed to replace such voided provision with a valid and enforceable provision that comes as close as possible to expressing the intention of the voided provision.

j) The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

k) Any reports generated by GZA will be subject to GZA's standard report limitations for that particular type of report.

l) To the extent applicable to GZA's Services, you acknowledge and agree that GZA cannot anticipate the effects of climate change/extreme weather on any report, design or other document produced by GZA, unless such analysis is specifically within the scope of GZA's Services.

m) You agree that during the performance of GZA's Services and for a period of twelve (12) months completion of those Services, you will not encourage, induce, or otherwise solicit, or actively assist any other person or organization to encourage, induce or otherwise solicit, directly or indirectly, any employee of the GZA or any of its affiliates to terminate their employment with GZA or any of its affiliates, or otherwise interfere with the advantageous business relationship of GZA or any of its affiliates with their employees. You agree that if you violate this non-solicitation provision, you will pay GZA liquidated damages in an amount equal to the total earnings of the solicited employee during the last twelve (12) months of their employment with GZA.

n) This Agreement does not create any third-party beneficiaries and is intended for the benefit of the parties hereto and their respective successors and permitted assigns, and is not for the benefit of, nor may any provision hereof be enforced by, anyone else.

22) Asbestos Abatement Services (If Applicable). If the Services include asbestos abatement services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement.

a) You acknowledge that conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of those conditions, despite due professional care. GZA therefore cannot guarantee specific results such as the identification or removal of all asbestos or other contamination.

23) Microbial Services (If Applicable). If the Services include Microbial services, then the following terms and conditions will apply and will supersede any conflicting terms contained elsewhere in this Agreement. For purposes of this Agreement, Microbial is defined as any and all fungal and/or bacterial growth including but not limited to mold, mildew, yeast, fungus, fungi, bacteria, spores, odors, particulates, vapors, gas, or other emissions produced by or arising out of or toxins emanating therefrom.

a) You recognize that meeting the standard of care does not establish an assurance that corrective procedures will be permanent. Because Microbial infestations are created by near-omnipresent living microscopic spores which grow very quickly and are influenced by nanoclimatological conditions that are very difficult to detect and sources of water intrusion, elevated moisture or relative humidity over which GZA has neither control or responsibility, GZA cannot and does not claim that its Services will eliminate the risk of a Microbial infestation recurring.

b) You acknowledge that the Services entail risk of personal injury and property damage (including cross-contamination) that cannot be avoided, even with the exercise of due care. You also acknowledge that environmental conditions can vary from those encountered at the times and locations of explorations and data collection, and that the limitation on available data may result in some level of uncertainty with respect to the interpretation of these conditions, despite due care. GZA therefore cannot guarantee specific results such as the identification of all contamination or other environmental conditions or problems nor their resolution.

c) You acknowledge that Microbial infestations may be hidden from view and concealed in locations that are difficult to discover. Accordingly, you agree that despite GZA's efforts, some Microbial locations may remain undetected. In such situations, you agree that you will have no claim against GZA provided GZA followed the applicable standard of care and all applicable laws and regulations pertaining to the Work.

d) You further agree that when GZA performs Services intended to minimize the risk of Microbial infestations, GZA shall not be liable for damages resulting from Microbial contamination including but not limited to fungal or bacterial infestations and water damage or dry or wet rot. You agree to waive any Microbial infestation claim(s) against GZA and you agree to indemnify, defend and hold the GZA Indemnitees harmless from any claim alleging that GZA's Services caused or aggravated a Microbial infestation or did not prevent a Microbial infestation from recurring.

SCHEDULE OF FEES (SPR-CY25-3.7L)

2025 Fee Schedule

Client ("You"): Town of Shutesbury
Proposal No: 15.P000160.26
Date: December 15, 2026

A. FEES FOR SERVICES

Fees for services will be based on the time worked on the project by personnel plus reimbursable expenses. Labor related fees will be computed based on actual time worked on the project, including time required for travel from the GZA office to/from project site, and according to the rates listed below.

Classification	Hourly Rate
Technician II	$82
Technician I	$104
Staff Engineer/Scientist II	$111
Staff Engineer/Scientist I	$120
Technical/Administrative Support	$130
CAD/Technical Designer	$130
Assistant Project Engineer/Scientist	$145
Senior Landscape Architect/Design Engineer	$147
Senior CAD/Technical Designer	$165
Project Engineer/Scientist	$174
Senior Wetland Scientist	$189
Senior Project Engineer/Scientist	$205
Senior Consultant	$231
Associate Principal Engineer/Scientist	$260
Principal Engineer/Scientist	$260
Senior Principal Engineer/Scientist	$260

1. Rates above include fringe benefits, burden, and fee. Rates are typically subject to annual increases.
2. Pre-trial conferences, depositions, mediations, and expert testimony will be billed at one and one-half (1.5) times the rates above.
3. Work requiring out-of-town overnight stays will be billed at eight (8) hours minimum per day.
4. Direct non-salary project-related expenses, including subcontractors, will be billed at cost plus fifteen (15) percent.
5. General project-related expenses such as smartphones (including mobile app fees); data and cybersecurity; in-house reproduction; mail and hard-copy document delivery; and long-term electronic and paper document storage will be billed as a general communication fee at a rate of three (3) percent of the labor charges.
6. Based on client need or request, retired GZA Principals or other individual subconsultants may be retained to perform project work. In these cases, the billing rate for these individuals will be the appropriate rate listed above.
7. Employee vehicle use will be billed at Internal Revenue Service (IRS) allowed mileage rates.
8. Project and fieldwork-related equipment use will be billed as cost + 15%.
9. For projects involving access to hosted online data hubs (ArcGIS, EQuIS, and others) or high-resolution digital imagery, additional software hosting fees may apply and will be calculated as cost + 15%. Fees for staff involved in hosted online data hubs or high-resolution digital imagery will be based on equivalent classifications listed in the above table.

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Maura T. Healey
GOVERNOR

Kimberley Driscoll
LIEUTENANT GOVERNOR

Rebecca L. Tepper
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
http://www.mass.gov/eea

March 3, 2025

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Dam Repair and Replacement – Turnpike Lake
PROJECT MUNICIPALITY	: Plainville
PROJECT WATERSHED	: Taunton River
EEA NUMBER	: 16914
PROJECT PROPONENT	: BASF Corporation
DATE NOTICED IN MONITOR	: January 24, 2025

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of the repair and rehabilitation of the North and South dams located on the Natural Resources Trust of Plainville (NRTP) property. The NRTP is a 501(c)(3) non-profit whose mission is land conservation and preservation of wildlife habitat. These dams control the water level in Turnpike Lake. The project involves the repair/replacement of both dams at the headwaters of Turtle Brook and Sawmill Brook located along the shore of Turnpike Lake. The proposed modifications involve widening the spillway to meet dam safety standards, replacing the leaning concrete training walls on the North Dam, and reconstructing the South Dam to act as a functional auxiliary spillway. Turnpike Lake North Dam, which is subject to the Department of Conservation (DCR) Office of Dam Safety (ODS)'s jurisdiction,

is classified as a Significant Hazard Potential Dam in Poor condition. A dam is deemed to be of Significant Hazard Potential where dam failure may cause loss of life and damage to home(s), industrial or commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important facilities. A Certificate of Non-Compliance and Dam Safety Order for North Dam was issued by the DCR Office of Dam Safety on February 3, 2020. While Turnpike Lake North Dam is subject to regulation by DCR, Turnpike Lake South Dam is not, due to its limited height.

The proposed modifications for both dams are as follows:

Turnpike Lake North Dam:

- The removal of trees, debris, and vegetation from the spillway, approach, downstream, and discharge areas.
- Regrade the dam crest and upstream embankment and maintain a healthy stand of grass for erosion control.
- Extend the embankment into the abutment such that the elevation of the crest blends with the natural grade of the abutment, to prevent overtopping in low spots.
- Widen the spillway and replace leaning concrete walls in the training area and downstream spillway, except for downslope side walls, which will be overtopped with backfill to create a 2:1 final slope terminating adjacent to, and on either side of the outlet.
- Fill the erosion and sloughing on the crest and downstream slope.
- Install a low-level outlet and toe drain in coordination with replacement of the spillway.
- Install interlocking metal sheeting to a 20-foot depth, or refusal, in the north and south embankments.
- Develop an operation and maintenance (O&M) manual for the dam.
- Remove and reinstall the existing Boy Scout Eagle Project bridge.

Turnpike Lake South Dam:

- The removal of trees, debris, and vegetation from the spillway, approach, downstream, and discharge areas. Regrade the dam crest and upstream embankment and maintain a healthy stand of grass for erosion control.
- Extend the embankment into the abutment such that the elevation of the crest blends with the natural grade of the abutment, to prevent overtopping in low spots.
- Develop an operation and maintenance (O&M) manual for the dam.

Project Site

The project will take place on two parcels of wooded open space owned by NRTP. These parcels are located adjacent to land owned by BASF Corporation at 36 Taunton Street, to the north and south. Land owned by BASF consists of an approximate 32.8-acre parcel located at 36 Taunton Street, which includes areas that were used for industrial/commercial operations since first being developed in 1957; those facilities have since been demolished. BASF, as part of its planned remediation of its site located

at 36 Taunton Street which includes remediation of land owned by NRTP has agreed to fund the cost of the dam repair work.

The North Dam is a 180-foot earthen dam with an approximately 76-foot long downstream concrete retaining wall and weir structure. The earthen embankments outside the concrete retaining wall extend approximately 40 feet to the retaining wall's north and south. The South Dam is an approximately 30-foot long concrete/earthen dam. As noted above, the South Dam is not subject to ODS jurisdiction, but is in need of upgrades and repairs to reduce seepage and create a structure with long-term stability.

State and local wetland resource areas located within and adjacent to the project site include Bank, Bordering Vegetated Wetland (BVW), and Bordering Land Subject to Flooding (BLSF). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Panel No. 25027C0641F, effective July 16, 2014), the Turnpike Lake North & South Dams are located within a Zone AE and both within a regulatory floodway. The Massachusetts Department of Environmental Protection (MassDEP) lists Turnpike Lake as an Outstanding Resource Water (ORW). According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP) Atlas (15th Edition), the site is not located within Estimated or Priority Habitats of Rare Species. The site does not contain any structures listed in the State Register of Historic Places or the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth. The project site is not located within a designated geographic area (DGA) of Environmental Justice (EJ) Populations.[1]

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the temporary alteration of 200 linear feet (lf) of Bank, 800 sf of BVW, and 800 sf of Riverfront Area (RA) (impacts may be overlapping), and 800 sf (1,500 cubic yards cy)) of permanent impacts to BLSF. Approximately 800 square feet of the project is located in Buffer Zone. The ENF did not quantify impacts to Land Under Water (LUW), even though in-water work is proposed during construction. As noted, the entire site is mapped as ORW.

Measures to avoid, minimize, and mitigate environmental impacts include the use of erosion and sediment controls to address pollutant discharges and turbidity curtains to limit sediment migration within the limits of work within the lake. Areas temporarily impacted during construction will be restored to pre-existing conditions. The project proposes the use of cofferdams to facilitate construction in lieu of drawing down water levels in the two dams. As discussed below, DCR/ODS has requested further information and analysis to demonstrate that cofferdams can be employed safely without risk of

[1] "Environmental Justice Population" is defined in M.G.L. c. 30, § 62 under four categories: Minority, Income, English Isolation, and a combined category of Minority and Income.

destabilization during construction. The final construction methodology will be determined in subsequent permitting with DCR/ODS.

Jurisdiction and Permitting

This project is subject to MEPA review and preparation of an ENF pursuant to 301 CMR 11.03(3)(b)(1)(e) - New fill or structure or Expansion of existing fill or structure, except a pile-supported structure, in a velocity zone or regulatory floodway. The project will require a 401 Water Quality Certification (WQC) and a Chapter 91 Waterways License from MassDEP, and a Chapter 253 Dam Safety Permit from ODS. The project received an Order of Conditions (OOC) (SE 265-0428) from the Plainville Conservation Commission on October 10, 2023, which was not appealed.

The project is not receiving Financial Assistance from an Agency. Therefore, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of any required or potentially required Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF provides a description of existing and proposed conditions and preliminary project plans. It identifies project elements and describes alternatives that were considered by the Proponent. It identifies existing environmental conditions, potential environmental impacts, and measures to avoid, minimize and mitigate impacts.

Alternatives Analysis

The ENF included an alternatives analysis which evaluated a No-Action Alternative, a Complete Dam Removal Alternative, and the Preferred Alternative.

The ENF states that a No-Action Alternative was considered; however, the North dam is subject to a Dam Safety Order requiring repair or removal of the dam. Based on the deficiencies noted in ENF, the condition of the dam will likely worsen if left in its current state which could further endanger downstream property and public safety. Not improving the South Dam would eventually render the control structure inoperative and the area subject to excessive leakage and eventual dam failure. For these, reasons the No-Action Alternative was dismissed.

The Complete Dam Removal Alternative would remove the two dams instead of repairing and rehabilitating them. The DCR Dam Safety Order indicated that the dam has been found to be in need of repair, breaching or removal. The Proponent notes that complete removal of the dams could result in downstream impacts during spring flooding since the dams currently regulate the water levels at Turnpike Lake. Upstream impacts would also affect 1) the operation of the Town of Plainville water

supply wells which are at the southwest corner of Turnpike Lake and indirectly draw from the lake via glacial deposits beneath/beside this surface water; and 2) the biota and flora of the lake.[2]

The Preferred Alternative, as described herein, was selected as it best meets the requirements to eliminate the risk of dam failure for both the North and South dams. As discussed, spillway widening on the North Dam is intended to meet ODS dam safety standards and achieve a condition sufficient to pass the required 100-year storm.

Wetlands and Waterways

As noted above, the project will result in temporary and permanent impacts to wetland resource areas including 200 lf of Bank, 800 sf of BVW, 800 sf (1,500 cf) of BLSF, 800 sf of RA, and 800 sf of Buffer Zone. Impacts to Bank, BVW and RA will result from the removal of trees, debris, and vegetation from the spillway, approach, downstream, and discharge areas. The Proponent filed a Notice of Intent (NOI) with the Plainville Conservation Commission on June 15, 2022. An administrative completeness review was completed by MassDEP and was issued by the Department on July 8, 2022. A final OOC was issued by the Plainville Conservation Commission on July 13, 2022. Comments from MassDEP state that based on the description in the ENF, and as permitted through the OOC, it appears that the project is designed to meet applicable performance standards in Wetlands Protection Act (WPA) regulations. Outstanding issues and revisions can be managed through the permitting process, which may require an Amended Order (Wetlands Program Policy 85-4) through the Plainville Conservation Commission.

Comments from MassDEP state that Turnpike Lake is a dammed non-tidal river or stream which appears to be navigable; therefore, the project is subject to c. 91 jurisdiction, in accordance with 310 CMR 9.04(1)(e), and will require a c. 91 License. Comments from MassDEP note that if the 401 WQC program determines that the rebuilding activity proposed requires addition or removal of soils from the stream bed below Ordinary High Water (OHW), which would trigger a Waterways Dredge Permit, then the Waterways program will issue a license and permit concurrently within one Waterways Application, working with the applicant.

The proposed modifications involve widening the spillway and replacing the leaning concrete training walls on the North Dam and reconstructing the South Dam to act as a functional auxiliary spillway. For the North Dam, the project also includes regrading the dam crest and adjacent upstream embankment, installing interlocking metal sheeting to a 20-ft depth, or refusal, in the north and south embankments, installing a 12-inch diameter low-level outlet and a 6-inch diameter toe drain, and removing trees, debris, and vegetation from the spillway, approach, downstream, and discharge areas. This project is intended to upgrade the condition of the North dam from a "poor" designation and to widen the spillway in order to pass the required 100-year design storm.

The South Dam will be reconstructed to an elevation suitable for the surrounding topography. The upstream face will be covered with riprap for erosion protection. The crest and downstream face will be covered with an interlocked armored configuration. During the design storm event (100-year storm), the entirety of the south dam will act as a spillway. The interlocking armor will strengthen the face to preclude any erosion. The South Dam will also be provided with a weir opening similar to the

[2] Email from Proponent to Amina Miliani, MEPA Analyst, dated February 25, 2025.

original design to allow water to flow through the existing channel. Erosion control socks, coir logs, silt curtains and siltation fence will be located adjacent to the wetlands, and pond to mitigate migration of sediment into the resource areas within the 100-foot wetlands buffer zones and flood zones.

As noted above, the project is located in a FEMA VE Zone and regulatory floodway. Comments from the Massachusetts Water Resources Commission (WRC) indicate that, for work in the floodway, communities participating in the National Flood Insurance Program (NFIP) are required to prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic (H&H) analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge (44 CFR § 60.3 (d), 3). This standard is enforced through the Plainville's Zoning Bylaw, Section 500-40, F, (1). As both the North Dam and South Dam are located in the adopted regulatory floodway on the effective FIRM, the proposed work must be analyzed to determine if an increase in the base flood elevation (BFE) will occur. If through this analysis it is determined that an increase in BFE is anticipated, then a Conditional Letter of Map Revision (CLOMR) is required, and further technical and scientific data must be presented to FEMA and local planning boards. WRC indicates that this technical data must be provided and feedback received before project activities may proceed.

According to the Proponent, no change to the 100-year (FEMA Zone AE) floodplain is anticipated to result because the immediate flood levels upstream of the site were already decreased by the removal of 7,200 cubic yards (cy) of contaminated sediment from the 3-acre South Embayment of Turnpike Lake as part of a separate remediation project (EEA #16781).[3] The Proponent provided an initial H&H analysis during the review period to demonstrate the effect on the project on water levels. However, while the analysis is primarily intended to confirm the ability of the rehabilitated dam (North Dam) to pass the 100-year storm as required by ODS regulations, it does not further analyze water levels upstream or downstream of the project site to confirm compliance with the "No Rise Certification requirement. The Proponent has committed to completing the required H&H analysis to document compliance with the "No Rise" standard.[4] To the extent design changes are needed to meet regulatory requirements, a Notice of Project Change (NPC) filing may be required.

Dam Safety

The ENF states that the North Dam, which is subject to ODS jurisdiction and requires a Chapter 253 Dam Safety Permit for repairs, is classified as a Significant Hazard Potential Dam in Poor condition. A dam is deemed to be of High Hazard Potential where dam failure will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s). A Poor condition rating is assigned when structural deficiencies are identified and the dam condition presents a significant risk to the public located downstream from the dam. The water quality of Turnpike Lake, Turtle Brook and Sawmill Brook will be protected during the work. According to the ENF, a temporary coffer dam will be installed to facilitate construction just upstream from both dams and will be anchored to the lake bottom. Turbidity (silt) curtains will be installed

[3] The South Embayment is located just upstream from the South Dam, which is of concrete construction, and not regulated by the Massachusetts Department of Conservation and Recreation (DCR) since it is less than six feet in height.
[4] Email from Proponent to Amina Miliani, MEPA Analyst, dated February 27, 2025.

downstream of the dams. The ENF notes that the coffer dam to be installed just upstream of both dams (at different times) will create a barrier and seal off flow from Turnpike Lake into the Brooks, so as to allow dewatering for excavation for the new dam installations, assumed to be undertaken in summer weather conditions, when the depth of water column in the lake averages 2 to 3 ft deep. Erosion controls (secured coir logs) will be installed adjacent to the temporary access roads and work areas. The ENF states that completion of the project will result in significant improvement to overall dam conditions and public safety.

Comments from DCR/ODS state that the potential consequences of cofferdam failure during the proposed dam repair project, where the Proponent is relying on a fabric membrane to protect the downstream public from the uncontrolled release of hundreds of acre-feet of impounded water while a substantial portion of the dam embankment is removed for the proposed spillway replacement, are much higher than the consequences of cofferdam failure for a dredging project where the dam embankment remains intact. Additional issues noted by DCR/ODS include the potential problem that could arise with too much impounded water behind a cofferdam during construction, which includes the management of flood water inflow to the impoundment during unanticipated periods of significant precipitation and runoff. High rates of seepage and uncontrollable precipitation/runoff inflows can present construction quality control challenges, but more importantly, can result in undermining and failure of a construction cofferdam and potential loss of life. Comments from DCR/ODS indicate concern regarding the applicant's revised approach to construction water control for the dam rehabilitation project.[5]

The Proponent should continue to consult with DCR/ODS to confirm construction staging methodology as part of subsequent permitting. In light of the serious safety concerned voiced by DCR, it appears that a revision in construction methodology to include a lake drawdown may be possible. In such event, a further revision to wetland impact calculations and potentially a revised Order of Conditions may be required. If these or other design changes are made based on further consultation with DCR, the Proponent is directed to consult with the MEPA Office to determine whether further review may be required through an NPC filing.

Climate Change

Adaptation and Resiliency

Effective October 1, 2021, all MEPA projects are required to submit an output report from the MA Resilience Design Tool to assess the climate risks of the project. Based on the output report attached to the ENF, the project has a "High" exposure rating based on the project's location for the following climate parameters: extreme precipitation (riverine flooding) and extreme heat. The project is identified as having a "Moderate" exposure rating for extreme precipitation (urban flooding). Based on the 60-year useful life and the self-assessed criticality of the dam, the MA Resilience Design Tool recommends a planning horizon of 2070 and a return period associated with a 50-year (2% chance) storm event when designing the dams for the extreme precipitation parameter. The tool recommends planning for the 50th percentile with respect to extreme heat (which indicates an increase in extremely hot days as compared to a historical baseline).

[5] Email from the ODS to Amina Miliani, MEPA Analyst, dated February 26, 2025.

As noted, the project will improve the longevity of the dam and bring the North dam's condition into compliance with the ODS Dam Safety Regulations (302 CMR 10.00) and provide necessary repairs to the South dam. In particular, the proposed improvements will bring the North dam within the design parameters of the Dam Safety Regulations (302 CMR 10.00) by rehabilitating the dam to a condition sufficient to pass the present-day 100-year storm. While it is unclear how this compares to storms under future climate conditions, it will be an improvement of existing conditions and serve to reduce the risk of failure of both dams during extreme precipitation events.

In order to mitigate for the Extreme Heat rating, the project has been designed to avoid extensive tree clearing. The construction activities will result in the elimination of some trees and other vegetation that threaten the structural integrity of the dams. According to ODS Dam Safety regulations, deficiencies that may result in a Poor Condition Dam includes significant woody vegetation and tree growth on embankments and areas immediately adjacent to the dam.[6] The ENF notes that limited removal of trees may be required to not undermine the North dam, and limited removal of trees may be required to access and facilitate the planned work at the South dam. The trees and brush which will need to be removed in the area of the dams and will be chipped for onsite reuse on the access trails on the NRTP property.

Construction Period

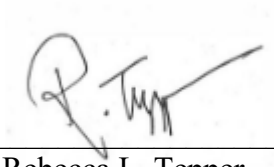
According to the ENF, the project is expected to commence in May of 2025, with project completion anticipated for September 2025. All construction and demolition (C&D) activities should be managed in accordance with applicable MassDEP regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management, etc.) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Proponent to reuse or recycle C&D debris to the maximum extent.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with Agencies, I have determined that an EIR is not required. The project may proceed to permitting.

[6] See: 302 CMR 10.

March 3, 2025
Date



Rebecca L. Tepper

Comments received:

02/13/2025 Massachusetts Department of Conservation and Recreation (DCR)
02/20/2025 Massachusetts Water Resources Commission (WRC)
02/25/2025 Massachusetts Department of Environmental Protection (DEP)

RLT/AM/am

dcr
Massachusetts

February 13, 2025

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Amina Miliani
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EEA #16914 Dam Repair/Replacement – Turnpike Lake (Plainville) ENF

Dear Secretary Tepper:

The Department of Conservation and Recreation ("DCR") Office of Dam Safety ("ODS") has reviewed the Environmental Notification Form ("ENF") for the Dam Repair/Replacement Project at Turnpike Lake (the "Project") located in Plainville, submitted by Aries Engineering, LLC on behalf of the BASF Corporation (the "Proponents") and Natural Resources Trust of Plainville (the "Owners"). It is noted that Tata & Howard, Inc. is the engineering designer for the dam repairs.

From information presented in the ENF, ODS understands the project scope includes the rehabilitation of the two dams that impound Turnpike Lake, known as Turnpike Lake North Dam and Turnpike Lake South Dam. Turnpike Lake North Dam is subject to regulation by ODS; however, Turnpike Lake South Dam is not, due to its limited height. The ENF indicates work proposed at Turnpike Lake North Dam includes: removal of trees from the dam embankment; installation of steel sheet seepage barriers beneath the left and right dam embankments; replacement of the existing spillway with a new cast-in-place concrete spillway equipped with a new low level outlet pipe; placing fill against and over the dam's downstream retaining wall to create a 2H:1V downstream slope and a consistently level dam embankment crest; installation of toe drains in the downstream embankment slope; and installation of articulated concrete block mats as dam embankment overtopping protection.

The jurisdictional dam, Turnpike Lake North Dam, is classified as a Significant Hazard Potential Dam in Poor condition. A dam is deemed to be of Significant Hazard Potential where dam failure may cause loss of life and damage to home(s), industrial or commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important facilities. A Poor condition rating is assigned when structural deficiencies are identified, and the dam condition presents a significant risk to the public located downstream from the dam.

The proposed repair of Turnpike Lake North Dam will require issuance of a Ch. 253 Dam Safety Permit by ODS. A Ch. 253 Part B permit application filing for the project, submitted by Tata & Howard in April 2022, remains under review by ODS. It is noted that ODS put a pause on processing the permit application until issuance of the final MEPA certificate. After completion of the MEPA review process and upon receipt of

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all required technical information demonstrating compliance with ODS regulations, a Chapter 253 Dam Safety Permit will be prepared and issued by ODS.

ODS generally advises that impoundment water level drawdown during invasive dam construction projects is good practice that will ensure enhanced protection of downstream interests during construction, protection of construction workers in the work area and a higher quality of completed work. Drawdowns during construction can reduce the risks of high rates of seepage into the work area and potential cofferdam failure.

During ODS' review of the Ch. 253 filing and in response to ODS' concerns about performing project work while maintaining Turnpike Lake at normal pool elevation (elevation 196'), Tata & Howard stated to ODS in a letter dated May 9, 2023, "The intent is to draw the lake down as far as possible. We anticipate that the lake can be drawn down to elevation 190 to 192 during construction."

During review of the ENF, ODS found no discussion of the proposed four- to six-foot-deep construction drawdown. ODS requests confirmation from the Proponent that, as indicated in the Ch. 253 Permit filing, a construction drawdown of at least four feet will be maintained while completing repair work on Turnpike Lake North Dam.

DCR appreciates the opportunity to comment on this project. Please contact David Ouellette at (617) 549-3553 or david.ouellette@mass.gov with any questions or to request additional information or coordination with ODS.

Sincerely,

Brian Arrigo
Commissioner

cc: Robert Fitzgerald, General Counsel, DCR
Ariana Johnson, Assistant General Counsel, DCR
Priscilla Geigis, Deputy Commissioner for Conservation and Resource Stewardship, DCR
Patrice Kish, Chief, Division of Design and Engineering, DCR
Robert Lowell, Deputy Chief Engineer, Division of Design and Engineering, DCR
Dam Safety file

THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

February 20, 2025

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
Attn: Amina Miliani, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: MEPA File No. 16914 - Plainville

Dear Secretary Tepper:

The Water Resources Commission (WRC) staff has reviewed the Environmental Notification Forms (ENF) for the Dam Repair/Replacement – Turnpike Lake in the Town of Plainville.

As proposed, the Project involves activities within a 100-year floodplain as delineated on the current effective Flood Insurance Rate Map (FIRM) for Norfolk County dated July 16, 2015. In its role as the state coordinating agency for the National Flood Insurance Program (NFIP), I submit the following comments on behalf of the WRC.

WRC's Flood Hazard Management Program (FHMP), under agreement with the Federal Emergency Management Agency (FEMA), is the state coordinating agency for the NFIP. As such, the FHMP provides technical assistance to communities that participate in the NFIP related directly to the program and also related to floodplain management in general. Communities that participate in the NFIP are required by FEMA, as a condition of their participation, to regulate development within the 100-year floodplain in a manner that meets or exceeds the minimum standards established by FEMA, located at 44 CFR 60.3. Participating communities such as the Town of Plainville are required to adopt the NFIP requirements through locally enforceable measures. In Massachusetts, many of the requirements contained in 44 CFR 60.3 are enforced through existing state regulations such as the State Building Code (780 CMR) and Wetlands Protection Act regulations (310 CMR 10.00). Communities typically adopt the remainder of the requirements as part of a zoning ordinance or other locally enforceable measure. The Town of Plainville has a Zoning Bylaw which has been accepted by FEMA as meeting their requirements under the NFIP.

In our role as NFIP coordinator, the FHMP offers comments on the proposed Project's relationship to many of the above regulations and requirements. The FHMP does not administer any of these requirements and therefore does not provide official determinations as to compliance with them; rather, our comments are provided as an overview of the requirements and the documentation that the FHMP believes may be necessary to demonstrate compliance with these requirements.

The Project includes repairs to two dams, designated as the North and South Dams, located on two parcels of land adjacent to Turnpike Lake. The proposed work will consist of the installation of interlocking steel sheeting to stop seepage on sides of the dam, regrading of the dam crest, widening of the spillway, and

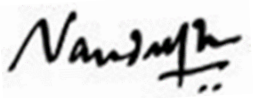
replacement of the upstream and downstream concrete training walls. The proponent has indicated that both dams control the water level in Turnpike Lake and the repairs are necessary to prevent the ultimate failure of the dams. Based on information submitted with the ENF, the project site for both the North and South Dams are located within the 100-year floodplain on the current effective FIRM in a Zone AE with a regulatory floodway. Because of the project's location in the 100-year floodplain, compliance with the requirements of several federal, state and local measures related to floodplain development are required.

For work in the floodway, communities participating in the NFIP are required to prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge (44 CFR § 60.3 (d), 3). This standard is enforced through the Plainville's Zoning Bylaw, Section 500-40, F, (1). As both the North Dam and South Dam are located in the adopted regulatory floodway on the effective FIRM, the proposed work must be analyzed to determine if an increase in the base flood elevation (BFE) will occur. If through this analysis it is determined that an increase in BFE is anticipated, then a Conditional Letter of Map Revision (CLOMR) is required (44 CFR § 65.12 (a)).

Additionally, if it is determined that there will be a change in the published base flood elevation located in the Norfolk County Flood Insurance Study, 44 CFR § 65.3 requires that communities notify FEMA within six months of changes in the base flood elevation by submitting technical or scientific data. This is in addition to the Requirement to Submit New Technical Data located in Section 500-40, K of Plainville's Zoning Bylaw. It is highly recommended that this data be submitted to FEMA through a Letter of Map Revision (LOMR) application, so to be reflected in the effective FIRM. Both the CLOMR and LOMR applications can be submitted to FEMA through the MT-2 application process.

Additionally, projects within the 100-year floodplain involving any federal action (e.g., permit, funding) must also comply with federal Executive Order 11988, Floodplain Management, as amended by Executive Orders 13690 and 14030. Executive Order 11988 requires an eight-step decision-making process which includes analysis of alternatives, avoiding impacts when possible, and minimizing impacts when avoidance is not possible. If this project requires submittal of any federal permits or has received funding from any federal agency, compliance with the eight-step decision-making process is necessary. Compliance with these orders will also require meeting the Federal Flood Risk Management Standard (FFRMS) which can involve design and construction to a higher standard, to be determined by the applicable federal agency.

Thank you for the opportunity to comment on the ENF. If you have any questions regarding these comments, or to request additional information or coordination with the FHMP, please contact Katie Paight at katie.o.paight@mass.gov or 857-283-0583.



Vandana Rao, PhD
Executive Director, MA Water Resources Commission

cc: Katie Paight, Department of Conservation and Recreation
Nadia Madden, Department of Conservation and Recreation
Eric Carlson, Department of Conservation and Recreation
Joy Duperault, Department of Conservation and Recreation
Kevin Baldwin, Conservation Agent and Floodplain Administrator, Town of Plainville

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cabridge Street, 10th Floor
Boston, MA 02114

Document Title

Dam and Seawall Repair or Removal Program Precontract Form

About This Form

Submission of this form and its attachments is required for execution of your Dam and Seawall Repair or Removal Grant. Please reach out to the Program Administrator (Nicholas.Bulens2@mass.gov) with any questions.

Section 1. Contractor Identification

Contractor (Grantee) Legal Name: Town of Shutesbury

Legal Address: 1 Cooleyville Road

City: Shutesbury

State: MA

Zip Code: 01072

Contract Manager (CM) First and Last Name: ~~Haley Bolton~~ Hayley Bolton
ⓘ The Contract Manager must be an employee of the Public Entity.

CM Title: Town Administrator

CM Email: townadmin@shutesbury.org

CM Phone: 413-259-1214

Public Entity Fax Number: None
ⓘ If no fax number is available, type “None.”

Contractor (Grantee) Vendor Code: VC6000191981
ⓘ The Public Entity’s 12-character code assigned by the Commonwealth, beginning with the characters “VC”.

CEO First and Last Name: Hayley Bolton

CEO Title: Town Administrator

CEO Email: townadmin@shutesbury.org

Section 2. Project Details

Project Identification

Structure Name(s) – Please enter the name(s) of the structure(s).

Lake Wyola Dam, Identification Number: MA00510

Grant Type – Please select one grant type. (select one)
☒ Design (pre-construction)
☐ Construction

Project Type – Please select one project type. (select one)
☒ Repair
☐ Removal
☐ Alternatives assessment to determine repair or removal

Project Map (Attachment)

⚠ **Attachment** – Please submit with this form a locus map that clearly identifies the structure and project area.

Scope of Work and Outcomes

Sequence of Work – Please list using bullet points the sequence of work to be performed.

Following submission of the original Dams and Seawall application and grant award, on November 28, 2025, the Town of Shutesbury (Town) Fire Chief and Emergency Management Director reported that one or more holes had formed in the upstream embankment slope of the Lake Wyola Dam and that sandy sediment material was observed discharged to the outlet stream from the low-level outlet pipe downstream of the dam. The Emergency Action Plan for the dam was activated and the Emergency Management Director declared an Emergency Level One, accordingly. The Massachusetts Department of Conservation and Recreation Office of Dam Safety (ODS) issued an *Immediate Emergency Action Dam Safety Order and Certificate of Non-Compliance* (Order) on December 3, 2025, requiring the Town to lower the lake level and work with an engineer to monitor conditions and

develop a temporary stabilization repair plan. The revised scope, proposed below, is necessary to respond to the emergency situation and address the newly understood and observed dam deficiencies. These efforts include:

- Emergency Response
- Coordination and Response with the Office of Dam Safety
- Emergency Repair Design
- Emergency Repair Permitting Assistance
- Emergency Repair Construction
- Designer Services During Construction
- Completion and Compliance Reporting

Project Outcomes – Please list using bullet points the outcomes that will result from the work.

- For design contracts, grantees should list the project deliverables. For example:
    - *Hydrologic and hydraulic (H&H) analysis*
    - *Alternatives assessment*
    - *Opinion of proposal cost*
    - *Permit applications submitted to MEPA, DEP Chapter 91, etc. (specify agencies)*
    - *75/100% plans and specifications*

- For construction contracts, grantees should list the repairs and/or improvements to be completed. For example:
    - *Patch concrete spalls and cracking*
    - *Safely pass the SDF without overtopping*
    - *Resolve upstream and downstream slop stability and seepage factors of safety*
    - *Regrade embankment with uniform slopes and an even crest elevation*

- Notification of Emergency condition to Office of Dam Safety
- Coordination with Office of Dam Safety
- Preliminary Emergency Repair Design
- Emergency Repair Permit Certifications
- Emergency Repair Construction
- Construction phase observations
- As-Built Plans

Schedule

Schedule Table – In the table below, please enter the major tasks to be performed in connection with the Project and their anticipated completion month and year. Grantees may add more rows as needed. Please note that the Program Administrator may return this form for additional itemization if further details are needed to create a clear and complete scope and schedule for contracting.

- For design contracts, grantees should use the major tasks identified in their designer's price proposal, if available.

- For construction contracts, grantees should enter the major tasks and milestones used to measure a GC's progress and on-time performance.

Milestone Task Name	**Anticipated Completion Month and Year (MM-YYYY)**
Emergency Response	11-2025
Coordination and Response with the Office of Dam Safety	12-2025
Emergency Repair Design	12-2025
Emergency Repair Permitting Assistance	1-2026
Designer Services During Construction	1-2026
Construct Emergency Repairs	1-2026
Completion and Compliance Reporting	2-2026

Estimated Project Cost (Attachment)

⚠ **Attachment** – Please submit one of the following documents with this form: (select one)

☒ Design Cost Estimate – Submit an itemized designer price proposal or engineer's estimate for anticipated design services, itemized by task
☒ Construction Cost Estimate – Submit an opinion of probable cost or itemized engineer's cost estimate for construction

Section 3. Fiscal-Year Allocations

Fiscal Year Table – In the table below, *consistent with the Project Scope and Schedule table completed above*, enter the amount of grant funds that the grantee anticipates spending in the current fiscal year and following fiscal year.

To maintain the integrity of the Dam and Seawall Program's capital budget, grantees are expected to utilize the grant funds in the particular fiscal year that they are allocated. Any grant funds not utilized in their scheduled fiscal year will require a contract amendment to reallocate funds. EEA is under no obligation to approve an amendment.

Fiscal Year (July 1 – June 30)	Anticipated Grant Spending

Current Fiscal Year	$41,325
Next Fiscal Year	0
Total Spending (should match award amount)	**$41,325**

Section 4. Submission Checklist

⚠ **List of Attachments** – Check the box of each attachment submitted with this form. Attachments not included must be explained.

If Design Contract:
☒ Locus Map
☒ Design Cost Estimate (as described above)

If Construction Contract:
☐ Locus Map
☒ Construction Cost Estimate (as described above)

⚠ **Attachments Not Included** – For any attachments not included, please explain why.

Please note that the Program Administrator may still require that the requested attachment or an equivalent document be submitted prior to contracting.

Acknowledgement – Select the box below to acknowledge the completion of this form and the submission of the attachments above.

☒ **The Preparer acknowledges the completion of this form and the submission of the attachments above.**

Preparer Name: Adrienne Dunk

Preparer Title: Project Manager

Preparer Email: adrienne.dunk@gza.com

☒ **The Contractor (Grantee) Authorized Signatory acknowledges the completion of this form and the submission of the attachments above.**

Authorized Signatory Name: Hayley Bolton

Preparer Title: Town Administrator

Preparer Email: townadmin@shutesbury.org

Authorized Signatory Signature: Hayley Bolton

Date of Signature: January 5, 2026

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The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Maura T. Healey
GOVERNOR

Kimberley Driscoll
LIEUTENANT GOVERNOR

Rebecca L. Tepper
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
http://www.mass.gov/eea

June 30, 2025

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Weld Pond Dam Lowering Project
PROJECT MUNICIPALITY	: Dedham
PROJECT WATERSHED	: Charles River
EEA NUMBER	: 16945
PROJECT PROPONENT	: Massachusetts Institute of Technology
DATE NOTICED IN MONITOR	: April 23, 2025

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61- 62L) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I have reviewed the Expanded Environmental Notification Form (EENF) and hereby determine that this project requires the submission of a mandatory Environmental Impact Report (EIR). In accordance with 301 CMR 11.11(5), the Proponent submitted a request that I grant a Waiver of the requirement to prepare an EIR. The Proponent requested that, if a Waiver were not granted, a Single EIR be allowed to be submitted in accordance with 301 CMR 11.06(8) in lieu of the usual two-stage Draft and Final EIR process. As discussed below, comments submitted on the project raise concerns regarding the substantial wetland impacts anticipated to result from the project and identify additional alternatives and analyses that should be provided to ensure full disclosure of impacts and proposed mitigation. In particular, the EENF indicates that the project will result in conversion of significant acres of wetland resource areas, but does not demonstrate how it will meet performance standards under wetland regulations. Accordingly, I am denying the request for a Waiver of EIR. The Proponent should submit a Draft EIR (DEIR) in accordance with the Scope included in this Certificate.

Project Description

As described in the EENF, Weld Pond Dam is subject to a Dam Safety Order requiring repair or removal of the dam, due to the multiple structural deficiencies identified. In an effort to address this, the project proposes to lower the existing dam and spillway by five feet (ft), replace the concrete cap on top of the dam, and reinforce the downstream face with a concrete buttress. This reduction in height, in turn, will reduce the total volume of water contained within the impoundment (Weld Pond) and is anticipated to reduce the hazard rating of the dam. The concrete and masonry stone of the existing dam and wet well riser will be cut down by approximately five ft and removed from the site. The masonry section will be overcut, and a new concrete cap will be placed on top. The spillway will also be reconstructed to accommodate the lower pond level. A new, lowered spillway chute structure will be constructed downstream of the spillway. A two-foot-thick concrete buttress will be built along the remaining downstream face, covering the existing stacked masonry. In addition, approximately 50 cubic yards (cy) of accumulated debris and sediment will be dredged from an elevated area of the pond bottom about 75 ft upstream of the dam. Temporary water controls are required to dewater the work area and to convey base flows through the dam. The water controls will consist of a combination bypass pumping to a protected downstream discharge point with velocity dissipation materials (e.g., large riprap) and installation of a cofferdam to segregate the work area. During construction, the pond will be lowered to the base of the dam, between approximately elevation 178 ft and 174 ft NAVD88. Following construction, it is anticipated that the native seed bank will naturally restore wetland areas; however, a remedial action plan may be developed should supplemental plantings and vegetation establishment become necessary.

According to the EENF, the goal of the project is to address the requirements of the Dam Safety Order, primarily by improving the hazard rating of the dam. Dam breach analyses indicate that lowering the crest of the dam will allow ODS to reclassify the dam as a Low Hazard Potential structure. As further discussed below, this structural change will permanently lower surface water elevations within Weld Pond and thereby result in conversion of wetland resource areas. The potential to cause downstream flooding risks through increased flows will also need to be considered.

Project Site

The project site consists of the approximately 28.7-acre Weld Pond, the Weld Pond Dam, and an approximately 0.5-acre temporary access easement adjacent to Meadowbrook Road in the Town of Dedham (the "Town"). Weld Pond and the Weld Pond Dam are located on property owned by the Massachusetts Institute of Technology ("MIT" or the "Proponent") and are located upstream of a low-lying forested wetland area with suburban development further downstream. There is also an earthen dike on the north side of Weld Pond, located on the adjacent private property, not owned by the Proponent. Weld Pond, which has a normal pool elevation of 188 ft NAVD88, is fed by two mapped intermittent streams along its western edge; one of these streams appears to also convey stormwater runoff from the High Street on-ramp to Interstate I-95 northbound. Water discharging from the dam flows south for about 3,000 ft along a small tributary before entering Lowder Brook and eventually reaching wetland areas north and south of Highland Street. The site is bordered by Interstate I-95 to the west and residential properties along Westfield Street and Meadowbrook Road to the north, south, and east. The dam is primarily accessed via a 200-ft private walking path through the woods near 43 Meadowbrook Road.

The Weld Pond Dam was constructed in the 1880s and consists of an approximately 78 ft long masonry and concrete dam founded on bedrock. The dam has a structural height of approximately 16.5 ft and a hydraulic height of about 14.5 ft, with a crest elevation of approximately elevation 189.7 ft NAVD88. The dam is primarily comprised of un-mortared stone masonry; however, the crest and the upstream face are covered in concrete. The primary spillway consists of a five-ft-long weir with a two-ft deep notch in the crest of the dam (elevation 188 ft NAVD88) approximately 14 ft from the left abutment. The spillway channel is a steeply inclined concrete trough with approximately two-ft-high sidewalls set on a stone masonry incline. A concrete wet well structure, measuring approximately eight ft on each side and 15.4 ft tall, extends into the pond from the dam's center. Flow into the wet well is controlled by a 36-inch by 28-inch aluminum slide gate attached to the upstream wall. A four-inch cast iron outlet exits the downstream face of the dam and connects to a four-inch high-density polyethylene (HDPE) water line. The HDPE water line travels above ground downstream of the dam, before traveling under the road and eventually discharging into an irrigation pond at the Endicott House property, owned by the Proponent.

State and local wetland resource areas located within and adjacent to the project site include Bank, Bordering Vegetated Wetlands (BVW), and Land Under Waterbodies and Waterways (LUWW). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Panel No. 25021C0177E and 25021C0039E, effective July 17, 2012), the entire project site appears to be located within a Zone X (0.2% annual chance flood hazard, or 500-year floodplain). However, preliminary FIRMs (Panel No. 25021C0177F and 25021C0039F) with a pending effective date of July 8, 2025, reclassify this area as a Zone A (1% annual chance flood hazard, or 100-year floodplain).

As shown in the EEA EJ Mapper, the project site is not located within one mile of any Environmental Justice (EJ) Populations.[1] Additionally, no languages were identified as being spoken by 5% or more of Limited English Proficiency ("LEP") residents within one mile of the project site.

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the direct alteration of 0.65 acres of land as well as the alteration of wetland resource areas including 100 linear feet (lf) of Bank (10 lf permanent, 90 lf temporary) and 1,209,810 square feet (sf) of LUWW (809,810 sf permanent, 400,000 sf temporary). The project is also anticipated to result in the conversion of approximately 18.6 acres of LUWW into BVW due to the permanent drawdown of water levels associated with reducing the storage capacity of the dam.

Measures to avoid, minimize, and mitigate environmental impacts include the use of erosion and sedimentation controls during construction; installation of turbidity curtain upstream of the work area; replacement of any trees required to be removed at a two to one (2:1) replacement ratio; and restoration of temporarily disturbed areas directly adjacent to the dam with a native wetland seed mix following construction. The project will also install a temporary cofferdam upstream of the dam to dewater the work area; base flows will be conveyed around the dam during construction through pumping and discharged through a bypass pipe to a protected downstream discharge point with velocity dissipation materials (e.g., large riprap). Additional mitigation measures should be itemized in the DEIR.

[1] The EEA EJ Mapper is available at: https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts.

Jurisdiction and Permitting

This project is subject to MEPA review because it requires Agency Action and meets/exceeds the mandatory EIR threshold at 301 CMR 11.03 (3)(a)(4) for the structural alteration of an existing dam that causes an Expansion of 20% or any decrease in impoundment Capacity. It also exceeds the ENF threshold at 301 CMR 11.03 (3)(b)(1)(f) for the alteration of ½ or more acres of any other wetlands. The project will require Agency Action in the form of a 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Chapter 253 Dam Safety Permit from the Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS).

The project will require an Order of Conditions (OOC) from the Dedham Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP). The project also requires the submittal of a Pre-Construction Notification (PCN) to the U.S. Army Corps of Engineers (ACOE) seeking authorization under the General Permits for Massachusetts in accordance with Section 404 of the Clean Water Act and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA).

The project is not seeking Financial Assistance from an Agency. Therefore, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of any required or potentially required Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations.

Request for EIR Waiver

The proponent submitted an EENF for the project with a request for a Waiver from the requirement for the preparation of a mandatory EIR in accordance with MEPA regulations (301 CMR 11.11). The EENF described how the project meets the Waiver criteria outlined in 301 CMR 11.11 and the EENF was subject to an extended comment period, as required by 301 CMR 11.05(8).

The MEPA regulations at 301 CMR 11.11(1) state that I may waive any provision or requirement in 301 CMR 11.00 not specifically required by MEPA and may impose appropriate and relevant conditions or restrictions, provided that I find that strict compliance with the provision or requirement would:

a) result in an undue hardship for the Proponent, unless based on delay in compliance by the Proponent; **and**
b) not serve to avoid or minimize Damage to the Environment.

As stated in 301 CMR 11.11(3), in the case of a waiver of a mandatory EIR review threshold, the Secretary shall at a minimum base the finding required in accordance with 301 CMR 11.11(1)(b) on a determination that:

a) the Project is likely to cause no Damage to the Environment; and
b) ample and unconstrained infrastructure facilities and services exist to support the Project (in the case of a Project undertaken by an Agency or involving Financial Assistance) or those

aspects of the Project within subject matter jurisdiction (in the case of a Project undertaken by a Person and requiring one or more Permits or involving a Land Transfer but not involving Financial Assistance).

The Proponent may provide evidence satisfactory to the Secretary that the Agency Action on the Project will contain terms such as a condition or restriction that will cause benefits to environmental resources or quality or infrastructure facilities or services in excess of those that would result in the absence of the waiver.

Request for a Single EIR

The MEPA regulations at 301 CMR 11.06(8) indicate that a Single EIR may be allowed provided I find that the EENF:

a. describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
b. provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and,
c. demonstrates that the planning and design of the project use all feasible means to avoid potential environmental impacts.

Consistent with this request, the EENF was subject to an extended comment period under 301 CMR 11.05(9).

For the reasons discussed below, I hereby deny the request for EIR Waiver and the request for Single EIR. As detailed below, the DEIR should explore additional alternatives to avoid or minimize impacts to wetland resource areas, and should provide additional explanation of how the project intends to comply with applicable performance standards in wetland regulations.

Review of the EENF

The EENF included a project description, preliminary alternatives analysis, existing and proposed conditions plans, estimates of project-related impacts, a bathymetric analysis, a hydraulic and hydrologic (H&H) analysis, and an identification of measures to avoid, minimize and mitigate environmental impacts. Consistent with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency, the ENF contained an output report from the Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "MA Resilience Design Tool").[2]

The Proponent provided supplemental information on May 16, 2025, which included an additional discussion of the standards for EIR Waiver; a copy of the Dam Safety Order issued by ODS and copies of the engineering/inspection reports conducted to date; a discussion of how the project intends to comply with the applicable regulatory requirements; additional information on construction and post-construction activities; and an additional discussion regarding the conversion of LUWW to BVW. For purposes of clarity, all supplemental information provided by the Proponent are included in references to the "EENF," unless otherwise indicated.

[2] Available at: https://resilientma.mass.gov/rmat_home/designstandards/

I acknowledge the numerous public comments from Dedham residents submitted on this project, the majority of which oppose the proposed lowering of the dam to reduce the impoundment at Weld Pond. As indicated below, further analysis of wetland impacts associated with a permanent drawdown of water levels should be provided in accordance with the Scope.

Alternatives Analysis

As described below, the EENF evaluated two alternatives on their ability to address the existing deficiencies and bring the dam into compliance with the Dam Safety Order and ODS regulations while managing environmental, social, economic, and public safety impacts. The EENF states that a No-Action Alternative was not considered as the dam is subject to a Dam Safety Order requiring repair or removal of the dam.

Alternative 1 would involve the complete removal of the dam. Although this alternative would achieve the project's goal of achieving compliance with ODS regulations by eliminating the dam altogether, it would also result in greater wetland impacts by converting additional areas of the pond to BVW and possibly into upland areas, as compared to the Preferred Alternative. However, dam removals typically have other ecological benefits and can be permitted as Ecological Restoration Projects under wetland regulations. According to the EENF, analysis of downstream flooding impacts also indicates that removing the dam would result in an increase in downstream roadway overtopping and residential impacts during storm events, as compared to existing conditions. In addition, the removal alternative would eliminate the irrigation supply for the Endicott House property and could attract unauthorized recreational use of formerly submerged areas, posing liability concerns for the Proponent. For these reasons, this alternative was dismissed.

The Preferred Alternative (as described herein) would involve lowering the dam crest by five ft and installing a two-ft-thick concrete buttress to the downstream face of the dam. Although the Preferred Alternative would permanently reduce the storage capacity of the impoundment (thereby reducing the total area of Weld Pond) by 18.6 acres, the EENF indicates that these areas would be allowed to convert to BVW. According to the EENF, analysis of downstream flooding impacts indicates that the Preferred Alternative would result in a minimal change in roadway overtopping and residential impacts during all storm events except for during the 500-year storm event, as compared to existing conditions. In addition, the Preferred Alternative would continue to maintain the irrigation supply for the Endicott House property.

As stated in comments, the Proponent did not evaluate a repair alternative that would bring the dam into compliance with current ODS standards without lowering water levels within the impoundment. The EENF indicates that lowering the hazard classification of the dam to reduce compliance obligations under ODS regulations is an objective of the project, and, therefore, a permanent reduction in water surface elevation is necessary. As noted, however, the EENF does not make clear how a permanent conversion of wetland resource areas meets performance standards without incorporating ecological restoration components. As stated in the Scope, the DEIR should continue to explore alternatives that meet the objective of complying with ODS regulations without permanently lowering water surface elevations and/or otherwise minimizing wetland impacts in a manner that complies with regulatory standards.

Dam Safety

According to the EENF, on June 30, 2022, the Weld Pond Dam was reclassified by ODS as a High Hazard Potential, Intermediate Size dam structure based on dam breach analyses.[3] Subsequently, ODS issued a Certificate of Non-Compliance and Dam Safety Order on March 28, 2023, citing a November 2022 engineering inspection report which found the dam to be structurally deficient and in "POOR" condition.[4] The deficiencies noted by ODS included upstream sediment or debris restricting flow into the low-level outlet intake, such that the pond cannot be drained in a timely manner; spalling stone and mortar elements;[5] vegetation growing on the downstream face of the dam and spillway chute; and the widespread presence of cracks across the dam, including along the entirety of the upstream face of the dam near the crest and transverse cracking on the crest near the right abutment. The Dam Safety Order mandated a Phase II investigation and improvements to the dam to comply with Dam Safety Regulations (302 CMR 10.00). A Phase II Inspection and Investigation report was submitted to ODS in July 2024, which presented detailed inspections, surveys, and explorations of the dam and adjacent earthen dike. The Phase II report also presented two alternative options (complete dam removal and lowering the dam by five ft) to bring the dam out of Poor condition.

The EENF states that in addition to the noted deficiencies, the existing spillway cannot safely pass the Spillway Design Flood (SDF), which is half of the Probable Maximum Flood (½ PMF) for a High Hazard, Intermediate Size dam. The SDF for the Weld Pond Dam was previously documented in a Spillway Design Flood Evaluation conducted in December 2022, and was determined to result in a flood elevation of 191.4 ft NAVD88.[6] Based on the projected flood elevation, the dam crest (at elevation 189.7 ft NAVD88) would be overtopped with a water depth of 1.7 ft.[7] As noted, the proposed project involves lowering the dam crest and spillway by five ft, to elevation 184.7 ft and 183 ft NAVD88, respectively. This will reduce the total volume of water contained within the impoundment and is anticipated to reduce the hazard rating of the dam. The EENF states that for a Low Hazard (dams located where failure may cause minimal property damage to others, and loss of life is not expected), Intermediate Size dam, the SDF is based on a 50-year storm event and would result in a flood elevation of 185.4 ft NAVD88 (approximately 0.4 ft higher than the dam crest elevation). The EENF states that while the reconstructed spillway will still not be capable of passing the SDF, it will allow for safe pedestrian passage across the dam during normal pond levels, and should the dam be overtopped, the newly installed concrete protection buttress on the downstream face will provide added stability and protection to the dam.

Comments provided by ODS state that, should the project design result in reduction of the dam's hazard potential classification from High to Low, successful implementation of the project will decrease the public safety risk posed by the dam.

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[3] A dam is deemed to be of High Hazard Potential where dam failure will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s).

[4] A Poor condition rating is assigned when the dam condition presents a significant risk to the public located downstream from the dam.

[5] Spalling damage is typically defined as the breaking away or flaking of a material's surface.

[6] The ½ PMF was based on a 72-hour storm event with 37.3 inches of precipitation, utilizing Northeast Regional Climate Center precipitation data.

[7] The EENF states that the adjacent earthen dike, with a crest elevation of 188.9 ft NAVD88, would also be overtopped with a water depth of 2.5 ft.

Wetlands

As noted above, wetland resource areas are located on and adjacent to the project site. According to the EENF, the project will result in the permanent alteration of 10 lf of Bank and 809,810 sf of LUWW. The project will also result in the temporary alteration of 90 lf of Bank and 400,000 sf LUWW. Permanent impacts to Bank will result from the construction of the concrete buttress on the downstream face of the dam. As noted, the project will also result in the permanent conversion of approximately 18.6 acres of LUWW to BVW. Temporary impacts to Bank will result from construction access and temporary impacts to LUWW will result from dewatering the work area around the dam and dredging approximately 50 cy of accumulated debris and sediment from an elevated area of the pond bottom about 75 ft upstream of the dam. The Dedham Conservation Commissions (or MassDEP in the case of an appeal) will review the project for its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00) and associated performance standards, and local bylaws. In addition, the proposed project qualifies as a Major Fill/Excavation Project (BRP WW 10), requiring a 401 WQC, because it will impact land under water, and the cumulative impact will exceed 5,000 sf after drawdown. MassDEP will review the project to determine its consistency with the 401 WQC regulations (314 CMR 9.00).

According to the EENF, temporary water controls are required to dewater the work area and to convey base flows through the dam. The water controls will consist of a combination of bypass pumping to a protected downstream discharge point with velocity dissipation materials (e.g., large riprap) and installation of a cofferdam to segregate the work area. A turbidity curtain will be placed upgradient of the cofferdam before installation and a sediment trap will be located downstream of the dam. During construction, the pond will be lowered to the base of the dam, between approximately elevation 178 ft and 174 ft NAVD88 (an approximately 10 ft to 14 ft decrease in water depth). To ensure safe and stable access on both sides of the dam, temporary ramps—using either placed fill or timber swamp mats—will be installed both upstream and downstream, as needed.

Comments provided by the Water Resources Commission state that based on information submitted with the EENF, the project site is not within the 100-year floodplain currently. However, the project site is located in the 100-year floodplain (Zone A) as depicted in the pending FIRMs that will become effective on July 8, 2025. Comments state that pre-project and proposed project analysis should be completed to understand this project's effects on the floodplain prior to any work being completed.

Comments provided by MassDEP state that it is unlikely that the entirety of the 18.6 acres of exposed substrate, due to the lowering of the water level within the impoundment, will successfully convert to BVW. Comments state that a hydrological study should be performed to evaluate the likelihood of successful resource area conversion based on existing and proposed topography, and post-lowering hydrology. Comments also state that there is a high likelihood that invasive species colonize areas of exposed substrate. Comments state that an invasive species management plan and a supplemental planting plan that includes herbaceous, woody shrubs, and tree species, should be prepared. This information should be provided in accordance with the Scope. As noted, additional information was provided detailing how the project intends to comply with the wetland performance standards; however, it remains unclear how the permanent conversion of LUWW to BVW and possibly

upland complies with said standards. The DEIR should provide additional explanation of how the project will meet wetland performance standards.

Climate Change

Adaptation and Resiliency

Effective October 1, 2021, all MEPA projects are required to submit an output report from the MA Resilience Design Tool to assess the climate risks of the project. Based on the output report attached to the EENF, the project has a "High" exposure rating based on the project's location for the extreme precipitation (stormwater flooding), extreme precipitation (riverine flooding), and extreme heat climate parameters. Additionally, the project location scores moderate in ecosystem benefits. Based on the 50-year useful life and the self-assessed criticality identified for the dam, the MA Resilience Design Tool recommends a planning horizon of 2070 and a return period associated with a 25-year (4% chance) storm event. It also recommends planning for the 50th percentile for applicable extreme heat parameters.

The MA Resilience Design Tool output indicates that the site is located in the current 100-year FEMA floodplain, is located within 100 ft of a waterbody, and is potentially susceptible to riverine erosion. These factors are indicated in the Tool as contributing to the "High" exposure for the extreme precipitation (riverine flooding) parameter. An H&H model was developed to evaluate the potential downstream flooding impacts associated with the SDF under existing and proposed conditions.[8] As noted above, the SDF of the dam under existing conditions is based on a 72-hour storm event with 37.3 inches of precipitation (½ PMF), whereas the SDF of the dam under proposed conditions would be based on a 50-year, 24-hour storm event with 7.39 inches of precipitation. As noted, the EENF states that the reconstructed spillway will still not be capable of passing the SDF, but will allow for safe pedestrian passage across the dam during normal pond levels; should the dam be overtopped, the newly installed concrete protection buttress on the downstream face will provide added stability and protection.

The results of analysis of downstream impact are summarized in the table below:

Location	½ PMF Non-Failure Flood Depth (Existing)	½ PMF Failure Flood Depth (Existing)	50-year Non-Failure Flood Depth (Proposed)	50-year Failure Flood Depth (Proposed)[9]
House 1	0.6 ft	3.4 ft	0.0 ft	0.0 ft
House 2	0.0 ft	2.4 ft	0.0 ft	0.6 ft
House 3	2.5 ft	4.9 ft	0.7 ft	2.2 ft
House 4	4.9 ft	7.3 ft	3.8 ft	5.4 ft
House 5	3.5 ft	4.9 ft	2.2 ft	3.2 ft
House 6	4.0 ft	5.5 ft	3.3 ft	5.1 ft
House 7	4.6 ft	7.7 ft	0.0 ft	0.7 ft
House 8	1.0 ft	2.2 ft	0.3 ft	1.1 ft

[8] Non-failure flood depths are based on an overtopping of the dam crest without a breach of the main dam structure. Failure flood depths are based on a breach of the main dam structure, resulting in an uncontrolled release of water from within the impoundment.

[9] Changes in flood depth under proposed conditions during a 50-year, 24-hour storm event and main dam failure were not provided for downstream roadways.

Meadowbrook Rd.	4.0 ft	9.0 ft	2.5 ft	N/A
Route 109/High St.	1.0 ft	2.1 ft	2.4 ft	N/A
Lowder St.	0.4 ft	1.7 ft	0.9 ft	N/A

As shown above, under the proposed conditions, the analysis indicates that the depth of downstream flooding of residential properties and roadways will be reduced, primarily due to the difference in the SDF. However, for comparative purposes, the EENF also evaluates the potential downstream flooding impacts associated with a 50-year, 24-hour storm event under existing conditions:

Location	50-year Non-Failure Flood Depth (Existing)	50-year Failure Flood Depth (Existing)	50-year Non-Failure Flood Depth (Proposed)	50-year Failure Flood Depth (Proposed)[10]
House 1	0.0 ft	2.8 ft	0.0 ft	0.0 ft
House 2	0.0 ft	1.9 ft	0.0 ft	0.6 ft
House 3	0.0 ft	4.3 ft	0.7 ft	2.2 ft
House 4	1.5 ft	6.8 ft	3.8 ft	5.4 ft
House 5	0.0 ft	4.6 ft	2.2 ft	3.2 ft
House 6	0.0 ft	5.5 ft	3.3 ft	5.1 ft
House 7	0.0 ft	5.3 ft	0.0 ft	0.7 ft
House 8	0.0 ft	1.9 ft	0.3 ft	1.1 ft
Meadowbrook Rd.	1.5 ft	8.0 ft	2.5 ft	N/A
Route 109/High St.	0.0 ft	1.9 ft	2.4 ft	N/A
Lowder St.	0.0 ft	0.8 ft	0.9 ft	N/A

As shown, the depth of downstream flooding of residential properties and roadways will increase under "non-failure" proposed conditions during a 50-year, 24-hour storm event. However, the depth of downstream flooding of residential properties and roadways is anticipated to decrease under "failure" proposed conditions during a 50-year, 24-hour storm event, primarily due to the lower volume of water stored within the impoundment. The EENF does not evaluate potential downstream impacts associated with projected future climate conditions. This analysis should be supplemented in accordance with the Scope.

The MA Resilience Design Tool output indicates that the maximum annual daily rainfall exceeds 10" within the overall project's useful life, and the project site has a history of flooding. In addition, the project site is anticipated to have a more than 30-day increase in days over 90 degrees Fahrenheit within project's useful life, between 10% and 40% of the existing project site has canopy cover, and existing trees are being removed as part of the proposed project. These two series of factors, respectively, are indicated in the Tool as contributing to the "High" exposures for the extreme precipitation (stormwater flooding) and extreme heat climate parameters. According to the EENF, the project does not propose

[10] Changes in flood depth under proposed conditions during a 50-year, 24-hour storm event and main dam failure were not provided for downstream roadways.

any increase in impervious surface, and will therefore, not exacerbate the impacts of extreme precipitation (stormwater flooding) or extreme heat under future climate conditions. However, the project does propose the construction of a two-ft-thick concrete buttress along the downstream face of the dam and will reconstruct the existing spillway to accommodate the lowered crest of the dam. The EENF does not quantify whether this work will result in additional impervious area located on and round the dam. In addition, the project includes the removal of several trees in order to address deficiencies identified in the Dam Safety Order and facilitate project construction. The EENF states that all trees required to be removed will be replaced at a 2:1 ratio either at upland locations near the dam or off-site at the Endicott House property.

Greenhouse Gas Emissions (GHG)

This project is subject to review under the May 2010 MEPA GHG Policy and Protocol (GHG Policy) because it exceeds thresholds for a mandatory EIR. The GHG Policy includes a de minimis exemption for projects that are expected to produce minimal GHG emissions. GHG emissions associated with this dam rehabilitation project will be limited to the construction period and are de minimis. was not required to submit a GHG analysis in conjunction with the EENF.

Construction Period

According to the EENF, implementation of the project is expected to commence in the summer of 2026 and be completed by the fall of 2026. Access to the dam will be provided via a temporary gravel access pathway from Meadowbrook Road.[11] The access path to the dam widens near the dam, providing space for a small laydown area, with an additional laydown area required near Meadowbrook Road. Prior to the commencement of work, erosion and sedimentation controls will be established throughout the work area and will be maintained until the site is stabilized. Temporary water controls are required to dewater the work area and to convey base flows through the dam. The water controls will consist of a combination bypass pumping to a protected downstream discharge point with velocity dissipation materials (e.g., large riprap) and installation of a cofferdam to segregate the work area. A turbidity curtain will be placed upgradient of the cofferdam before installation. During construction, the pond will be lowered to the base of the dam, between approximately elevation 178 ft and 174 ft NAVD88. To ensure safe and stable access on both sides of the dam, temporary ramps—using either placed fill or timber swamp mats—will be installed both upstream and downstream, as needed. Construction activities will also require the removal of several trees including a small number of trees located downstream of the spillway chute; several small trees downstream of the low-level outlet; trees along the temporary ramps; and trees near the construction laydown areas. Following construction, it is anticipated that the native seed bank will naturally restore wetland areas; however, a remedial action plan may be developed should supplemental plantings and vegetation establishment become necessary.

[11] The EENF states that a temporary gravel access road was previously constructed in 2023 during the most recent dam maintenance activities.

SCOPE

General

The DEIR should follow Section 11.07 of the MEPA regulations for outline and content and provide the information and analyses required in this Scope. It should clearly demonstrate that the Proponent will avoid, minimize, and mitigate Damage to the Environment to the maximum extent practicable through project alternatives and design.

Project Description and Permitting

The DEIR should describe any changes to the project since the filing of the EENF. The DEIR should identify, describe, and assess the environmental impacts of any changes to the project that have occurred between the preparation of the EENF and DEIR. The DEIR should also include an updated list of required Permits, Financial Assistance, and other state, local and federal approvals and provide an update on the status of each of these pending actions. The DEIR should include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the project's consistency with those standards.

The DEIR should include site plans for existing and post-development conditions. Plans should clearly identify structures, impervious areas, wetland resource areas, and stormwater and utility infrastructure. Plans should include datums relative to the location of each of the proposed project components, and the narrative should describe the total permanent and temporary impacts on wetland resource areas resulting from the proposed project. Plans should include cross-sections to accurately depict existing and proposed conditions in relation to the existing and projected water level elevations and wetland resource area extents.

The information and analyses identified in this Scope should be addressed within the main body of the DEIR and not in appendices. In general, appendices should be used only to provide raw data, such as wetland delineations, hydrologic and hydraulic modeling, and dam inspection reports, that is otherwise adequately summarized with text, tables, and figures within the main body of the DEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the DEIR to materials provided in an appendix should include specific page numbers to facilitate review.

Alternatives Analysis

As noted above, numerous comments raised concern about the extensive wetland impacts associated with the Preferred Alternative. The DEIR should provide a supplemental alternatives analysis that evaluates additional alternatives to address the identified deficiencies while minimizing wetland impacts. In particular, the DEIR should consider a "repair" alternative that would bring the dam into compliance with current ODS standards without changes to water levels within the impoundment. The DEIR should describe each of the alternatives considered; redefine the Preferred Alternative; describe

the reason(s) that the Preferred Alternative was chosen; and detail how each Preferred Alternative avoids, minimizes, or mitigates environmental impacts. The alternatives analysis should support the selection of the Preferred Alternative that includes all feasible measures to avoid Damage to the Environment, or to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable.

Wetlands

The DEIR should confirm the areas of impact to each affected resource area, provide plans with accurate resource area delineations of a reasonable scale to show where work will occur, and specify and describe which impacts are temporary versus permanent. The DEIR should explain how all components of the project are designed to meet the performance standards for the relevant resource areas. In particular, the DEIR should discuss how the proposed conversion of wetland resource areas will meet wetland performance standards absent any ecological restoration components. The DEIR should also describe how the project intends to conform to the 401 WQC regulations.

The DEIR should include a hydrological study to evaluate the likelihood of successful resource area conversion based on existing and proposed topography, and post-lowering hydrology. The DEIR should provide revised estimates of resource area conversion and identify whether any areas of LUWW will be converted to upland. The DEIR should also include an invasive species management plan detailing the methodology for the identification, treatment, and removal of invasive species from areas of the project site. The DEIR should also provide a planting plan that details supplemental planting, including herbaceous, woody shrubs, and tree species.

Climate Change

The DEIR should evaluate the potential downstream flooding impacts associated with a future (2070) 25-year storm event, as recommended by the MA Resilience Design Tool, under proposed conditions. The DEIR should also evaluate other future storm the potential downstream flooding impacts associated with a 50-year and 100-year storm event in 2070. The Proponent may make use of precipitation values available in the MassDEP NOAA14 PLUS – Summary of Technical Review Memorandum and on the Resilient MA Climate Change Projections Dashboard. The Resilient MA Climate Change Projections Dashboard now provides 24-hour rainfall volumes for a wide variety of storm scenarios and planning horizons, so comparison of other storm scenarios is possible through the dashboard without re-running the Tool. Information available through the Resilient MA Climate Change Projections Dashboard could be used as a resource in estimating future precipitation volumes.[12] The DEIR should identify potential increases in downstream flood depths that will directly result from the project and identify potential mitigation measures. The DEIR should present downstream flooding scenarios for the Preferred Alternative and any "repair" alternative that achieves ODS compliance without changing water surface elevations at the dam. For the latter, the DEIR should compare existing and proposed conditions using the ½ PMF storm event, in addition to any climate scenarios considered as discussed above.

[12] A dashboard showing anticipated 24-hour rainfall volumes under a wide variety of future storm events is now available as a resource on the Resilient MA Climate Change Projections Dashboard. See https://resilientma-mapcenter-mass-eoeea.hub.arcgis.com/.

Mitigation and Draft Section 61 Findings

The DEIR should include a separate chapter summarizing all proposed mitigation measures including construction-period measures. This chapter should also include a comprehensive list of all commitments made by the Proponent to avoid, minimize, and mitigate the environmental and related public health impacts of the project. The filing should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The list of commitments should be provided in a tabular format organized by subject matter (traffic, water/wastewater, GHG, environmental justice, etc.) and identify the Agency Action or Permit associated with each category of impact. Draft Section 61 Findings should be separately included for each Agency Action to be taken on the project. The filing should clearly indicate which mitigation measures will be constructed or implemented based upon project phasing to ensure that adequate measures are in place to mitigate impacts associated with each development phase.

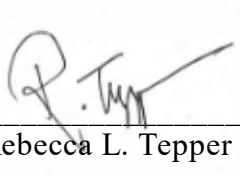
Responses to Comments

The DEIR should contain a copy of this Certificate and a copy of each comment letter received. The DEIR should contain a direct response to the scope items in this Certificate. In order to ensure that the issues raised by commenters are addressed, the DEIR should include a comprehensive response to comments that specifically address each issue raised in the comment letter; references to a chapter or sections of the DEIR alone are not adequate and should only be used, with reference to specific page numbers, to support a direct response. This directive is not intended, and shall not be construed, to enlarge the scope of the DEIR beyond what has been expressly identified in this Certificate.

Circulation

In accordance with 301 CMR 11.16(3), the Proponent should circulate the DEIR to each Person or Agency who commented on the EENF, each Agency from which the Project will seek Permits, Land Transfers or Financial Assistance, and to any other Agency or Person identified in the Scope. Pursuant to 301 CMR 11.16(5), the Proponent may circulate copies of the DEIR to commenters in in a digital format (e.g., CD-ROM, USB drive), by directing commenters to a project website address, or electronically. However, the Proponent must make a reasonable number of hard copies available to accommodate those without convenient access to a computer and distribute these upon request on a first-come, first-served basis. A copy of the DEIR should be made available for review in the Dedham Public Library.

June 30, 2025
Date



Rebecca L. Tepper

Comments received:

Comments submitted on the MEPA Public Comment Portal

5/12/2025 Elizabeth Quarles
5/12/2025 Roberta Shaw (supplemental comments submitted on 6/13/2025)
5/12/2025 Ross Henderson
5/12/2025 John Shaw
5/15/2025 Anne DeSimone
5/15/2025 Charles Devens III
5/15/2025 Hugo Williams
5/15/2025 John Paolella & Elliot Davis
5/20/2025 Vivian & David Pratt
5/21/2025 Al & Ruth Wisialko
5/21/2025 Amanda Saunders
5/21/2025 Robert Saunders
5/22/2025 Anna Palmer
5/22/2025 Mary Kroger
5/22/2025 Matthew Pierce
5/23/2025 Phiphi Liang
5/23/2025 Tony Liang
5/24/2025 Tran Cao
6/05/2025 Greg Heger
6/05/2025 Jay Graves
6/05/2025 Jens Peers
6/05/2025 Shawn Kumar
6/05/2025 Laura Pierce
6/05/2025 Xilei Zhang
6/09/2025 Kurt & Michelle Graves
6/23/2025 Hua Cheng
6/23/2025 Brian Leary

Comments submitted by email

5/14/2025 Senator Michael Rush & Representative Paul McMurty
5/21/2025 Dedham Land Trust
6/06/2025 Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS)
6/10/2025 Dedham Conservation Commission
6/20/2025 Massachusetts Water Resources Commission (WRC)
6/23/2025 Massachusetts Water Resources Authority (MWRA)
6/23/2025 Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO)

RLT/NJM/njm

View Comment

Comment Details

EEA #/MEPA ID
16945

Comments Submit Date
5-12-2025

Certificate Action Date
5-23-2025

Reviewer
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov

First Name
Elizabeth

Last Name
Quarles

Phone
--

Email
bkquarles@comcast.net

Address Line 1
31 Channing Rd

Address Line 2
--

State
MASSACHUSETTS

Zip Code
02026

Organization
Executive Office of Energy and Environmental Affairs

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: MIT's Request to Waive Environmental Impact Report to Drain Weld Pond Should be Denied

Comments

Segoe UI | 10 pt | Paragraph

I live within close proximity to Weld Pond. It is my understanding that MIT proposes to drain most of Weld Pond rather than fix the dam, and that it has requested that the requirement to submit an Environmental Impact Statement be waived. This request should be denied. Virtually draining this significant source of water and wildlife habitat will have a huge negative environmental effect. MIT should be required to complete the Environmental Impact Statement so that the extent of the impact can be objectively and scientifically assessed. This seems fundamental.

Attachments

Update Status

Status

Accepted

SUBMIT →

Share Comment

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BACK TO SEARCH RESULTS

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Ann	70 Deerpath Road	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-15-2025	DeSimone	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	desifamily@comcast.net	02026	

Comment Title or Subject

Topic: Environmental study of Weld Pond is needed

Comments

Segoe UI 10 pt Paragraph

An Environmental Impact Report is critical to understanding how a severely reduced Weld Pond would impact the Charles River Watershed and wildlife habitats that are fed by the pond. MIT's assertion that the pond and surrounding area is not environmentally sensitive, and that the pond is not an important water source, is unfounded

Attachments

Update Status

Status

Accepted

SUBMIT

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Charles	45 Deerpath Rd	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-15-2025	Devens III	--	--
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	cdevens@gwkinvest.com	02026	

Comment Title or Subject

Topic: Don't drain Weld Pond

Comments

Segoe UI 10 pt Paragraph

Weld Pond is a beautiful pond that is a woodduck (and other duck) nursery. It holds largemouth bass, chain pickerel and other gamefish. Great blue herons, ospreys and other birds fish its water. It would be a shame to drain it and kill all those inhabitants. MIT has an enormous endowment and can afford to fix it. They should reconsider the environmental impact of draining this beautiful pond and destroying all of that habitat, and use a small portion of their billions to save this ecosystem that they will destroy by draining the pond.

Attachments

Update Status

Status

Accepted

SUBMIT

Share Comment

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BACK TO SEARCH RESULTS

5/21/25

Secretary Kate Dineen
Executive Office of Energy and Environmental Affairs (EEA)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Comments on MEPA Review – MIT's Weld Pond & Weld Pond Dam Lowering Proposal (Weld Pond Dam, NID# MA02261)

Dear Secretary Dineen,

I am writing to express strong opposition to any waiver of a full Environmental Impact Report (EIR) for MIT's proposed Weld Pond Dam lowering project. Based on multiple environmental risk factors—some of which are confirmed in the Phase II report and others based on direct on-site observations—I respectfully urge the Executive Office of Energy and Environmental Affairs (EEA) to require a full EIR prior to any approval of this project.

1. **Confirmed Presence of Federally Threatened Northern Long-eared Bats**

According to the U.S. Fish and Wildlife Service's official species list for the Weld Pond Dam area, the federally threatened Northern Long-eared Bat is present. These bats have been directly observed foraging near the dam at dusk. Additionally, Bald Eagles which are protected under the Bald and Golden Eagle Protection Act (BGEPA) and Migratory Bird Treaty Act (MBTA), are frequently seen perching and foraging from tall trees very close to the dam. The actual presence of federally protected species and high-value wildlife (including beaver, turtles, frogs, and herons) demands current, field-based species assessment and public disclosure. A full EIR would ensure proper coordination with both state and federal agencies.

2. **MIT's Obligations To Manage Pond Water & Prevent Spread of Invasive Aquatic Species**

Weld Pond is hydrologically connected to multiple other nearby water bodies within the Charles River Watershed. The dramatic lowering of Weld Pond (by up to 70%) will expose new shoreline, disturb sediment, and create conditions highly conducive to invasive species establishment and spread within and beyond Weld Pond. MIT has an obligation under the ***Clean Water Act,*** to prevent ecological degradation. No invasive species monitoring or mitigation plans appear to be included in their filings, which presents an unacceptable risk to Weld Pond and downstream ecosystems and bodies of water connected to and/or fed by Weld Pond.

3. **Failure to Evaluate The Required 'Least Environmentally Damaging Practicable Alternatives' (LEDPA)**

The MEPA process, as well as federal and state environmental permitting frameworks (including Clean Water Act §404 and 401 Water Quality Certification), **require** that all applicants evaluate the least environmentally damaging practicable alternative (LEDPA). Nowhere in MIT's current filings is there any serious consideration of a repair of the dam at its current height—a clear alternative that would:

- Avoid destruction of Weld Pond's ecosystem that has been here for well over 100 years,
- Protect habitat for threatened species like the Northern Long-eared Bat and preserve existing Bald Eagle foraging areas,
- Maintain the historical and scenic landscapes that were established in the late 1800's and early 1900's when the Weld family and Frederick Law Olmsted worked together to design this natural habitat, and share it with generations of Dedham residents have enjoyed skating, fishing and boating on Weld Pond,
- Prevent devastating negative impacts to private homeowners who've invested significantly in the stewardship of the pond through contracting with a management company to combat invasive weeds, etc. for at least 20 years.

4. **Lack of Required Access Permissions from Landowners and Dedham Land Trust**

MIT's proposed dam-lowering activities require access across at least 3 private properties on the Pond and additional land held in conservation by the **Dedham Land Trust**. MIT **has not secured access permissions** from these stakeholders—all of whom are directly opposed to the project due to its devastating environmental, aesthetic, historical, and property impacts.

Proceeding without these critical property rights violates basic due diligence—it also renders the current proposal **infeasible under both MEPA and local permitting standards**. No waiver of a full Environmental Impact Report (EIR) should be considered until MIT can demonstrate legal access and cooperation from all landowners affected by construction, drawdown, or hydrologic changes.

Moreover, significant dam repair funding opportunities exist through public conservation trusts, historic preservation organizations, and state climate resilience grant programs. These options appear to have been overlooked or dismissed without the required technical or financial evaluation. Choosing to pursue only dam lowering and destroying 70% of existing Pond, or removal, as the default path—without a transparent comparison to the repair alternative and external funding options available—violates the core purpose of MEPA and likely federal permitting requirements.

Accordingly, I respectfully request that the Secretary

1. Deny any request to waive a full Environmental Impact Report

2. Require full species surveys, Section 7 ESA consultation, and a plan to manage Pond water to prevent invasive species spread and water quality management planning prior to any permitting decision

3. Require a balanced analysis of the current-level dam repair alternative as the least environmentally damaging practicable solution

4. Require written proof of legally required land access permissions from each private property required (including that of the Dedham Land Trust)

The direct and indirect environmental, ecological, historical, and community damages of MIT's proposed dam lowering are not only certain and irreversible—they vastly outweigh the uncertain and speculative benefits claimed by the applicant.

In contrast, a practicable and far less harmful alternative exists: repairing the dam at its current elevation, preserving Weld Pond, and leveraging available public and philanthropic funding sources to achieve long-term safety and resilience. To proceed without fully evaluating this alternative would not only violate MEPA's intent—it would risk enabling an avoidable disaster.

Sincerely yours,

Amanda Saunders

414 Westfield St.

CC:

Senator Michael Rush (Michael.Rush@masenate.gov)

Representative Paul McMurtry (Paul.McMurtry@mahouse.gov)

Dedham Select Board (selectboard@dedham-ma.gov)

Dedham Conservation Commission (concom@dedham-ma.gov)

Dedham Planning Board (planning@dedham-ma.gov)

MassDEP Southeast Regional Office (SERO@mass.gov)

U.S. Fish and Wildlife Service – New England Field Office (newengland@fws.gov)

Charles River Watershed Association (crwa@crwa.org)

The Nature Conservancy – Massachusetts Chapter (massachusetts@tnc.org)

Dedham Land Trust (info@dedhamlandtrust.org)

The Dedham Land Trust
Dedham, Massachusetts 02026

21 May 2025

Rebecca Tepper, Secretary
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, Suite 900
Boston, Massachusetts 02115

Re: Weld Pond Dam Environmental Impact Report Waiver

Dear Secretary Tepper:

I write as president of the Dedham Land Trust (DLT), a Section 501(c)(3) public charity. DLT owns a small parcel of land on the shore of Weld Pond adjacent to the dam in question. It has also essentially completed negotiations to acquire a conservation restriction (CR) on a parcel that includes significant shoreline on Weld Pond. This CR awaits only approval from EOEEA before being recorded, if I understand the process correctly.

DLT did not enter into negotiations for this CR with the expectation that we would be protecting mud flats, nor was that what the landowner wished to preserve.

The dam that creates Weld Pond was constructed over 100 years ago. NO current shorefront owner favors removal of the dam or any reconstruction of the dam that would lower its height and thus reduce the size of the pond. To my knowledge there have never been any unscheduled water releases or any maintenance difficulties in connection with the dam that might suggest any necessity for the action now proposed by MIT. DLT respectfully recommends that EOEEA commission or require a neutral, third-party engineering and environmental review of the Weld Pond dam prior to any action on MIT's proposed project.

My own totally amateur and cursory inspection of the dam suggests that it should be fine for at least the next hundred years without any repair or modification. In the case of absolutely unprecedented diluvian downpours that the existing sluice cannot dispose of by itself- downpours not seen in at least the last

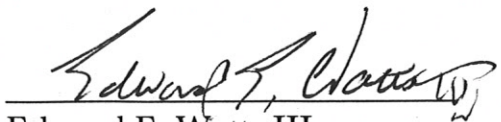
hundred years- water will flow over the top of the dam until the excess abates. If there is advance warning of such a flood, the dam contains a mechanism to permit lowering the water level in the pond in advance of such excess rainfall.

The impetus for removal seems to come solely from MIT. MIT owns no shorefront property on the pond, so, in that sense, it has no dog in this fight. If the dam should fail, MIT might have some liability to any property owner downstream (including itself with the Endicott Estate) damaged by the sudden release, but this is not the Hoover Dam. Houses downstream are not in any actual flood path that would be inundated by catastrophic dam failure, however unlikely such failure might be.

There seems to be some sort of movement afoot in Massachusetts that most dams are bad and many should be removed. If that is a factor here, it should not be. For instance, the Silk Mill Dam on the Charles River and the resulting Hemlock Gorge are scenic wonders and should not be tampered with. Weld Pond is a similar scenic gift, and it should not be extinguished.

MIT accepted Weld Pond as a gift in 2003. It should now accept the stewardship responsibilities that came with the gift. If the dam that creates the pond has now somehow ended up on a "suspect dams" list, let's fix it (should professional analysis suggest any such fix would be of use), not end it.

For the reasons set out above, as well as the reasons set out in greater detail in the letters from other abutting landowners, DLT respectfully requests that EOEEA deny MIT's request for a waiver of the requirement of an Environmental Impact Report.



Edward E. Watts III
311 West Street
Dedham, Massachusetts 02026-5513
nedwatts@mac.com
781-326-1045

CC: Kristin Garvin, Counsel, MIT
John S. Paolella
John Shaw
Polly Pierce
Kurt Graves

Request for Full Environmental Impact Report – MIT's Proposed Weld Pond Dam Lowering

As a Dedham resident and abutter to Weld Pond, I am writing to respectfully express my opposition to MIT's request for a waiver of a full Environmental Impact Report (EIR) under the Massachusetts Environmental Policy Act (MEPA) for its proposed Weld Pond dam-lowering project.

This proposal—aimed at lowering the dam and reducing the pond by approximately 70%—raises significant concerns. It would cause lasting and widespread harm to the local ecosystem, federally protected species, connected waterways, important historic landscapes, private properties, and the broader Dedham community. These impacts clearly meet—and in fact exceed—the thresholds that trigger the need for a mandatory EIR under MEPA.

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1. The Project Clearly Requires a Full EIR under MEPA

According to 301 CMR 11.03(3)(a)(4), a full EIR is required for:

"Structural alteration of a dam that results in an increase or decrease in impoundment capacity and affects one or more acres of land under water, wetlands, or other resource areas."

MIT's own submission confirms that the project would:

- Reduce the pond's area by 18.6 acres (approximately 809,810 square feet),
- Affect land under water, bordering wetlands, and critical wildlife habitat,
- Impact private properties and wetland areas not owned or controlled by MIT.

These factors meet the standard for requiring a full Environmental Impact Report.

---

2. Concerns with Flood Risk Modeling

MIT and its consultant, GEI, base their proposal on modeling that suggests significant flood risk. However, the HEC-RAS model used includes extremely conservative and, in many experts' view, unrealistic assumptions:

- The dam has never overtopped in its 100+ year history.
- The pond is shallow (average depth of 2–4 feet), and much of the water would not contribute to downstream flooding.
- Surrounding terrain includes wetlands and forests that naturally slow water flow, unlike dense urban areas where flooding is more severe.
- The model lacks calibration against real historical data—an essential step for reliable risk assessment.

Independent experts suggest the actual flood impact from a dam breach would likely be less than one foot of water—not the 7–11 feet claimed. A peer review of GEI's assumptions and methodology is essential before this modeling is used to justify any course of action.

---

3. Lack of Evaluation of a Less Damaging Alternative (LEDPA)

MIT has not thoroughly considered other reasonable and less damaging alternatives, such as repairing the dam at its current height. This option could:

- Avoid destruction of over 18 acres of pond,
- Preserve a historic and scenic area shaped by the Weld family and Frederick Law Olmsted,
- Protect known wildlife habitats and endangered species,
- Reduce negative impacts on nearby properties and wetlands.

Federal and state permitting processes require a full analysis of the Least Environmentally Damaging Practicable Alternative (LEDPA), and MIT should be expected to comply with this obligation.

---

4. Limited Cost Analysis and Omission of Key Alternatives

MIT's cost estimates compare dam lowering ($1.2–$1.6 million) with complete removal ($1.4–$1.8 million). However, no meaningful analysis is provided for repairing the dam—an option eligible for funding from public and private grants that support historic and climate-resilient infrastructure. A balanced evaluation of all options, including repair, is required for informed decision-making.

---

5. Lack of Legal Access to Required Private and Conservation Lands

MIT's project would require access to several private properties and land held by the Dedham Land Trust for construction staging, tree removal, and excavation. These property owners have not granted access, and many have publicly opposed the project. As currently proposed, the project lacks the legal rights needed to proceed—a serious oversight that must be addressed before any further steps are taken.

Request to MEPA

Given these concerns, I respectfully urge your office to **deny MIT's request to waive the EIR** and instead require a full Environmental Impact Report that includes:

- Independent peer review of MIT's flood risk modeling,
- A thorough analysis of less damaging alternatives (including dam repair at the current elevation),
- An assessment of the project's impacts on wildlife, habitat, historical resources, and visual character,
- Verification that all necessary legal access rights have been secured.

In Closing

The proposed dam-lowering project presents clear and irreversible risks, while the benefits remain speculative and uncertain. A far more responsible and balanced approach would be to preserve Weld Pond by repairing the dam and using available public and philanthropic funding to support long-term safety and environmental resilience.

Thank you very much for your thoughtful consideration of this matter, and for your continued leadership in protecting the environmental, historical, and community values that MEPA exists to uphold.

Sincerely,

Phiphi Liang

119 Meadowbrook Road, Dedham, MA 02026

Comments on MEPA Review – MIT's Weld Pond & Weld Pond Dam Lowering Proposal (Weld Pond Dam, NID# MA02261)

To the Executive Office of Energy and Environmental Affairs,

I am writing to respectfully express my deep concern regarding the proposed Weld Pond Dam lowering project by MIT, and to urge your office to require a full Environmental Impact Report (EIR) before any decisions are made. The potential environmental consequences of this project—some of which are noted in MIT's Phase II report and others observed directly on-site—warrant a thorough and transparent review process.

1. Presence of Federally Protected Species

According to the U.S. Fish and Wildlife Service's species list for the area, the federally threatened Northern Long-eared Bat is present near the dam site. These bats have been observed foraging at dusk, and Bald Eagles—protected under both the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act—are also frequently seen nearby. The confirmed presence of these species, along with other valuable wildlife such as beavers, turtles, frogs, and herons, underscores the importance of a comprehensive, field-based species assessment. A full EIR would help ensure proper coordination with both state and federal wildlife agencies and safeguard these important habitats.

2. Risks Related to Invasive Aquatic Species

Weld Pond is part of the Charles River Watershed and hydrologically connected to other nearby water bodies. Lowering the pond by up to 70% could expose new shoreline and disturb sediment, significantly increasing the risk of invasive species taking hold and spreading. Despite obligations under the Clean Water Act, no detailed monitoring or mitigation plan for invasive species appears to have been submitted. This creates considerable concern for both the health of the pond and the broader watershed.

3. Limited Consideration of a Less Harmful Alternative

Environmental regulations require that applicants thoroughly evaluate the *Least Environmentally Damaging Practicable Alternative* (LEDPA). To date, MIT's filings have not seriously examined repairing the dam at its existing height—a reasonable option that would:

- Preserve an ecosystem that has developed over more than a century,
- Protect habitats for threatened species and existing Bald Eagle foraging areas,
- Maintain the scenic and historical character of the pond and surrounding area, shaped in part by Frederick Law Olmsted and cherished by generations of Dedham residents,
- Avoid significant impacts on nearby homeowners who have long invested in maintaining the health of the pond.

Given the potential benefits of this approach, I believe it deserves thoughtful analysis as part of the EIR process.

4. Property Access and Stakeholder Cooperation

The proposed project would require access to at least three private properties and land conserved by the Dedham Land Trust. To my knowledge, MIT has not yet obtained the necessary permissions from these landowners, many of whom have voiced strong concerns about the potential impacts. Proceeding without these agreements raises both practical and legal issues and could complicate permitting efforts. Ensuring full cooperation and legal access should be a prerequisite to any further consideration of the project.

Opportunities for a More Balanced Path Forward

There are public and philanthropic funding sources available that could support dam repair, enhance climate resilience, and protect both historical and environmental values. These options do not appear to have been fully explored. Focusing solely on dam removal or major lowering, without a transparent comparison to feasible repair alternatives, risks overlooking a more balanced and community-supported solution.

Therefore, I respectfully request that the Secretary:

1. Decline any waiver request and require a full Environmental Impact Report;
2. Ensure updated species surveys, ESA consultation, and a plan for invasive species and water quality management are completed before any permitting decisions;
3. Require a thorough analysis of repairing the dam at its current height as a possible least-damaging alternative;
4. Request written documentation of land access permissions from all affected property owners, including the Dedham Land Trust.

The environmental, ecological, historical, and community impacts of this project are far-reaching and deserve careful evaluation. A full EIR is essential to making a well-informed decision that reflects the long-term interests of the environment and the surrounding community. I greatly appreciate your attention to this matter and your commitment to upholding the values of environmental stewardship and public engagement.

Sincerely,

Tony Liang

119 Meadowbrook Road, Dedham, MA 02026

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Laura	354 Westfield Street	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-5-2025	Pierce	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	laura@keelerandco.com	02130	

Comment Title or Subject

Topic: Opposition to Permanent Weld Pond Lowering

Comments

Segoe UI 10 pt Paragraph

Good evening,

I am writing as an abutter to Weld Pond, at 354 Westfield Street in Dedham in opposition to MIT's plan to lower Weld Pond. Weld Pond is a truly special place. I have the deep fortune of owning a property that has been in my husbands family for generations. His grandmother grew up in the home and on the pond, his dad grew up in the home and on the pond, and we now have the incredible fortune of being able to share the same with our son, Percy (2). Early in my relationship with my husband, we visited with his grandparents at 354 Westfield Street and almost immediately upon arrival were running down the property to the shore of Weld Pond, jumping in to swim. We became frequent summer visitors escaping Boston and cooling off in the sweltering summer evenings, and often meeting neighbors who were also recreating - canoeing and swimming. When it came time to think about where we wanted to lay roots, we visited all sorts of places all over the state, and at each visit, we returned to how special this family home is. It's a home that when we mention it to friends and acquaintances, many have said, "Harding Pond!" knowing it as the Harding family (my husbands family) recreational outlet known for swimming and infamous skating parties that doubled as fundraisers - selling hot chocolate out of the library window. Once we decided that we were interested in stewarding this family property into the next generation, it took over two years to finalize on that decision, one that we undertook with great responsibility and enthusiasm.

I am now disturbed to hear that Weld Pond is being threatened. And while I embark on this sentiment from a sense of nostalgia, I pursue this concern with an eye towards the historical perspective, the environmental perspective, the water quality impacts, the public risk impacts and the economic impacts. Weld Pond has significant importance to the history of the area - a place that had Frederick Law Olmsted's hand alongside the engineer who developed the plans for the pond and provided irrigation of the Endicott property - a place that was created with great intention. Weld Pond is a significance resource to the town both as a water resource and an open water wetland resource. Weld Pond is a recreational location for many Dedham residents - skating, fishing, boating and swimming - a loss to the community. And reducing the water level at Weld Pond compromises the healthy integrity of the area - transforming into a wetland that allows for mosquitoes. I urge the appropriate parties to strongly consider all the environmental impacts of draining this landmark.

I am grateful for your willingness to consider this important issue and look forward to your assistance.

My best,

Laura Pierce

354 Westfield Street, Dedham, MA

Attachments

Update Status

Status

Accepted

SUBMIT

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Shawn	--	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-5-2025	Kumar	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	shawnvk@gmail.com	--	

Comment Title or Subject

Topic: Opposition to MIT's Proposal to Lower Weld Pond Without an Environmental Impact Report (EIR)

Comments

To Whom It May Concern:

I am writing as a deeply concerned Massachusetts resident with a professional background in sustainability and a strong personal and academic interest in agriculture. I urge your office to require a full Environmental Impact Report (EIR) before allowing the Massachusetts Institute of Technology (MIT) to proceed with its proposal to lower the water level of Weld Pond in Dedham by 70%.

Weld Pond is a critical component of the local and regional ecosystem. It provides habitat for a wide range of wildlife, including beavers, bald eagles, and the northern long-eared bat, a species listed as threatened under the Endangered Species Act. Disrupting this delicate aquatic environment without a thorough assessment risks irreparable biodiversity loss, the displacement or death of protected species, and long-term ecological harm.

As someone committed to climate resilience and agricultural sustainability, I am especially alarmed by the timing and scale of this proposal. Lowering a wetland water body by 70% in an era of climate-driven droughts and rising temperatures is not just risky—it is counter to the principles of responsible environmental planning. Ponds like Weld play a vital role in groundwater recharge, localized climate regulation, pollinator habitat preservation, and soil moisture retention—all of which are essential to both natural ecosystems and agricultural resilience.

Weld Pond also feeds into the Charles River basin, meaning the consequences of this proposal are not localized but part of a much broader watershed system. Reducing the water level could impair water quality and flow throughout the basin and diminish the natural buffering capacity against extreme weather and wildfire risks—both of which are increasing due to climate change.

In light of these concerns, I respectfully request that your office require MIT to conduct a full Environmental Impact Report before any decision is made. Furthermore, I urge the state to require MIT to identify and evaluate alternative solutions that would achieve the same goals with equal or lower levels of risk and reduced environmental impact. There may well be engineering, ecological, or infrastructure-based alternatives that preserve the pond's critical functions while addressing MIT's concerns in a more sustainable manner.

This is not just a local issue—it is a test of our shared commitment to long-term environmental integrity and sound decision-making rooted in science and public accountability. I ask that you ensure transparency, community involvement, and the highest environmental standards are applied in this process.

Massachusetts has been a leader in climate policy and ecological preservation. Allowing a major institution to bypass a rigorous environmental review undermines the integrity of MEPA and the Commonwealth's broader sustainability goals.

Thank you for your leadership and for considering the concerns of those of us who care deeply about the health of our ecosystems, communities, and future generations.

Sincerely,
Shawn Kumar
Boston, MA

Attachments

Update Status

Status

Accepted

SUBMIT

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BACK TO SEARCH RESULTS

THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

June 20, 2025

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
Attn: Nicholas Moreno, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: MEPA File No. 16945 - Dedham

Dear Secretary Tepper:

The Water Resources Commission (WRC) staff has reviewed the Expanded Environmental Notification Form (EENF) for the Weld Pond Dam Lowering Project in the Town of Dedham.

As proposed, the Project involves activities within a 100-year floodplain as delineated on the pending Flood Insurance Rate Map (FIRM) for Norfolk County dated July 8, 2025. In its role as the state coordinating agency for the National Flood Insurance Program (NFIP), I submit the following comments on behalf of the WRC.

WRC's Flood Hazard Management Program (FHMP), under agreement with the Federal Emergency Management Agency (FEMA), is the state coordinating agency for the NFIP. As such, the FHMP provides technical assistance to communities that participate in the NFIP related directly to the program and also related to floodplain management in general. Communities that participate in the NFIP are required by FEMA, as a condition of their participation, to regulate development within the 100-year floodplain in a manner that meets or exceeds the minimum standards established by FEMA, located at 44 CFR 60.3. Participating communities such as Dedham are required to adopt the NFIP requirements through locally enforceable measures. In Massachusetts, many of the requirements contained in 44 CFR 60.3 are enforced through existing state regulations such as the State Building Code (780 CMR) and Wetlands Protection Act regulations (310 CMR 10.00). Communities typically adopt the remainder of the requirements as part of a zoning ordinance or other locally enforceable measure. Dedham has a Zoning Bylaw which has been accepted by FEMA as meeting their requirements under the NFIP.

In our role as NFIP coordinator, the FHMP offers comments on the proposed Project's relationship to many of the above regulations and requirements. The FHMP does not administer any of these requirements and therefore does not provide official determinations as to compliance with them; rather, our comments are provided as an overview of the requirements and the documentation that the FHMP believes may be necessary to demonstrate compliance with these requirements.

The Project includes modifications to the existing Weld Pond Dam, which is classified as a High Hazard Dam. The proposed modifications include lowering the existing Dam and spillway by five feet, replacement of the concrete cap, and reinforcement of the downstream side with a concrete buttress.

Based on information submitted with the EENF, the project site is not within the 100-year floodplain currently. However, the project site is located in the 100-year floodplain on the pending FIRMs that will become effective on July 8, 2025, in a Zone A. Once effective, compliance with the requirements of several federal, state and local measures related to floodplain development will be required.

Requirements for development occurring in Zone A, which have no published water surface elevation nor identified floodway, are located in 44 CFR § 60.3(b). This includes obtaining, reviewing and reasonably utilizing any base flood elevation and floodway data available from a federal, state, or other source. It is recommended that pre-project and proposed project analysis be completed to understand this project's effects on the floodplain prior to any work being completed.

Furthermore, 44 CFR § 65.3 outlines the requirement to submit new technical data when there are changes to a community's base flood elevations. This requirement is also located in Article VIII, Section 280-8.1 of Dedham's Flood Plain Overlay District as outlined below (please note both addresses below have changed):

"Requirement to Submit New Technical Data. If the Town acquires data that changes the base flood elevation in the FEMA mapped Special Flood Hazard Areas, the Town will, within six months, notify FEMA of these changes by submitting the technical or scientific data that supports the change(s.) Notification shall be submitted to:

- *FEMA Region I Risk Analysis Branch Chief*
  99 High St., 6th floor, Boston, MA 02110

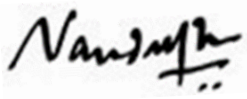
And copy of notification to:

- *Massachusetts NFIP State Coordinator*
  MA Dept. of Conservation & Recreation
  251 Causeway Street, Boston, MA 02114"

It is recommended that any new base flood elevation data be submitted to FEMA through a Letter of Map Revision (LOMR) application, so to be reflected in the effective FIRM once the project is completed. The LOMR application can be submitted to FEMA through the MT-2 application process.

The proponent should be aware that climate change can bring further impacts to the proposed development. Changes to the state's precipitation regime are ongoing with further predicted changes to the amount and timing of rainfall. This may increase the potential for flooding to properties located in the 100-year floodplain.

Thank you for the opportunity to comment on the EENF. If you have any questions regarding these comments, or to request additional information or coordination with the FHMP, please contact Katie Paight at katie.o.paight@mass.gov or 857-283-0583.



Vandana Rao, PhD
Executive Director, MA Water Resources Commission

cc: Katie Paight, Department of Conservation and Recreation
Joy Duperault, Department of Conservation and Recreation
Kenneth Cimeno, Building Commissioner and Floodplain Administrator, Town of Dedham
Meredith Labelle, Conservation Agent, Town of Dedham
Leonel Lainez, Environmental Specialist, Town of Dedham

June 23, 2026

Secretary Rebecca Tapper
Executive Office of Energy and Environmental Affairs
Commonwealth of Massachusetts
100 Cambridge Street, 10th Floor
Boston, MA 02114

Re: Opposition to Request for Waiver of a Full Environmental Impact Report ("EIR") for the Weld Pond Dam Lowering Project (the "Project")

Dear Secretary Tapper,

The supplemental EIR waiver analysis submitted by MIT's consultant to your office on May 18, 2025 exhibits a misunderstanding of both the kind of "Damage to the Environment" 310 CMR 11.00 seeks to prevent, and the "Damage to the Environment" MIT's Project is sure to cause ***based on its own engineering data***. We urge you then to reject MIT's request for an EIR waiver.

Whatever delay MIT speaks of in its supplemental filing is of its own making. Its engineers opined in 2021 that the Weld Pond dam was in need of repair. Had MIT proceeded to make those repairs, and maintain the current level of the pond, both to best protect the environment and honor its legal agreements with certain abutters, the Project likely would have been completed by now. It's our understanding that MIT has not yet attempted to enter into the access agreements it needs with certain abutters to do the work it proposes. MIT's submissions do not indicate that there is any imminent danger of flooding from the current dam that would warrant waiving an EIR filing. But those submissions do lay out the substantial flooding risk that the Project will cause – one that is not present with the existing dam configuration.

In its supplemental filing MIT makes the wholly unsupported conclusory statement that the Project will cause "no damage to the environment because the project will lower the hazard level (from high) to low." First, as further explained below, MIT's own engineers' modeling of flooding attributable to its lowered dam project in a 50 year storm absent a dam failure indicates *the Project will significantly increase the risk* to public safety and downstream property as compared to the current dam and will pose an approximate flooding risk for downstream residents and property owners in a failure scenario. There is no basis then for MIT's statement that the hazard level "will" be lowered.

Further, MIT's waiver analysis fails to appreciate that the MEPA regulations are focused not on dam hazard classifications, but on whether a proposed project will, in fact, likely cause actual damage to the environment. MIT's own engineers have concluded, in effect, that this Project will do just that. 301 CMR 11.02 defines "Damage to the Environment" to include "increases in flooding or storm water flows…impairment…of streams…or other surface or subsurface water resources…(and) destruction of…historic…sites." MIT's EENF, and the attachments to it, show that just this kind of damage is **likely.**

Among other things, the Project would: result in a significant increased flooding risk for downstream neighbors, threatening both property and human lives; drain some 2/3 of Dedham's largest body of water; impair streams on the northern side of the project; and destroy a local historic site (the

only known pond and dam partly designed by Frederick Law Olmstead). Additionally, the shallowed pond would potentially result in significant degraded water quality and vegetation (the EENF seems not to have addressed either potential environmental harm) .

We have reviewed the Office of Dam Safety Certificate of Non-Compliance and Dam Safety Order dated March 28, 2023 which required the dam owner, MIT, to repair, breach or remove the dam. Upon review of MIT's submission, we believe that *repairing the current dam* is the only way to maintain the status quo for downstream property owners, prevent adverse environmental impacts and respect the property rights of certain abutters to the pond. This conclusion is supported by the preliminary peer review of Project documents by GZA GeoEnvironmental, Inc. which we have submitted to your office. And yet the EENF failed even to consider the option of repairing the currently configured dam. Under these circumstances an EIR waiver should not be permitted.

The Hydraulic and Hydrologic Analyses section of the EENF, dated April 4, 2025, shows that, without a potential dam failure, the proposed dam lowering would *increase* the risk of flooding (compared to the existing dam) to downstream property owners both under a 50 year return period flood and under less intensity, but higher frequency, flooding conditions. The current dike on the north end of the pond serves as a supplemental spillway. Lowering the dam would eliminate discharges from the dike. In addition to increasing the threat to downstream property owners, this would eliminate water flows into the intermittent stream and wetland system downstream of the dike. Even absent a failure of a lowered dam, MIT's plan would result in five homes experiencing flooding of up to 3.8 feet. In such a scenario <u>the current dam structure</u> would result in only 1 home being flooded, at a depth of just 1.5 feet.

The statement in Epsilon Associates' May 16, 2025 supplemental waiver analysis that "(l)owering the hazard level will lower the risk of flooding" is non-sensical. First, the Project in no way lowers the hazard level. Second, such a statement is plainly contradicted by the engineers' own data which shows the design of the lowered dam project will INCREASE flooding in the most likely scenario – a 50 year storm without dam failure.

Even if we were to compare the relative risks of flooding damage and loss of human life in a dam failure scenario, MIT's data does NOT support a conclusion that they've reduced the risk materially. In Section 2.2.4 of the April 2025 Hydrology and Hydraulic Analysis, the proponent reports that, if their lowered dam fails during a 50 year flood, the incremental flood increase experienced by 8 downstream homes would be less than 2.0 feet (a "guideline" in Section 10.06 of the ODS regulations.) But, there's no comfort to be taken in that. MIT's consultants fail to point out that that incremental increase would be *on top of* significant flooding caused by the design of the lowered dam itself, even without failure. For instance, one home would be flooded by 5.5 feet if the current dam failed during a 50 year flood, but by 5.1 feet if the Project's dam failed. Another would flood by 6.8 feet if the main dam failed, and still by 5.4 feet if the proposed lowered dam failed. The likelihood of significant property damage and loss of life then hasn't really changed. Therefore, it would seem the dam's hazard classification would remain HIGH.

Further, repairing the dam will keep northern downstream streams intact and eliminate the danger of neighboring invasive species overwhelming the de-watered property. It would also avoid the threats to water quality and aquatic life posed by a dramatically shallowed pond area which would typically have warmer temperatures, lower dissolved oxygen content and be more vulnerable to nuisance aquatic vegetation. An EIR should measure these potential impacts.

Finally, the dam lowering proposal plainly violates the deeded property rights of several abutters, which MIT seemed not to appreciate at the time of its EENF filing. These property rights, dating back to 1928, and which provide for the use and enjoyment of the pond for bathing, boating and fishing, as well as an interest in the dam itself, were duly noted in MIT's 2003 deed from Bradford Endicott. MIT's proposal would clearly frustrate the purpose of these deeded property rights, and breach the original indenture agreement, which has been duly assigned to us.

We believe that MIT should be required to fully consider the alternative of repairing the existing dam. We have been presented with preliminary remediation design plans which appear to be roughly in line with the Project's estimated cost. The repair option has several benefits then. The cost is reasonable. Abutters' rights will be protected. The environment and an important historic site will be preserved. And, most notably, downstream property owners will be best protected from damaging flooding.

For all these reasons an EIR should be required for the Project.

Respectfully yours,

/s/Brian G. Leary
/s/Heather Woodroe

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June 19, 2025
GZA File No. 01.0178084.00

Mr. Brian Leary
159 Meadowbrook Road
Dedham, MA 02026

Re: Preliminary Technical Review of Information
Weld Pond Dam (MA 02261)
Dedham, Massachusetts

Dear Mr. Leary:

As requested, GZA GeoEnvironmental, Inc. (GZA) is pleased to provide you ("Client") with this preliminary review of dam safety related technical information contained in documents related to proposed actions at the Weld Pond Dam located in Dedham, Massachusetts (the "Dam"). Our objective was to review and summarize dam safety related information contained in these documents and provide context for potential dam safety related issues raised by the Dam Owner's proposed actions at the dam. The purpose of our work is to provide you with information to use in your discussions with the Dam Owner and in development of comments for submission under the MEPA and permit review processes.

This GZA letter is intended to provide Client a summary of technical information related to the proposed dam lowering project at Weld Pond Dam, as described in the available documents. This letter is subject to the **Limitations** contained in **Attachment 1**.

BACKGROUND

We understand that the Owner of the Weld Pond Dam has been ordered by the Massachusetts Office of Dam Safety (ODS) to correct safety deficiencies at the Weld Pond Dam. The dam has been judged to be in POOR condition by ODS and has also been reclassified by the ODS from Low Hazard Potential to High Hazard Potential. The Owner is considering a program to address the Dam Safety Order through a lowering of the dam by five feet. This action will dramatically reduce the impounded area and depth of Weld Pond.

GZA has completed an expedited review of materials related to the situation at Weld Pond Dam that have been made available to us. These documents are as follows:

- ODS Certificate of Non-Compliance and Dam Safety Order (March 28, 2023);
- GEI Phase I Inspection Report (August 17, 2021);
- GEI Follow-up Inspection (May 15, 2024);
- GEI Follow-up Inspection (October 9, 2024);
- GEI Phase II Inspection and Investigation Report (July 2024);
- Epsilon EENF (April 15, 2025) [From Environmental Monitor website];
- Epsilon Supplemental Information Memo (May 16, 2025).

We note that other documents are referenced in the materials that were made available to us, but these were not reviewed by GZA. GZA did not visit the site nor did GZA independently verify calculations or field data contained in the reports.

GENERAL DISCUSSION OF DAM SAFETY ASSESSMENTS OF WELD POND DAM

The Phase I, Phase II, and Follow-Up Inspection Reports for Weld Pond Dam reviewed by GZA were all completed by GEI Consultants, Inc. In GZA's opinion, these reports were professionally prepared in general accordance with commonly accepted engineering practices and state regulations. GZA offers the following limited commentary on key items of these reports:

Dam Condition – Based on the information contained in the reports, a condition rating of POOR currently appears to be appropriate for the Weld Pond Dam.

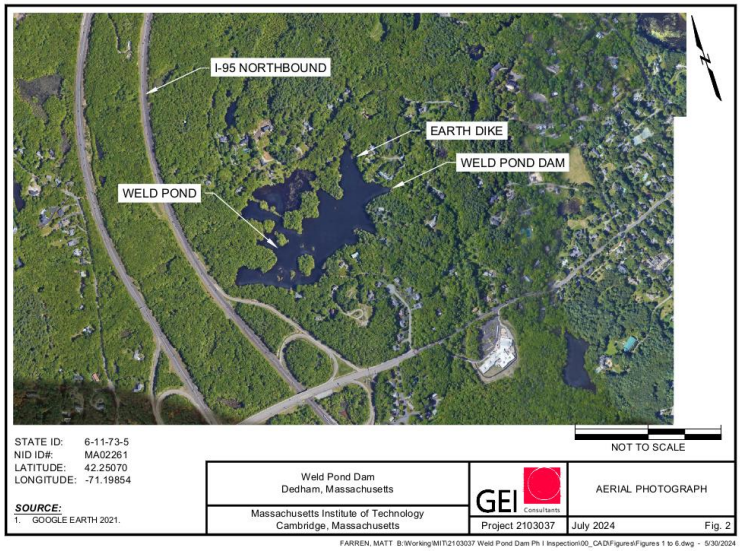
Hazard Classification – In GZA's opinion, the previous Hazard Classification change (for the existing dam) from LOW to HIGH is reasonable. The 2021 GEI Phase I contains an H&H Analysis dated April 2022. The methodology utilized in this analysis is consistent with current engineering practice for assessing the potential impacts of a hypothetical dam failure. The results of the analysis indicate that at certain areas, structures which would not be flooded in the absence of a dam failure would experience flooding of greater than two feet. In other locations, incremental flooding increases of more than two feet are predicted by the model, and at the Route 109 road crossing (downstream of the dam) depths of more than two feet will be accompanied by flow velocities of more than 10 ft/sec. The GEI report states, "*The incremental rise greater than 2 ft at habitable structures indicates the dam has the potential to cause loss of life and damage to homes*." GZA notes that the 2023 ODS Dam Safety Order lists the dam as HIGH Hazard and explicitly references the incremental flooding impacts estimated by the GEI report.

As a technical note, the 2-foot flooding threshold referenced by GEI is a typical standard that has historically been used to assess flooding consequences (and is referenced in Massachusetts dam safety regulations). However, GZA's opinion is that this is not a strict standard and that site-specific considerations (including parameters such as flow velocity and warning time) must be taken into account when assessing potential consequences due to dam failure.

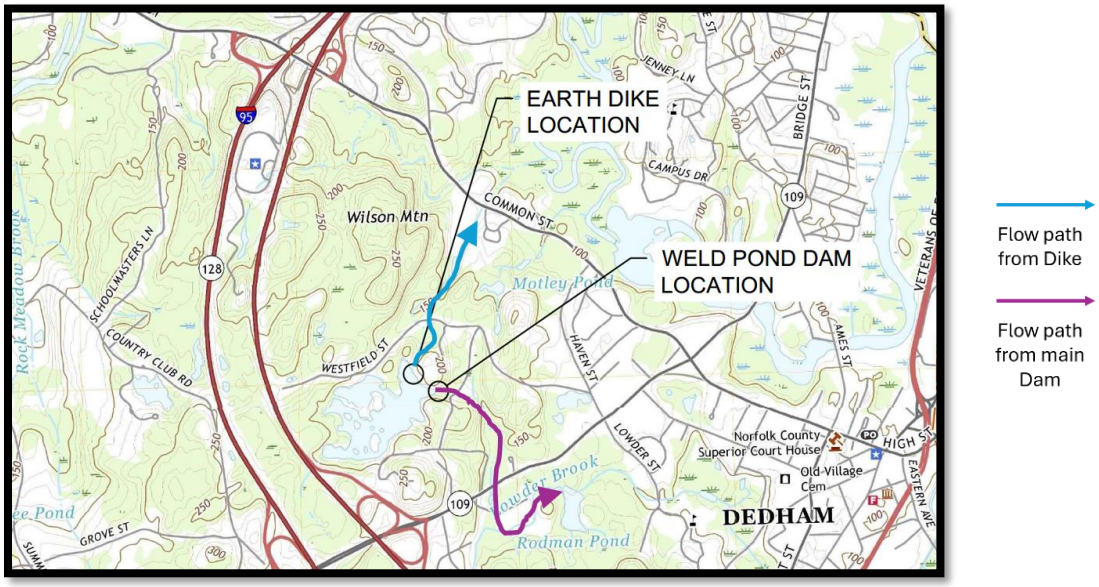
Hydrology and Hydraulics – The discussions of the methodologies employed by GEI for their analyses of the hydrology and hydraulics (H&H) at the dam indicate the use of appropriate techniques and reasonable parameters. GZA offers the following as points of discussion for issues related to H&H:

- The 2021 GEI Phase I initially lists the watershed area as 0.14 square miles including the pond itself. Subsequent documents revise the drainage area to 0.28 square miles (double.) The drainage area boundary are acknowledged to be complex and the behavior of runoff into the pond is likely influenced by the drainage structures associated with I-95/Route 128. It is possible these structures could attenuate or even re-route some of the inflow to the pond from the enlarged drainage area.
- The peak 50-year flood inflow is estimated by GEI to be approximately 274 cfs, which is equivalent to approximately 982 cfs per square mile. In GZA's opinion, this flow rate is higher than typically would be expected in this area. It is likely that this high flow is a function of the high CN value resulting from the preponderance of Group D soils, as used in the SCS method used by the HEC-HMS hydrologic model. Based on GZA's experience, the SCS method is a generally accepted approach even though it can result in highly conservative estimates of peak flood flows. Due to the limited watershed size, alternatives using more refined techniques such as calibration and verification based on observed data or similar, gaged watersheds may not be feasible.
- One indication that the predicted flows may be overestimated is that there is no anecdotal evidence of overtopping of the dam. However, this is NOT definitive.

Another potential reason that the dam may not have overtopped in the past (or at least been significantly damaged by overtopping) is that the Dike essentially serves as an auxiliary spillway for the Dam. Survey results indicate that the top of the Dike is roughly 1 foot below the top of the Dam. The GEI Phase II report indicates that the Dike owner has observed overtopping of the Dike. This indicates that flow is likely being diverted to the intermittent stream downstream of the Dike in addition to flowing through the spillway at the Dam. The relative location of the Dam and Dike are shown below in a figure reproduced from the GEI Phase II Report.



The portion of the GEI Locus Plan from the Phase II Report shown below has been annotated by GZA to indicate the difference in the general flow paths for water discharging from the main Dam vs. water flowing through or over the Dike. The Charles River is the final receiver of flow from both points, but the direction of the two water courses are different.



The overtopping of the Dike and the function of the Dike as an auxiliary spillway should be considered in any Project Alternative which maintains the Dam at its existing height. Conversely, the existing function of the dike which serves to divert flood flow away from the primary channel downstream of the main Dam should also be considered in any Project Alternative which proposes to lower or remove the Dam. If under proposed conditions, the function of the Dike as an auxiliary spillway should change, then the percentage of inflow to the pond that is discharged to the primary channel downstream of the main Dam under flood conditions could be substantially increased, leading to the potential for increased flood damage downstream of the dam. Additional discussion of the possible flood impact consequences of lowering the dam is provided below.

PROPOSED PROJECT

The EENF dated April 15, 2025 proposes a Project that will lower the top of the main Dam by approximately 5 feet, replace the concrete cap, and reinforce the downstream side of the main Dam with a concrete buttress. The EENF states that these actions will improve the dam's condition rating and will result in the dam's hazard rating changing from High to Low.

TECHNICAL ISSUES RELATED TO DAM SAFETY, HYDROLOGY, AND HYDRAULICS

- The proposed actions appear to be capable of addressing the identified physical dam safety deficiencies identified at the main Dam.
- However, the proposed Project also appears to have the potential to increase flooding impacts under normal, post-Project conditions by altering the conditions in which water is discharged to the channel downstream of the main Dam versus when water is discharged to the north-flowing channel downstream of the Dike. This additional flow in the channel downstream of the main Dam could result in increased incremental or new flooding of downstream residential structures and public infrastructure.
- The EENF contains, as Attachment F, a report titled "Weld Pond Dam Hydrology and Hydraulics," dated April 4, 2025 by GEI. This report provides information on the modeling done in support of the proposed Project. The modeling and report appear to have been prepared in general accordance with commonly accepted engineering practices, in GZA's opinion. However, the format of the tables and text in the report make it difficult to fully understand the consequences of the proposed lowering of the top of the main Dam on the distribution of flow to the two outflow channels from Weld Pond during flood conditions. There is no table that compares peak outflow rates for various floods at both the main Dam and Dike under both existing and proposed conditions without dam failure. Table 17 provides incremental increases in flood depth comparing existing and proposed conditions (without dam failure), but does not list total flood depths at the downstream houses. The later information can be inferred by combining data from Table 5 (50-year, 24-hour Flood Depths and Incremental Depth Increases due to Main Dam Failure [Existing Conditions]), Table 9 (50-year, 24-hour Flood Depths and Incremental Depth Increases due to Main Dam Failure – Dam and Spillway Crest Lowering by 5 ft Option), and Table 13 (Roadway Overtopping Depth – 5 ft Dam Lowering), as shown below:

Comparison of Flood Depths under Existing and Proposed Conditions (No Dam Failure)
50-year, 24-hour Flood

Location	Non-Failure Flood Depth (Existing Conditions) (from Table 5)	Non-Failure Flood Depth (Proposed Conditions) (from Table 9 & 13)	Change in Flood Depth	New Flooding Due to Proposed Project?	Increased Flooding Due to Proposed Project?
House 1	0.0’	0.0’	0.0’	No	No
House 2	0.0’	0.0’	0.0’	No	No
House 3	0.0’	0.7’	0.7’	**Yes**	**Yes**
House 4	1.5’	3.8’	2.3’	No	**Yes**
House 5	0.0’	2.2’	2.2’	**Yes**	**Yes**
House 6	0.0’	3.3’	3.3’	**Yes**	**Yes**
House 7	0.0’	0.0’	0.0’	No	No
House 8	0.0’	0.3’	0.3’	**Yes**	**Yes**
Meadowbrook Rd.	1.5’	2.3’	0.8’	No	**Yes**
Route 109 / High St.	0.0’	0.4’	0.4’	**Yes**	**Yes**
Lowder St.	0.0’	0.0’	0.0’	No	No

- In GZA’s opinion, based on our review of the EENF, the Project as currently presented has the potential to cause both damage to the environment and to downstream property and public safety by increasing flooding impacts under normal, post-Project conditions. The technical documents related to hydrology and hydraulics (Tables 5 and 17 of Attachment 4 of the EENF - the April 4, 2025 H&H document) indicate that the proposed configuration of the dam leads to flooding of four previously unaffected houses and one road crossing. Eight downstream houses and 3 road crossings were evaluated for potential flooding by GEI. Under the 50-year return period flood for the existing dam configuration (Table 5), one of these houses (House 4) and one of the road crossings (Meadowbrook Road) are indicated to be flooded (by natural flooding, in the absence of a dam failure). Under the proposed conditions (Table 17), 5 houses (i.e., 4 additional houses: Nos. 3, 5, 6, and 8) and (Table 14) 2 roadways (i.e., 1 additional roadway, the Route 109 crossing) will be flooded. Similar (though lesser) increases in new flooding (i.e. feature not flooded under existing conditions but flooded under proposed conditions) are also possible under lower intensity, higher frequency floods. This condition appears to represent an increase in flood risk to downstream property owners and infrastructure when compared to the existing conditions (assuming no failure of the dam). The H&H technical documentation does not provide information on flood flows expected to be discharged due to overtopping of the Dike, but it seems likely that the increase in flooding of structures downstream of the Dam under proposed conditions is a result of discharges from the Pond being entirely routed downstream of the Dam due to its lowering, rather than a sizable fraction being diverted over the Dike to the intermittent stream to the north, as occurs under existing conditions. Were the downstream areas covered by FEMA mapping, it is GZA’s opinion that the results provided in Attachment 4 of the EENF would not constitute a “no rise” condition resulting from the proposed Project. While not within a FEMA Zone A, AE, or AO, the proposed project does not appear to be consistent with the purpose of the Dedham Flood Plain Overlay District which requires all proposed project to “minimize flood damage.”

Additionally, eliminating discharges from the dike, while a dam safety improvement, would also eliminate flows into the intermittent stream and wetland system downstream of the dike.

These downstream impacts are essentially a result of the existing channel and stream crossing infrastructure downstream of the main Dam not being capable of supporting the increased flows which will result from the proposed dam lowering project.

- The documents indicate that one decision criteria for the selection of the Preferred Alternative (lower top of dam by 5 feet) is a desire to reduce the Hazard Classification of the dam to LOW. State Dam Safety Regulations define LOW Hazard dams as:

  "Dams located where failure may cause minimal property damage to others. Loss of life is not expected."

  The technical documents related to hydrology and hydraulics (Table 9 of the April 4, 2025 H&H document by GEI) indicate that under proposed (lower top of dam by 5 feet) conditions, 7 of the 8 houses are anticipated to have non-zero incremental flood depths of between 0.6 to 1.8 feet due to the failure of the proposed modified (lowered) dam. There are two downstream houses (House Nos. 2 and 7) that will be flooded in the event of the failure of the modified (lowered) dam that would not be flooded in the absence of failure of the modified dam. In GZA's opinion, while the expected depths of flooding of these two structures is reported to be less than 1 foot, these impacts could create damage to the homes (particularly if they have basements). Additionally, incremental rises at the other houses may create significant additional damages, particularly if the incremental flood depths result in exceeding first floor elevations. Furthermore, the EENF does not appear to discuss potential flood impacts to downstream roadways for the failure of the lowered dam. Therefore, in GZA's opinion, the results suggest that the proposed lowered dam would be more appropriately classified, at minimum, as a SIGNIFICANT Hazard dam, which is defined as:

  "Dams located where failure may cause loss of life and <u>damage to home(s),</u> industrial or commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important facilities."

  The "proposed conditions" flooding depths listed in the comparison table above are under the "non-failure" scenario. In the event of a hypothetical failure of the proposed dam under similar flood conditions, the additional outflow from the dam break would likely result in increased downstream impacts (depth and velocity) which could affect the final assessment of the Hazard Classification of the dam.

  It is important to note that only the Office of Dam Safety and the DCR Commissioner may make a final decision about the appropriate Hazard Classification of a dam.

ISSUES RELATED TO POTENTIAL ENVIRONMENTAL IMPACTS

- MEPA Regulations require a full assessment of potential project alternatives which could result in reduced potential environmental and public health impacts in comparison to the Proposed Project. The EENF describes one alternative to the Proposed Project, full dam removal. The EENF (page 8) eliminates the full removal alternative in part because:

  "*Analysis of downstream flooding impacts indicate an increase in roadway overtopping and residential impacts during storm events*," and "*This alternative would create a visual nuisance and potential safety concerns for abutters. Residents would lose the aesthetic pond views that have existed for over a century, and the newly exposed land could attract unauthorized recreational use on private property, posing liability concerns for the Project Proponent.*"

  - As shown above, the Preferred Alternative also increases downstream flooding impacts.
  - The visual nuisance and potential safety concerns related to full removal will also apply to abutters of the upper pond under the Preferred Alternative (which will effectively dewater the upstream portions of the pond.)

- The 2021 Phase I Dam Inspection Report recommends a study to "evaluate improvements to remediate or replace the dam, the dike, the spillway and the outlet works." However, in GZA's opinion, the EENF appears to dismiss the Rehabilitation alternative without appropriate analyses by saying "*[C]omplete dam replacement was not feasible as this option would maintain the current water surface elevation and the dam would remain classified as high hazard. This would not meet the objective of the project purpose, to lower the hazard classification of the dam*." GZA notes that the Office of Dam Safety (ODS) Order dated March 28, 2023 does not require a reduction in hazard of the dam. There are many High Hazard dams in the Commonwealth. Rather it orders the dam to be "brought into compliance" with state dam safety regulations. A reduction in Hazard classification is not required to bring a dam into compliance with dam safety regulations. GZA suggests that it would be reasonable for future MEPA documents to include a fuller assessment of potential dam rehabilitation alternatives which would ultimately reduce project impacts.

- The bathymetric survey of the pond contained in the EENF states that "the entire pond is relatively shallow and flat." The EENF states that lowering the normal pool elevation by 5 feet will result in the open water pond (Land Under Water) area being reduced to 30% of its current size with typical depths ranging from 1 to 4 feet. The EENF does not describe the impacts to water quality and the remaining aquatic habitat that will result from the reduced pond area and depth. Shallow ponds typically have higher water temperatures, lower dissolved oxygen content, and are more vulnerable to impacts from nuisance aquatic vegetation. It would be appropriate for the EIR to assess the potential environmental impacts related to this issue.

- According to the EENF, the lowering of the normal pond level by 5 feet will result in the transformation of 18.6 acres of Land Under Water to Bordering Vegetated Wetlands. The EENF states that "Exposed substrate of the drawn down pond will be allowed to revegetate from existing seedbank in exposed sediments." In GZA's experience, this can be an appropriate and effective means of revegetating an exposed area of former pond bottom. However, there is a risk of rapid colonization of the former pond bottom by invasive species such as phragmites, purple loosestrife, etc. The EENF contains no information on the potential presence of such invasive plant species or any plans for mitigating against the spread of invasives.

- The documents indicate that the Project does not propose to modify the existing Dike on the northwest edge of the pond because the lowering of the pond by 5 feet will result in the Dike no longer being a water-retaining structure under most conditions. The 2021 GEI Phase I Inspection (pg 12) states (emphasis added):

  "After a distance of about 13 feet from the lakeside wall, the dike began to slope downwards to a downstream stream (Photos 39 and 40). We did not observe an outlet pipe where the stream began. *Water was flowing from an area of about 6-inch-diameter angular rocks (Photo 41).* The elevation of the beginning of the stream was about 3.6 feet below the dike and 4.2 ft lower than the highest point of the lakeside wall."

  However, the July 2024 GEI Phase II Report (pg. 20) states (emphasis added):

  "After a distance of about 13 feet from the lakeside wall, the Earth Dike began to slope downwards to a downstream streambed, *but the streambed was dry because of the lowered pond level (Photo 84)*.

  Figure 4 of the EENF shows a mapped intermittent stream originating from the Dike. Figure 6 of the EENF indicates that after the Dam is lowered by 5 feet, the pond will no longer be in contact with the upstream limit of the Dike. This raises the possibility that the lowering of the pond will result in a permanent reduction or complete loss of flow to the stream downstream of the Dike and thus direct impacts to the aquatic habitat and wetlands supported by that stream. In GZA's opinion, it would be appropriate for this issue to be analyzed in an EIR.

MEPA REVIEW PROCESS

The Project Proponent (the dam owner) has filed an Expanded Environmental Notification Form (EENF) with MEPA.

- The project is subject to the following ENF review threshold with requires an ENF and MANDATORY EIR:

  301 CMR 11.03(3)(a)(4): "Structural alteration of an existing dam that causes an Expansion of 20% or any decrease in impoundment Capacity."

The Project Proponent has concurrently requested a waiver from the Mandatory EIR or proceeding with a Single EIR. It is within the rights of any stakeholder to request that such a waiver not be granted on the grounds that the Project Proponent has NOT adequately demonstrated that "the Project is likely to cause no Damage to the Environment" or that the Expanded ENF has not demonstrated that "ample and unconstrained infrastructure facilities and services exist to support the Project." We suggest that it would be appropriate to raise some or all of these issues noted above as part of the MEPA Environmental Notification Form (ENF) comment process and request that additional information be provided as part of a full Draft and Final Environmental Impact Report (EIR).

Thank you for this opportunity to work with you on this important effort. We are of course available to answer any questions you may have regarding the contents of this letter.

Sincerely,
GZA GEOENVIRONMENTAL, INC.

Chad W. Cox, P.E.
Principal-in-Charge

David M. Leone, CFM, P.E.
Consultant / Reviewer

Attachment 1: Limitations

ATTACHMENT 1 - LIMITATIONS

USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of Mr. Brian Leary (Client) for the stated purpose(s) and location(s) identified in the Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. Our findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. Our services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

SUBSURFACE CONDITIONS

4. If presented, the generalized soil profile(s) and description, along with the conclusions and recommendations provided in our Report, are based in part on widely-spaced subsurface explorations by GZA and/or others, with a limited number of soil and/or rock samples and groundwater /piezometers data and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

5. Water level readings have been made in test holes (as described in the Report), monitoring wells and piezometers, at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this Report. Fluctuations in the groundwater and piezometer levels, however, occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, reservoir and tailwater levels, the presence of subsurface utilities, and/or natural or artificially induced perturbations.

GENERAL

6. The observations described in this report were made under the conditions stated therein. The conclusions presented were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.

7. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein available to GZA at the time of the evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.

8. Any GZA hydrologic analysis presented herein is for the rainfall volumes and distributions stated herein. For storm conditions other than those analyzed, the response of the site's spillway, impoundment, and drainage network has not been evaluated.

9. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the structure or site, or to structures on the site was unavailable or limited, GZA renders no opinion as to the condition of that portion of the site or structure. In particular, it is noted that water levels in the impoundment and elsewhere and/or flow over the spillway may have limited GZA's ability to make observations of underwater portions of the structure. Excessive vegetation, when present, also inhibits observations.

10. In reviewing this Report, it should be realized that the reported condition of the dam is based on observations of field conditions during the course of this study along with data made available to GZA. It is important to note that the condition of a dam depends on numerous and constantly changing internal and external conditions, and is evolutionary in nature. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued inspection and care can there be any chance that unsafe conditions be detected.

COMPLIANCE WITH CODES AND REGULATIONS

11. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.

12. This scope of work does not include an assessment of the need for fences, gates, no-trespassing signs, boat/swimmer barriers, repairs to existing fences and railings and other items which may be needed to minimize trespass and provide greater security for the facility and safety to the public. An evaluation of the project for compliance with OSHA rules and regulations is also excluded.

COST ESTIMATES

13. Unless otherwise stated, our cost estimates are for comparative, or general planning purposes. These estimates may involve approximate quantity evaluations and may not be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over the labor and material costs required to plan and execute the anticipated work, our estimates were made using our experience and readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

ADDITIONAL SERVICES

14. It is recommended that GZA be retained to provide services during any future: site observations, explorations, evaluations, design, implementation activities, construction and/or implementation of remedial measures recommended in this Report. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Roberta	159 Meadowbrook Rd	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-12-2025	Shaw	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	+17814397152	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno (617)699-4254, Nicholas.Moreno@mass.gov	rbsberta@gmail.com	02026	

Comment Title or Subject

Topic: Please require a full Environmental Impact Report for this Project

Comments

Segoe UI | 10 pt | Paragraph

Dear Secretary Tepper,

As a resident of Dedham, I am writing to object to MIT's request to waive a full Environmental Impact Report (EIR) for its proposed project to lower Weld Pond.

Permanently reducing the volume of Weld Pond by 70% will drastically affect a quality water source for the Charles River and a system of wetlands, streams and ponds in the Charles River Basin, DCR's Wilson Mountain Reservation, and the Town of Dedham. A project of this significance should require a full Environmental Impact Report.

Weld Pond is a historic Dedham landscape of more than 100 years. Frederick Law Olmsted designed the ecologically inspired grounds for Stephen Weld and for Wendell Endicott who had similar interests in horticulture and landscape planning. Olmsted worked directly with the engineer who developed the plans for the pond to act as the primary water source for irrigation of the Endicott grounds, including what is now part of Wilson Mountain Reservation.

Reducing Weld Pond by 18.6 acres will have dramatic environmental impacts, eliminating wildlife habitat such as Northern Long-eared Bat, a variety of waterfowl, beaver, river otter, snapping turtles, bald eagles, etc. The resulting pond, which (per MIT's EENF filing) "will not be a continuous body of water" will be so shallow that it will inevitably evolve into a series of weed-choked puddles likely to attract significantly more mosquitos and ticks and even dry up during warmer months.

The Pond is a quality water source feeding the Charles River and very close to Dedham's drinking water well fields on Bridge St. Permanent pond lowering would forever change a Town resource that until fairly recently, was a backup water source for the Dedham Westwood Water District. At a time when water resources in Massachusetts and Dedham are often challenged by drought, is this the time to drastically reduce the largest body of open water in the town?

I respectfully request that MEPA urge MIT to reconsider its options for addressing the Weld Pond Dam.
At the very least, please require MIT to conduct a full Environmental Impact Report before embarking on such a drastic project.

Sincerely,

Roberta Shaw

Attachments

Update Status

Status

Accepted

SUBMIT

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Ross	23 BEMIS ROAD	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-12-2025	Henderson	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	rhendo@comcast.net	02026	

Comment Title or Subject

Topic: EIR - Weld Pond

Comments

Dear Secretary Tepper,

I am writing to request that MIT's request for a waiver on an Environmental Impact Report at Weld Pond be denied.

This project would have serious consequences for Dedham's environment, water supply, and public health.

Weld Pond is one of the town's most important open water and wetland areas, supporting wildlife and feeding into the Charles River and nearby well fields. Shrinking it by 70% would destroy over 18 acres of habitat and threaten protected species. The claim that it's not environmentally significant doesn't match what we know about the area.

Beyond its ecological role, the pond has a deep historical value. Frederick Law Olmsted helped plan it as the irrigation source for the Endicott estate, now part of Wilson Mountain Reservation. Draining it risks damaging not just a key natural resource, but a cultural one too.

There are also serious public health risks—standing water could increase mosquito activity and raise the chance of disease. And in a time of water scarcity, permanently reducing a major water source seems irresponsible.

Sincerely,

Ross Henderson

Dedham Resident

Attachments

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Hugo	--	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-15-2025	Williams	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	+16178522034	--	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	hugowilliams@comcast.net	--	

Comment Title or Subject

Topic: Weld Pond lowering objection

Comments

Segoe UI | 10 pt | Paragraph

I am a Dedham resident and one of many local who enjoy Weld Pond for recreation. MIT has a massive endowment hand should be a better steward of its local environments. Repair the dam.

Attachments

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Status

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John S. Paolella
195 Meadowbrook Road
Dedham, MA 02026

May 15th, 2025

Rebecca Tepper, Secretary,
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02115

Re: MIT's Request for an Environmental Impact Report Waiver

Dear Secretary Tepper:

We write to express our objection to MIT's petition to the Mass Environmental Protection Agency ("MEPA") for an Environmental Impact Report Waiver (or, in the alternative, a reduced filing requirement). MIT's assertion that Weld Pond and its surrounding area is not environmentally sensitive is inadequately supported, as is their disregard of the pond as an important water source. In order to understand how a severely reduced Weld Pond (a planned 70% reduction) would impact the Charles River Watershed and its abundant wildlife habitat, an Environmental Impact Report is necessary, especially given the irreparable damage that might ensue should MIT, without such a review, move forward with its plans to drastically reduce the pond.

To summarize, the key issues of grave concern to our community are as follows:

- Environmental Harms: MIT's plan would destroy approximately eighteen acres of designated wetlands, as well as a remarkable variety of aquatic habitats. The pond and its surrounding wetlands are home to swans, osprey, heron, turkey vultures, turtles, fish, frogs, and too many other creatures to enumerate. There may be protected species as well—something an Environmental Impact Report might reveal.

- Hydrology Concerns: Reducing the volume of the pond by 70% will materially diminish and possibly eliminate entirely the pond's current value as a water source for the Charles River and a system of wetlands, streams and ponds in the Charles River Basin, DCR's Wilson Mountain Reservation, and the Town of Dedham. I note here that the point where Weld Pond feeds the Charles River nearly abuts Dedham's drinking water well fields on Bridge Street. **Understandably, the Town of Dedham Master Plan lists Weld Pond as one of Dedham's most significant sources of open water, wetlands, and open space.**

- Public Health Risks: Draining the pond would most likely result in stagnant, swamp-like conditions, with increased mosquito activity, heightening the risk of vector-borne diseases, such as West Nile Virus and Eastern Equine Encephalitis. At a time with increasingly variable weather and hence higher public health risks arising from swamp-like conditions, a thorough understanding of the environmental impact resulting from MIT's drastic plans should be deemed essential to maintaining and safeguarding the public health.

In addition to the aforementioned concerns, as owners of an improved parcel that was part of Lot K as set forth on a 1927 Land Map filed in the Norfolk County Land Registration Office, we maintain the rights granted by a 1928 indenture (the "1928 Irrevocable License") to that lot's owner, heirs, and assigns. Specifically, that right entitles us to **"go upon and over the shoreline and the pond in boats or otherwise to bathe or fish and to repair, rebuild, reconstruct, or do whatever else may be necessary to maintain both the dams above referred to in good order and condition at a height not exceeding the current height..."** This right appears in numerous deeds in the chain of title beginning in 1946.

We raise this property right because the action MIT wishes to undertake, in addition to its detrimental environmental impact, also infringes on those rights—rights that we and at least three of our neighbors still possess. The deed by which MIT acquired the pond makes specific reference to the 1928 Irrevocable License. It is therefore not at all clear to us that MIT has the legal right to unilaterally extinguish those licensing rights. As a corollary, I do not believe they have the right to ask unilaterally for this exemption, let alone take any other action negatively impacting the pond and its surrounding environment, without engaging the abutting owners who are the inheritors of the rights granted in 1928.

As a final note, and without intending to be disparaging, it is unfortunate that MIT has made no meaningful effort to engage the abutters to the pond, especially those with licensing rights, to discuss collaborative solutions to any concerns they might have about the existing dam. Like our neighbors, we are therefore relying upon our sound government agencies to assess this situation, and to weigh heavily the need for further study, especially where there is evidently no compelling reason to grant a waiver.

Respectfully submitted,

Mr. John S. Paolella

Elliot B Davis

Ms. Elliot Bostwick Davis

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Robert	--	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-21-2025	Saunders	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-6-2025	+16179625675	--	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	robsaund612@gmail.com	--	

Comment Title or Subject

Topic: Weld Pond Dam Lowering Project #16945

Comments

Segoe UI 10 pt Paragraph

I am writing to express my strong opposition to any waiver of a full Environmental Impact Report (EIR) for MIT's proposed Weld Pond Dam lowering project. While I do not live on Weld Pond, I visit regularly and am deeply concerned about the impact this change will have on the town of Dedham and the many people who enjoy the pond.
Weld Pond is an essential part of Dedham's charm and character. It's a vital recreational resource for the community, where people come to fish, skate, kayak, and simply enjoy nature. Lowering the pond's water level by two-thirds would not only degrade the aesthetic and recreational value of the area, but also harm the local wildlife, including beavers, herons, and endangered species like the Northern Long-eared Bat. This project would significantly alter the pond's ecosystem and reduce its ability to support these species and the activities that so many in Dedham have enjoyed for generations.

The pond is an important water source for the Charles River and the surrounding wetlands, and any disruption could have lasting consequences for both wildlife and water quality. MIT's plan to lower the water level does not adequately address these concerns or consider alternative solutions, such as repairing the dam to maintain the pond's ecological and recreational value.

I strongly urge the EEA to require a full EIR to assess the potential impacts of this project. This review is crucial to ensure that the community and natural resources of Dedham are fully protected before making any irreversible changes to Weld Pond.

Thank you for your consideration of this important matter.

Attachments

Update Status

Status

Accepted

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Anna	203 meadowbrook rd	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-22-2025	Palmer	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-6-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	annabethpalmer@gmail.com	02026	

Comment Title or Subject

Topic: Impact of Lowering Weld Pond

Comments

Segoe UI 10 pt Paragraph

Hi,

My name is Anna Palmer and I, along with my husband and son, live in a home on Weld Pond. We are highly alarmed about the MIT plan to lower the pond for a number of reasons.

First, the pond is a quality water source very close to the town of Dedham's drinking water well fields and, until fairly recently, was designated a backup water supply. At a time when we are facing watering restrictions in Dedham each summer due to drought, permanently lowering or draining the water on the largest open body of water in the town could pose to ensuring and protecting the future of usable water in the city.

Second, the pond is home to robust sets of wildlife and has been actively managed by the surrounding owners for years. From fish, to hawks, to the occasional bald eagle sighting, to bats and many others, it's an important habitat for many different species.

And finally as a parent, the one I am most concerned about- any lowering of the pond will create a non-contiguous body of water, turning the area into effectively a swampland and a breeding ground for mosquitoes, putting the Dedham and nearby Needham at risk for EEE and other insect- born diseases. Outside the abutting home owners, the pond is nearby the large sports fields in Needham where kids soccer, track and baseball games happen at dusk throughout the summer. Any additional insect breeding grounds in the area may impact the outdoor enjoyment for all.

Weld Pond is an extremely important town resource with a longstanding and rich community history and the neighbors are actively working and investing time and resources into finding a solution. Please save this valuable pond and prevent irreversible environmental impact.

Anna and Jeff Palmer

Attachments

IMG_3454.jpeg(null)

IMG_2245.mov(null)

IMG_4143.jpeg(null)

IMG_0204.mov(null)

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Tran	119 Meadowbrook Road	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-24-2025	Cao	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-6-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	tran.cao11@gmail.com	02026	

Comment Title or Subject

Topic: Please require MIT to submit a Full Environmental Impact Report

Comments

Segoe UI | 10 pt | Paragraph

As a Dedham resident, I respectfully urge MEPA to deny MIT's request for a waiver of the full Environmental Impact Report (EIR) for its proposed project to significantly lower Weld Pond.

This project would permanently reduce the pond's volume by 70%, threatening a vital water source for the Charles River, impacting surrounding wetlands and wildlife habitats, and altering the ecology of the Wilson Mountain Reservation and Dedham itself. Weld Pond also holds historical significance, having been part of an Olmsted-designed landscape that served as an irrigation source for what is now a public reservation.

Eliminating 18.6 acres of water will not only degrade habitat for protected species like the Northern Long-eared Bat and various waterfowl, but also create shallow, stagnant conditions more prone to mosquito and tick populations. Additionally, the pond is near Dedham's drinking water wells and was previously a backup water source for the Dedham-Westwood Water District. In a time of increasing drought concerns, this loss is especially troubling.

Given the project's potential long-term consequences, a full Environmental Impact Report is both necessary and appropriate. I respectfully ask MEPA to require MIT to fully assess these impacts before moving forward.

Attachments

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Greg	245 Meadowbrook Road	Resident, Homeowner
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-5-2025	Heger	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	gheger@comcast.net	02026	

Comment Title or Subject

Topic: Please follow Environmental Impact Report Guidelines

Comments

Segoe UI 10 pt Paragraph

MIT has requested to significantly lower the water level of Weld Pond quickly by circumventing the Environmental Impact Report process.

Any changes to this sensitive environmental wetland ecosystem warrant that all ecological impacts be researched, identified and considered in a holistic and scientific process.

Weld Pond is Dedham's largest pond and wetland area. I contend the diverse habitat it supports must be cared for with a long term vision.

Maintaining our dwindling green space cannot be achieved by not following existing conservation guidelines and bylaws.

I support the EIR process by enforced and followed in this situation and all similar opportunities to avoid long term harm to our precious natural environment.

Attachments

Update Status

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dcr
Massachusetts

June 6, 2025

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Nicholas Moreno
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EEA 16945 Weld Pond Dam Lowering Project (Dedham) EENF

Dear Secretary Tepper:

The Department of Conservation and Recreation ("DCR") Office of Dam Safety ("ODS") has reviewed the Expanded Environmental Notification Form ("EENF") for the Weld Pond Dam Lowering Project (the "Project") located in Dedham, submitted by Epsilon Associates, Inc. ("Epsilon") on behalf of the Massachusetts Institute of Technology (the "Proponent" and "Owner").

ODS understands the Project scope includes: demolishing the upper portion of the dam; constructing a new concrete cap on the crest of the dam; placing a concrete buttress along the downstream face of the dam; reconstructing the dam's spillway and downstream spillway chute. The Project will result in lowering the dam crest and spillway by approximately five feet and a substantial reduction in the volume of water impounded by the dam both at normal pool and during storm events.

As noted by Epsilon, Weld Pond Dam is classified as a High Hazard Potential dam in Poor condition. A dam is deemed to be of High Hazard Potential where dam failure will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s). A Poor condition rating is assigned when the dam condition presents a significant risk to the public located downstream from the dam.

The EENF indicates that during construction, Weld Pond will be maintained in a drawn down state and work will be performed while the pond level is maintained between elevation 174' and 178'. This will reduce risk to both public safety and the safety of construction personnel during execution of the work and will provide for improved site conditions to ensure higher quality construction.

ODS understands that a primary project goal is the reduction of this dam's hazard potential classification from High to Low (dams located where failure may cause minimal property damage to others, and loss of life is not expected). Successful implementation of the Project design will decrease the public safety risk posed by the dam.

This Project will require a Chapter 253 Dam Safety Permit. The permit application must be submitted to ODS for review. ODS staff will communicate with the Proponent's design engineer as part of the permit process to ensure all required documentation is provided. After receipt of all required technical information

demonstrating compliance with ODS regulations, a Chapter 253 Dam Safety Permit will be prepared and issued by ODS. ODS is available to provide additional guidance through the permitting process.

DCR appreciates the opportunity to comment on this Project. Please contact David Ouellette at (617) 549-3553 or david.ouellette@mass.gov with any questions or to request additional information or coordination with ODS.

Sincerely,

Brian Arrigo
Commissioner

cc: Robert Fitzgerald, General Counsel, DCR
Ariana Johnson, Assistant General Counsel, DCR
Priscilla Geigis, Deputy Commissioner for Conservation and Resource Stewardship, DCR
Patrice Kish, Chief, Division of Design and Engineering, DCR
Robert Lowell, Deputy Chief Engineer, Division of Design and Engineering, DCR
Dam Safety file

Formal Objection to MIT's Proposed Dam Lowering at Weld Pond

Kurt & Michele Graves

254 Westfield Street

Dedham, MA 02026

graveku1@me.com

June 7, 2025

To: Secretary Rebecca Tepper

Executive Office of Energy and Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114

Cc:

Massachusetts Department of Conservation & Recreation (DCR)

Massachusetts Office of Dam Safety (ODS)

Dedham Conservation Commission

MIT Endicott House Leadership & Legal Counsel

Senator Michael Rush

Dedham Select Board

Dedham Economic Development, Planning, Zoning, Natural Resources

Dedham Planning Board

Summary Objection: MIT's Own 50-Year Storm Models Show Their Dam-Lowering Plan Would Flood 5x More Homes and Newly Inundate Route 109. A Breach of the Lowered Dam Increases Flood Outflows by 377% — and up

to 781% if the Dam Were Removed. Both of MIT Scenarios Knowingly Increase Life Safety Risks and Cause Far Greater Damages Than Repairing the Existing Dam To Bring It Into Compliance As Required By ODS.

Dear Secretary, Tepper,

My wife and I are the owners of 254 Westfield Street, Dedham, MA, which includes approximately 14 acres of land directly abutting Weld Pond. Our property comprises the Weld Pond dike structure, land directly adjoining the Weld Pond main dam, and extensive wetland systems on our property downstream of each. We write to formally object to the Massachusetts Institute of Technology's (MIT) proposed five-foot lowering of the Weld Pond Dam. The proposal would irreversibly devastate Weld Pond, existing wetlands, wildlife habitat and protected species, and one of the most historic, treasured, and ecologically important landscapes in New England and the Boston area.

First, MIT Will Not be Granted Legal Access Nor Any Permissions To Enter Any Part Of Our Property – As Is Required To Lower The Dam

MIT has no permission, access rights, or easements required to enter our property and carry out any dam lowering activities. Additional abutters next to the dam will be doing the same. Our reason is that MIT's 2025 EENF Report, prepared by GEI, shows that MIT's dam and pond lowering actions will irreversibly harm our property, the extensive interconnected wetlands on both sides of our property, and the broader Weld Pond ecosystem, scenic views, and extensive natural wildlife that has been the hallmark of Weld Pond for well over 100 years thanks to the foundation set by the Weld family, the Endicott family, and with direct input and design from Frederick Law Olmsted (long considered the Father of Landscape Architecture).

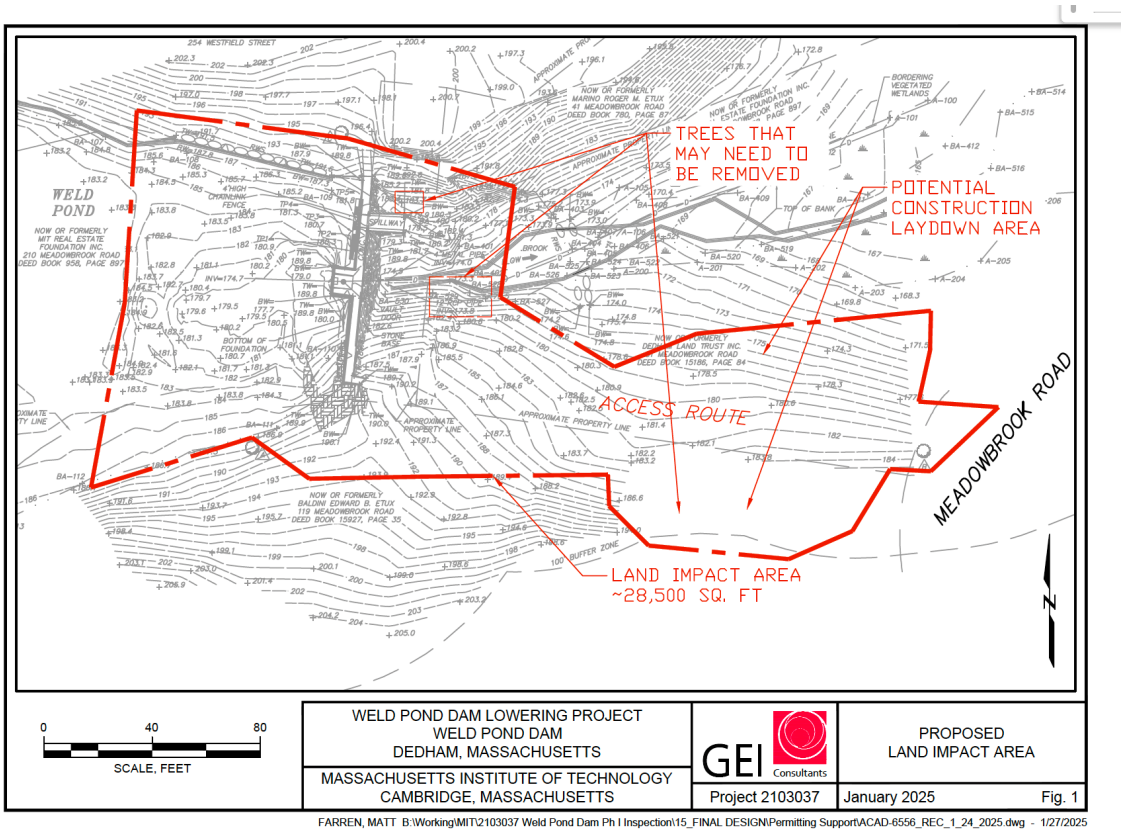
Beyond this, as outlined below, MIT's dam lowering proposal **increases loss of life risks to multiple downstream homes and families**. Furthermore, it increases predictable and dangerous flooding impacts to more homes, and more critical roadways and infrastructure compared to the existing dam configuration – even in normal storms that don't even require a breach of the lowered dam. For all these reasons and more, any attempt to access any part of our property to aid in lowering the dam will constitute:

- Trespass under Massachusetts law (see land impact area noted in GEI image below),

- A violation of the Wetlands Protection Act (M.G.L. c. 131, § 40), and

- A basis for civil liability due to interference with protected hydrology and habitat.

- A basis for legal exposure for **knowingly** lowering a dam that puts more homes, more lives, more critical roadways, and more infrastructure at tremendous risk.



Second, MIT's Own Flood Models Confirm They Will Irreversibly Increase Loss of Life Risks + Serious Damages To More Homes, Roads, And Infrastructure

GEI Consultants, working under the direction of MIT, modeled the Weld Pond dam **failure** and **non-failure** scenarios following the proposed 5-foot lowering of the dam and/or removal of the dam and compared the flooding risks to the current dam configuration.

Their own April 2025 Hydrology and Hydraulics (H&H) Report (See Section F; Tables 5-17) reveals numerous facts that the lowered dam causes **new and worsened risks** as well as very dangerous high velocity water conditions for downstream residents and infrastructure. To be clear, using MIT/GEI's own data, the new and worsened risks are irreversible, predictable, and result from lowering the dam in failure **and** non-failure scenarios.

Summary of New & Worsened Risks From MIT's Proposed Dam Lowering

New & Worsened Risks Shown In 'Non-Failure' Scenarios:

- **First,** In **Table 9** of the MIT/GEI 2025 EENF Report (in section F), the proposed **5-foot lowering** of the Weld Pond Main Dam and spillway is modeled under standard storm scenarios. Facts show under a 50-year storm, MIT's plan significantly **worsens flooding impacts to multiple downstream homes during even non-failure storm conditions**. Specifically, under the **50-year, 24-hour storm**, the number of residential structures flooded **increases from 1 to 5** — a fivefold increase — compared to existing dam conditions documented in **Table 5**.

The new and worsened **flood depths** introduced by the dam lowering reach **up to 3.8 feet** at certain homes. This kind of flooding is associated with severe structural damages and serious loss of life risks to occupants. As noted, these adverse impacts occur **without any dam failure required**, meaning the dam, once lowered 5 ft, would functionally contribute to new, predictable, and very dangerous flooding during normal and more frequent storm events. This data **directly contradicts** MIT's claim that the lowered dam hazard can be reclassified as "Low," since the **modification itself creates a 5x increase in the number of residential homes damaged as well as material loss of life risks during normal storm conditions that don't even require a breach of the dam.**

- **Second,** in section F, 2.2.5, GEI notes that the lowered dam will newly flood a critical roadway not flooded by the current dam during a 50-year storm. Specifically, Route 109 is newly flooded by the lowered dam at the culvert head by an incremental 2.4 feet of flood waters. Overtopping of the roadway is estimated at 0.4 ft (50-year storm) and 0.9 ft (100-year storm), (Table 10 and Table 13). Overall flooding may be even worse as GEI footnotes, "It should be noted that a significant inflow along Lowder Brook joins downstream of Route 109/High St.; this analysis does not include inflows from this portion of the creek". Irrespective of that modeling omission of significant inflows, MIT's dam lowering plan already presents new, serious, and predictable high hazard risk conditions even in non-failure scenarios. This means life-ending flood impacts are likely for innocent downstream families, potential emergency responders, and other civilians in the area. Noted risks are further amplified if storm flooding from a 50-year storm were to occur at night.

Bottom line, when MIT proposes to irreversibly lower the dam, they will be irreversibly removing critically important reservoir benefits of the current dam and dike system. When the existing dam reservoir and dike benefits are taken away, and when the dike is no longer capable of diverting excessive storm water in a different direction, everything will flow through the lowered main dam and this is shown to increase flooding risks, loss of life risks, and other high hazard risks that are plainly unconscionable and immoral to support.

New & Worsened Risks With Lowered Dam 'Failure' Scenarios:

- GEI's April 2025 EENF/Hydrology and Hydraulics Report in section F (Table 8) shows that lowering the dam by 5 feet increases the peak dam breach outflows from **31 cubic feet per second (cfs) with the existing dam to 148 cfs** with the lowered dam — a **377% increase**. 148 cfs equates to over **66,000 gallons per minute** of uncontrolled floodwater, using the standard conversion of 1 cfs = 448.831 gallons/minute. In the event of full dam removal, GEI reports a peak breach outflow of **273 cfs**, or more than **122,000 gallons per minute** — a stunning **781% increase vs the existing dam**. These large and sudden increases in floodwater volume and velocity materially raise the **risk of loss of life and serious damages to anything it its path including homes, roadways and infrastructure.**

- Previously unaffected homes in a non-failure scenario with the lowered dam (homes #2 and #7; Table 9) become flooded during a failure of the lowered dam.

The lowered dam **failure scenario** in 50-year storms poses new threats and creates significantly more intense flooding outflows that are **377% higher** (during non-failure) and **781% higher** (during dam failure) than the existing dam conditions. This materially increases the risk of destructive flooding that is capable of taking human lives downstream, impairing and/or taking the lives of emergency responders, and inflicting serious damages to homes, roadways, and critical infrastructure.

Additional Environmental and Procedural Failures

- The project would destroy hydrologic connections to downstream wetlands and cool-water habitat. As just one example, the 5 ft lowering of the dam irreversibly eliminates the flow of water through the existing dike and all of the wetlands downstream of it.

- It permanently eliminates thermal integrity of the pond and invites invasive weeds and the spread of mosquito populations and vector driven diseases. It may well negatively impact the health and vitality of protected species (i.e. long-ear bats, bald eagles, etc).

- The proposal to lower the dam is unjustified—and not required by the Dam Safety Order. MIT is required to bring the dam into compliance. MIT's request for an Environmental Impact Report (EIR) waiver is remarkable given the known and extensive risks including likely loss of human life and all of the additional damages noted as predictable in their own reports and herein due to lowering the dam. Given the serious risks and environmental damages noted above, an EIR is clearly mandatory and will be

very helpful in expanding critical insights into all of the potential irreversible damages above and beyond those listed herein.

- MIT has also not fulfilled it duty and obligation to seriously evaluate the least-damaging and most practicable alternative. Facts, logic and precedent strongly suggest rehabilitation and repair of the existing dam to bring it into compliance is the least-damaging and practicable alternative that preserves the dam reservoir and dike benefits vs. all the serious and increased risks associated with dam lowering and/or removal.

Conclusion and Formal Request

We Respectfully Urge MEPA And All Agencies Copied To:

1. Deny MIT's request for a Waiver from Environmental Impact Review (EIR).

2. If the already modeled increase in loss of life risks, and additional high hazard risks to homes, roadways and infrastructure aren't already enough to reject the dam lowering proposal, require a full and transparent EIR process for the proposed dam-lowering.

3. Make it clear to MIT that you would uphold the dam's High Hazard classification based on MIT's/GEI's own modeled data which shows increased risks for loss of human lives downstream – plus projected and predictable increases in damages to more homes, more roadways and more infrastructure even in non-failure scenarios.

4. Ensure MIT fulfills the duty and obligation to rigorously and objectively assess the least damaging and practicable alternative to bring the current dam into compliance. Given the well documented risks of lowering and/or removing the dam, MIT must fully evaluate a plan to rehab and repair of the existing dam which will preserve existing dam reservoir benefits – and very important dike benefits which serve to divert water in a different direction if/when needed. Moreover, it will protect the pond and wetland health and connectivity, and honor abutter property rights and long-standing easements that serval abutters have related to enjoying the existing Pond conditions (refer to specifics on this included in other letters from Weld Pond abutters).

Respectfully,

Kurt & Michele Graves

Owners, 254 Westfield Street, Dedham MA

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Hua	--	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-23-2025	Cheng	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	+16179432706	--	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	hua.cheng@mirova.com	--	

Comment Title or Subject

Topic: Opposition to MIT's Proposal to Lower Weld Pond Without an Environmental Impact Report (EIR)

Comments

Segoe UI 10 pt Paragraph

Dear Secretary Tepper,

I am writing as a Massachusetts resident and a professional investor whose career is dedicated to sustainable investing, to express my deep concern about the Massachusetts Institute of Technology's proposal to lower the water level of Weld Pond in Dedham by approximately 70%—apparently without first conducting a full Environmental Impact Report (EIR). I am also a colleague of a direct abutter to Weld Pond, and I can attest to the deep community concern surrounding this proposal.

Weld Pond is more than a body of water; it is a living ecosystem that supports a rich web of biodiversity. It serves as a critical habitat for deer, turtles, and potentially protected species such as the northern long-eared bat and bald eagle. Altering its water level to such a significant degree risks displacing or destroying this vital habitat, contributing to biodiversity loss at a time when we can least afford it.

As someone who evaluates sustainability risks and opportunities every day in the financial markets, I view the preservation of functioning ecosystems like Weld Pond as fundamental to long-term environmental and economic resilience. The pond plays an important role as a feeder into the Charles River basin, and any major change to its hydrology could have downstream consequences—including impaired water quality, altered sediment flow, and damage to aquatic ecosystems throughout the watershed.

Moreover, this proposal comes at a time when climate change is intensifying drought conditions and increasing the frequency of wildfires in Massachusetts. Wetlands and pond systems like Weld are natural buffers—helping to retain water, recharge aquifers, and reduce fire risk by maintaining higher levels of landscape humidity and biodiversity. Lowering the water level so drastically undercuts these natural climate adaptation mechanisms.

Given the scope and potential impact of this project, it is imperative that MIT be required to submit a comprehensive Environmental Impact Report in compliance with the Massachusetts Environmental Policy Act (MEPA). Proceeding without a full EIR would not only be a failure of due diligence but also a missed opportunity to ensure environmental integrity and public trust.

In addition, I urge your office to require MIT to explore and present alternative solutions—ones that would meet their needs while presenting equal or lower risk and less environmental harm. With the scientific and technical expertise at MIT's disposal, it is reasonable to expect a more balanced, sustainable, and thoughtful path forward.

As someone who works at the intersection of finance and environmental responsibility, I believe strongly that our public institutions—and particularly our world-class research universities—must be held to the highest standards of environmental stewardship.

Thank you for your continued leadership in protecting Massachusetts' natural resources. I trust that you will give this matter the thorough review and caution it deserves.

Sincerely,

Hua Cheng

Attachments

Update Status

Status

Accepted

SUBMIT

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BACK TO SEARCH RESULTS

MASSACHUSETTS WATER RESOURCES AUTHORITY
Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

June 23, 2025

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
MEPA Office, Nicholas Moreno
Boston, MA 02114

Subject: EOEEA #16945 – Expanded Environmental Notification Form
Weld Pond Dam Lowering Project, Dedham, MA

Dear Secretary Tepper,

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Expanded Environmental Notification Form (EENF) submitted by Massachusetts Institute of Technology (MIT) (the "Proponent") for Weld Pond Dam Lowering Project (the "Project") in Dedham, Massachusetts. The Project, located at 43 Meadowbrook Road in Dedham, consists of lowering the existing dam and spillway by five feet, replacing the concrete cap on top of the dam, and reinforcing the downstream side with a concrete buttress. The spillway will also be reconstructed to accommodate the lower pond level. While the reconstructed spillway will not be designed to pass the design flood, it will allow for safe pedestrian passage across the dam during normal pond levels. Lowering the dam will permanently reduce the area of Weld Pond to approximately 10 acres. The Project Site is bordered by Interstate I-95 to the west and residential properties along Westfield Street and Meadowbrook Road to the north, south, and east.

MWRA's comments on this EENF relate to Toxic Reduction and Control (TRAC) discharge permitting.

TRAC Discharge Permitting

MWRA prohibits the discharge of groundwater and stormwater into the sanitary sewer system, pursuant to 360 C.M.R. 10.023(1) except in a combined sewer area when permitted by the Authority and the Municipality. The Project Site has access to storm drains and is not located in a combined sewer area. Therefore, the discharge of groundwater or stormwater to the sanitary sewer system associated with this Project is prohibited. The Proponent instead will need to

secure a USEPA-NPDES General Permit for Storm Water Discharges from its construction activities.

On behalf of the MWRA, thank you for the opportunity to provide comments on this Project. Please do not hesitate to contact Hillary Monahan of my staff at (857) 324-0554 or Hillary.Monahan@mwra.com with any questions or concerns.

Sincerely,

Colleen C. Rizzi

Colleen Rizzi, P.E.
Director
Environmental and Regulatory Affairs

cc: John Viola, MassDEP

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	John	159 Meadowbrook Rd	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-14-2025	Shaw	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
5-23-2025	+16179136417	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	johnhshawma@gmail.com	02026	

Comment Title or Subject

Topic: Require full Environmental Report for Weld Pond Project

Comments

To whom it concerns:
As an abutter to Weld Pond in Dedham, I am writing to express strong opposition to any waiver of a full Environmental Impact Report (EIR) for MIT's proposed Weld Pond Dam lowering project. Weld Pond is being threatened with extinction. MIT has petitioned the state to **permanently** drain the pond by 70% in an effort to avoid the cost of fixing the dam.

Neighbors and abutters of the pond are eager to work with MIT in good faith to explore a viable alternative to their plan. However, we must first protect the pond's environmental integrity as a quality water source for the Charles River Watershed and the Town of Dedham; and the wildlife habitats that are fed by the pond. *An EIR is a normal requirement for any project of this scope and size; MIT should be required to fulfill this obligation.*

An Environmental Impact Report is critical to understanding how a severely reduced Weld Pond would impact the Charles River Watershed and wildlife habitats that are fed by the pond. MIT's assertion that the pond and surrounding area is not environmentally sensitive, and that the pond is not an important water source, is unfounded.

- **Environmental Harms:** The Town of Dedham Master Plan lists Weld Pond as one of Dedham's most significant sources of open water, wetlands and open space. The proposal would permanently destroy over 18 acres of thriving wetland and aquatic habitat, endangering wildlife and protected species, including Northern Long-eared Bat, Bald Eagles, a variety of waterfowl, beaver, river otter, snapping turtles, etc.
- **Hydrology Impacts:** Permanently reducing the volume of Weld Pond by 70% will drastically affect a quality water source for the Charles River and a system of wetlands, streams and ponds in the Charles River Basin, DCR's Wilson Mountain Reservation, and the Town of Dedham. Weld Pond is very close to Dedham's drinking water well fields on Bridge St. Permanent pond lowering would forever change a Town resource that until fairly recently, was a backup water source for the Dedham Westwood Water District.
- **Failure to Evaluate The Required 'Least Environmentally Damaging Practicable Alternatives' (LEDPA):** The MEPA process, as well as federal and state environmental permitting frameworks (including Clean Water Act §404 and 401 Water Quality Certification), require that all applicants evaluate the least environmentally damaging practicable alternative (LEDPA). Nowhere in MIT's current filings is there any serious consideration of a repair of the dam at its current height.
- **Loss of Historic and Cultural Significance:** Weld Pond is a historic Dedham landscape. Frederick Law Olmsted worked directly with the engineer who developed the plans for the pond to act as the primary water source for irrigation of the Endicott grounds, including what is now part of Wilson Mountain Reservation. The Pond and the surrounding wetlands comprise one of the most historically rich and scenic natural assets in Greater Boston.
- **Legal and Permitting Barriers:** MIT does not have the required private property access or construction rights from the direct abutters to the dam, dike and wetlands that MIT would legally need to have to carry out any dam or dike modifications. Additionally, multiple pond abutters enjoy an indenture agreement easement on Weld Pond which includes both the pond and the dams. By law, this deeded right cannot be unreasonably and unilaterally extinguished by MIT effectively draining the pond.
- **Public Health Risks:** Draining the pond would result in stagnant, swamp-like conditions and increased mosquito activity, heightening the risk of vector-borne illnesses. The resulting pond, which (per MIT's EENF filing) "will not be a continuous body of water" will be so shallow that it will inevitably evolve into a series of weed-choked puddles.

Attachments

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THE GENERAL COURT OF MASSACHUSETTS
STATE HOUSE, BOSTON 02133-1053

May 14, 2025

Secretary Rebecca Tepper
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Request for Full Environmental Impact Report (EIR) for MIT Weld Pond Dam Lowering Project

Dear Secretary Tepper,

We are writing to formally request that the proposed MIT Weld Pond Dam Lowering Project (EEA# 16945) be required to undergo a full Environmental Impact Report (EIR) under the Massachusetts Environmental Policy Act (MEPA). This project raises significant environmental, ecological, and community concerns that warrant a comprehensive and transparent review.

Weld Pond Dam plays a critical role in the local hydrology and ecosystem. Altering or lowering the dam could have long-term consequences for flood control, water quality, wetland integrity and wildlife habitat. These potential impacts necessitate careful analysis through a full EIR to ensure that all environmental effects are thoroughly assessed and that appropriate mitigation is considered.

A project that alters water systems or natural landscapes must be held to the highest standards of environmental review. A full EIR will provide an opportunity for public participation, expert input, and a comprehensive understanding of both the immediate and cumulative impacts of the project.

We urge your office to require that the MIT Weld Pond Dam Lowering Project proceed through the full EIR process to uphold the Commonwealth's commitment to environmental stewardship and public transparency.

Thank you for your time and attention to this important matter. Please do not hesitate to contact us should you require any additional information.

Sincerely,

Representative Paul McMurtry
11th Norfolk District

Senator Michael Rush
Norfolk and Suffolk District

View Comment

Comment Details

EEA #/MEPA ID
16945

Comments Submit Date
5-20-2025

Certificate Action Date
6-6-2025

Reviewer
Moreno, Nicholas

First Name
David

Last Name
Pratt

Phone
--

Email
dave@dvpratt.com

Address Line 1
300 Westfield Street

Address Line 2
--

State
MASSACHUSETTS

Zip Code
02026

Organization
--

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: Weld Pond Dam Project Environmental Review

Comments

Segoe UI | 10 pt | Paragraph

MIT has proposed lowering Weld Pond, reducing its volume by almost three quarters, and is requesting to waive a full Environmental Impact Report. As residents of Dedham, we strongly object to this request due to its significant environmental and historical consequences. Weld Pond has been a vital water source for the Charles River and Dedham's wetlands, as well as a backup supply for the Dedham Westwood Water District. Several generations of Dedham residents have enjoyed fishing in and skating on the pond. It also holds historical value, having been designed by the famous American landscape architect Frederick Law Olmsted over a century ago.

Reducing the pond by 18.6 acres would destroy critical wildlife habitats, impacting bald eagles, beavers, river otters, waterfowl, snapping turtles, and other species, not to mention the fish in the pond. MIT's own filings acknowledge that the pond would become shallow and fragmented, leading to increased mosquito and tick populations. It's an understatement to say that the environmental impact would be severe.

We strongly urge MEPA to require MIT to conduct a full Environmental Impact study before proceeding with this project and to reconsider its decision to decimate Weld Pond.

Sincerely,

Vivian and Dave Pratt

Attachments

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Accepted

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Albert	177 Meadowbrook Road	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-21-2025	Wisialko	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-6-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	af@wisialkotax.com	02026	

Comment Title or Subject

Topic: Weld Pond, Dedham MA

Comments

Segoe UI 10 pt Paragraph

Al & Ruth Wisialko

177 Meadowbrook Road
Dedham, MA 02026
af@wisialkotax.com
781-329-6175

May 21, 2025

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Weld Pond Environmental Impact Report

Dear Secretary Tepper,

We are writing to express our support for the preservation of Weld Pond in Dedham and to provide feedback on the recent environmental impact report. My wife Ruth and I purchased our home four years ago. We have fished, kayaked and even swam in the pond. Maintaining water quality is crucial for the health of the pond's ecosystem and the well-being of our residents.

Weld Pond, compassing approximately 43 acres, serves as a vital component of the Charles River watershed. The pond contributes to the local ecosystem by supporting a variety of aquatic life and providing a habitat for numerous bird species. Its role in the larger watershed underscores its importance in maintaining regional biodiversity and water quality.
Beyond its ecological significance, Weld Pond offers substantial recreational and health benefits to the community. The pond is a popular destination for fishing, boating, and swimming, activities that promote physical health and provide residents with opportunities to engage with nature.

Access to natural spaces like Weld Pond has been linked to numerous health benefits, including reduced stress levels, improved mental health, and increased physical activity. Preserving Weld Pond ensures that current and future generations have the opportunity to experience and enjoy these advantages. We have seen numerous wildlife at our home from a thirty-five-year-old snapping turtle, blue heron, deer, fox, coyote, mallard ducks, wood ducks, numerous birds and even an eagle around the pond.

Furthermore, the pond's presence adds to the character of Dedham, enriching the community's cultural and recreational landscape. In light of these considerations, we urge the agency to prioritize the preservation of Weld Pond. This includes implementing measures to protect and sustain the water level currently. By doing so, we can safeguard this valuable resource for future generations and continue to reap the ecological, recreational, and health benefits it provides. Our grandchildren also enjoy the use of the pond where they love to fish and swim.

Thank you for considering our comments. We look forward to seeing proactive measures that ensure Weld Pond remains a healthy and accessible resource for all to enjoy.

Sincerely,
Al & Ruth Wisialko
177 Meadowbrook Road
Dedham, MA 02026

Attachments

Weld Pond - Dedham, MA.pdf(null)

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Mary	91 Common St	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
5-22-2025	Koger	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-6-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	mkskoger5@gmail.com	02026	

Comment Title or Subject

Topic: Opposed to MIT Lowering the Water in Weld Pond in Dedham Without Conducting an Environmental Impact Study

Comments

Segoe UI 10 pt Paragraph

An Environmental Impact Report is critical to understanding how a severely reduced Weld Pond would impact the Charles River Watershed and wildlife habitats that are fed by the pond. MIT's assertion that the pond and surrounding area is not environmentally sensitive, and that the pond is not an important water source, is unfounded.

 Environmental Harms: The Town of Dedham Master Plan lists Weld Pond as one of Dedham's most significant sources of open water, wetlands and open space. The proposal would permanently destroy over 18 acres of thriving wetland and aquatic habitat, endangering wildlife and protected species.

 Hydrology Impacts: Permanently reducing the volume of Weld Pond by 70% will drastically affect a quality water source for the Charles River and a system of wetlands, streams and ponds in the Charles River Basin, DCR's Wilson Mountain Reservation, and the Town of Dedham. The location where Weld Pond feeds the Charles River is very close to Dedham's drinking water well fields on Bridge St.

 Loss of Historic and Cultural Significance: Weld Pond is a Dedham landmark. Frederick Law Olmsted worked directly with the engineer who developed the plans for the pond to act as the primary water source for irrigation of the Endicott grounds, including what is now part of Wilson Mountain Reservation. The Pond and the surrounding wetlands comprise one of the most historically rich and scenic natural assets in Greater Boston.

 Public Health Risks: Draining the pond would result in stagnant, swamp-like conditions and increased mosquito activity, heightening the risk of vector-borne illnesses.

 Dedham Water Wells: Weld Pond is a quality water source feeding the Charles River and very close to Dedham's drinking water well fields on Bridge St. Permanent pond lowering would forever change a Town resource that until fairly recently, was a backup water source for the Dedham Westwood Water District. At a

time when water resources in Massachusetts and Dedham are often challenged by drought, is this the time to drastically reduce the largest body of open water in the town?

Attachments

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Comment Details

EEA #/MEPA ID
16945

First Name
Matthew

Address Line 1
354 Westfield Street

Organization
--

Comments Submit Date
5-22-2025

Last Name
Pierec

Address Line 2
--

Affiliation Description
Individual

Certificate Action Date
6-6-2025

Phone
--

State
MASSACHUSETTS

Status
Opened

Reviewer
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov

Email
vassar@keelerandco.com

Zip Code
02026

Comment Title or Subject

Topic: RE: Comments on MEPA Review – MIT's Weld Pond Dam Lowering Proposal (Weld Pond Dam, NID# MA02261)

Comments

Segoe UI | 10 pt | Paragraph

Dear Secretary Tepper -

As an abutter of Weld Pond, I am writing to object to MIT's request to waive a full Environmental Impact Report (EIR) for its proposed project to lower Weld Pond.

An Environmental Impact Report is crucial to understanding how a reduced Weld Pond would impact the other watersheds in the area, including the Charles River, and various streams, ponds and wetlands that are fed by the Pond. I do not agree with MIT's assertion that the pond and surrounding areas is not an important water source or environmentally sensitive.

The reduction of Weld Pond by over 18 acres will have a dramatic impact on wildlife habitat and surrounding wetlands. The resulting pond will not be a continuous body of water. An Environmental Impact Report will expose this.

Weld Pond is a quality water source feeding the Charles River. This pond was, until fairly recently, the backup water sources for the Dedham/Westwood Water District. As water resources in Massachusetts are challenged by draught, this does not seem to be the time to reduce the largest body of open water in Dedham.

The 2009 Town of Dedham Master Plan lists Weld Pond as one of Dedham's most significant sources of open water, wetlands and open space. This alone should warrant an Environmental Impact Report.

In closing, I could go on for numerous other reasons that an Environmental Impact Report is warranted as it relates to the proposed project to lower Weld Pond, but I'll leave it here. This Pond has been and continues to be an important water source for the town and community and is environmentally sensitive. An Environmental Impact Report would prove that.

Sincerely,

Matthew Pierce

Attachments

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Comment Details

EEA #/MEPA ID
16945

Comments Submit Date
6-5-2025

Certificate Action Date
6-23-2025

Reviewer
Moreno, Nicholas

First Name
Jason

Last Name
Graves

Phone
+19782570447

Email
jaygraves.construction@gmail.com

Address Line 1
14 baltimore st

Address Line 2
--

State
MASSACHUSETTS

Zip Code
02054

Organization
J Graves Carpentry

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: Not good

Comments

To whom it may concern

I am writing as a deeply concerned Massachusetts resident and someone with a direct, professional connection to the area surrounding Weld Pond in Dedham. Over the past several years, I have worked as the general contractor on a property bordering Weld Pond, and I've come to appreciate not only its aesthetic and recreational value, but the critical role it plays in sustaining local ecosystems and buffering our community from the growing threat of drought due to accelerating climate change.

It has come to my attention that there are active plans to lower the dam at Weld Pond, which would result in a drastic 70% reduction in the pond's volume. I am writing to formally oppose this measure and to demand a full and transparent Environmental Impact Report (EIR) before any action is taken.

The ecological consequences of this action could be severe and irreversible. Weld Pond is a vital habitat for numerous species, including the federally threatened Northern long-eared bat, which depends on the forested wetland habitat that surrounds the pond for roosting and foraging. Lowering the water level could result in habitat loss and degradation, threatening an already imperiled species.

Additionally, the pond is home to beavers, the protected northern long-eared bat, and frequently visited by bald eagles—species that are integral to our natural heritage and ecosystem health. These animals rely on the existing water levels for shelter, hunting, and breeding grounds. A reduction of this magnitude would upend their ecosystems, possibly displacing or endangering their populations in the area.

From a broader environmental and climate resilience standpoint, Weld Pond plays a crucial hydrological role. During periods of drought—now more frequent and intense due to climate change—the pond helps regulate local water tables and provides essential moisture retention. Lowering the pond could exacerbate drought vulnerability in surrounding neighborhoods and landscapes, further stressing both natural systems and human infrastructure.

This issue deserves more than a bureaucratic checkbox—it demands robust public engagement, scientific study, and environmental foresight. A full Environmental Impact Report is not only warranted, but ethically and legally necessary before proceeding with any alterations to the dam or pond levels.

I urge your office to act in the best interest of our environment, endangered wildlife, and the future climate resilience of our community. Please require a comprehensive EIR and ensure that all stakeholders—including local residents and environmental experts—are given an opportunity to weigh in before decisions are made that could have lasting consequences.

Thank you for your attention to this urgent matter. I would appreciate a response confirming receipt of this letter and any steps your office plans to take in response.

Sincerely Jay Graves

Attachments

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Status

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Jens	225 Meadowbrook	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-5-2025	Peers	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	+18579710503	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	jens.severine@gmail.com	02026	

Comment Title or Subject

Topic: Opposition to MIT's Proposed Lowering of Weld Pond Water Level Without an Environmental Impact Report (EIR)

Comments

To whom it may concern,

As a direct abutter to Weld Pond in Dedham and a professional investor dedicated to sustainable investing, I write to strongly oppose any waiver of the Environmental Impact Report (EIR) requirement under the Massachusetts Environmental Policy Act (MEPA) for MIT's current proposal to lower the Weld Pond dam by approximately 70%.

The proposal poses substantial risks to the environment, public safety, and property downstream, and it fails to comply with MEPA's mandate to minimize environmental harm through proper evaluation of project alternatives. I respectfully urge your office to require a full EIR for the following reasons:

1. Increased Flooding Risk and Public Safety Concerns

MIT's own documentation indicates that full dam removal was eliminated as a project alternative due to the potential for roadway overtopping and residential flooding during storm events. However, the dam lowering proposal would similarly increase downstream flooding impacts—especially during extreme weather events that are becoming more frequent due to climate change. The proposed modification reduces the dam's capacity to manage stormwater and runoff, creating a potentially dangerous scenario for surrounding neighborhoods.

It is therefore inappropriate to waive EIR review, particularly when public safety and private property are at stake.

2. Elimination of Downstream Hydrology and Wetlands

The proposed reduction would eliminate flows into the intermittent stream and wetlands located downstream of the dike on the pond's northern side. These are critical natural habitats that support regional biodiversity and ecological function. The permanent disruption or loss of these water flows should be fully assessed in an EIR. Without this, the true environmental cost of the project cannot be known or mitigated.

3. Water Quality Degradation and Ecosystem Harm

Lowering the water level will result in a shallower, warmer pond with lower dissolved oxygen content—conditions that pose serious threats to aquatic life and water quality. This can also accelerate algae blooms and eutrophication. None of these impacts appear to be adequately addressed in the current project documents.

4. Risk of Invasive Species Proliferation

The proposed plan also fails to consider or mitigate the likelihood of invasive plant species, such as Phragmites australis, taking hold in the newly exposed shallow zones. These invasive plants spread aggressively, degrade native habitat, and are extremely costly to control. Ignoring this risk is a significant oversight and another reason to require a full environmental review.

5. Failure to Consider Viable and Reasonable Alternatives

I understand that under MEPA, project proponents must evaluate all feasible alternatives that could reduce environmental and safety impacts. MIT dismissed both full dam removal and dam repair or replacement options, citing either flooding risks or classification as a "High Hazard" dam. However, this reasoning is flawed:

- The Office of Dam Safety does not require a change in the dam's hazard classification from High to Low. Many High Hazard dams in Massachusetts operate safely once brought into compliance.
- The requirement is only to upgrade the condition of the dam—not to reduce its hazard classification.

Despite this, MIT did not fully assess or present dam rehabilitation alternatives such as:

- Construction of a new reinforced concrete structure on the upstream face of the dam, or
- Buttressing the dam with large rockfill on both upstream and downstream faces.

Both of these options are widely used in dam safety projects and could likely be implemented at comparable cost to the current dam lowering plan —but without the same degree of ecological and public safety impact. Failing to assess these options is in my opinion a significant violation of MEPA's alternative analysis requirement.

Attachments

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Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	XILEI	17 Fairfield St	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-5-2025	ZHANG	--	Individual
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	+16179828093	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Moreno, Nicholas	xilei.zhang58@gmail.com	02026	

Comment Title or Subject

Topic: Opposition to MIT's Proposed Lowering of Weld Pond Water Level Without an Environmental Impact Report (EIR)

Comments

June 5, 2025

Secretary Rebecca Tepper

Executive Office of Energy and Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114

Dear Secretary Tepper,

As a concerned resident of Dedham and a citizen deeply committed to environmental stewardship, I am writing to express my strong opposition to the Massachusetts Institute of Technology's proposed plan to lower the water level of Weld Pond without first conducting a thorough Environmental Impact Report (EIR), as required under the Massachusetts Environmental Policy Act (MEPA).

Weld Pond is a vital ecological resource in our community. It supports a rich and diverse habitat, including keystone species such as beavers, bald eagles, and the northern long-eared bat—a federally listed threatened species. The potential disruption of this fragile ecosystem could have irreversible effects on local biodiversity, especially in the absence of any formal environmental review.

Furthermore, Weld Pond plays a significant hydrological role as part of the Charles River basin. Altering its water levels could contribute to downstream degradation, disturb the natural watershed balance, and negatively impact water quality and aquatic habitats in surrounding areas.

In the era of accelerating climate change, this decision feels particularly shortsighted. Massachusetts has already seen increasing frequency and severity of droughts, which underscores the need to preserve natural water bodies, not drain them. Reducing the pond's water level could also increase the risk of wildfires in the surrounding wooded areas—an environmental and public safety concern that cannot be ignored.

MIT's plan, if enacted without an EIR, sets a dangerous precedent. It would allow a powerful institution to circumvent the very policies designed to protect our shared natural resources. The residents of Dedham—and all communities connected to the Charles River watershed—deserve transparency and science-based decision-making.

I respectfully urge your office to require MIT to conduct a comprehensive Environmental Impact Report before any alterations to Weld Pond are approved. This is not just a matter of local concern—it is a test of our collective commitment to sustainability, biodiversity, and responsible environmental governance.

Thank you for your attention to this urgent matter.

Sincerely,

Xilei Zhang

17 Fairfield St, Dedham, MA

Attachments

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TOWN OF DEDHAM
CONSERVATION
COMMISSION

June 10, 2025

Secretary Rebecca Tepper
Executive Office of Environmental Affairs
100 Cambridge Street, 9th Floor
Boston MA, 02114

Attention: MEPA Unit – Nick Moreno

RE: Expanded Environmental Notification Form
Weld Pond Dam Lowering
Dedham, MA
EEA #16945

Dear Secretary Tepper,

The Dedham Conservation Commission (the Commission) has reviewed the Expanded Environmental Notification Form (EENF) for the Weld Pond Dam Lowering Project submitted by the Massachusetts Institute of Technology (MIT). While the Commission is aware that MIT will be submitting a Notice of Intent application to the Commission, at which point we will have the opportunity to provide additional comments directly to the applicant, we respectfully would like to provide a few initial comments about the EENF.

1. The Project is seeking a waiver from filing a Single Environmental Impact Report under the Massachusetts Environmental Policy Act 301 CMR 11.11(1), which allows the Secretary to waive any provision or requirement in 301 CMR 11.00 provided that strict compliance would result in an undue hardship for the Proponent; and not serve to avoid or minimize damage to the environment. The justification for this waiver request is that undergoing a full MEPA EIR review would delay the project, creating a safety risk due to the dam's classification as High Hazard. MIT also states that the project is likely to cause no damage to the environment, therefore an EIR is not necessary. **The Dedham Conservation Commission urges the Secretary not to waive the EIR requirement, as the EIR will provide critical information in understanding the potential environmental effects, both in the immediate areas surrounding the pond as well as downstream impacts to the entire watershed.**

2. The project is not located within or within one mile of any Environmental Justice populations, therefore the project is exempt from fulfilling public involvement activities.

Given that the project may have downstream impacts to the entire watershed far beyond the one-mile radius, which include Environmental Justice populations, **the Dedham Conservation Commission strongly recommends that the MEPA decision include a provision requiring the project proponent to conduct a public engagement session with Dedham residents to ensure transparency and community input regarding potential environmental effects.**

3. The proposed project site is situated approximately 500 feet from wetlands located at 166 Westfield Street, a location with a history of wood frog activity. Pursuant to the Dedham Wetlands Protection Bylaw and associated Rules and Regulations, it is the applicant's responsibility to demonstrate whether this wetland meets the criteria for vernal pool certification under the Natural Heritage and Endangered Species Program. In accordance with this requirement, and to adequately assess potential environmental impacts to the surrounding area, **the Dedham Conservation Commission recommends that the applicant undertake a vernal pool survey to determine whether vernal pool habitat may be adversely affected by the proposed work.**

The Dedham Conservation Commission appreciates the opportunity to comment on this project. If you have any questions regarding these comments, please contact Meredith LaBelle, Dedham Conservation Agent, at 781-751-9211.

With Thanks,

The Dedham Conservation Commission

CC:

Meredith LaBelle, Conservation Agent
Jeremy Rosemberger, Town Planner
Leon Goodwin III, Town Manager
Dedham Select Board
Dedham Planning Board

View Comment

Comment Details

EEA #/MEPA ID	First Name	Address Line 1	Organization
16945	Roberta & John	159 Meadowbrook Rd	--
Comments Submit Date	**Last Name**	**Address Line 2**	**Affiliation Description**
6-13-2025	Shaw	--	--
Certificate Action Date	**Phone**	**State**	**Status**
6-23-2025	--	MASSACHUSETTS	Opened
Reviewer	**Email**	**Zip Code**	
Nicholas Moreno, (617)699-4254, Nicholas.Moreno@mass.gov	rbsberta@gmail.com	02026	

Comment Title or Subject

Topic: Request for Full Environmental Impact Report for Weld Pond Dam Lowering Project

Comments

Segoe UI 10 pt Paragraph

Dear Secretary Tapper,

Please deny MIT's request for an EIR waiver for its proposed project at Weld Pond in Dedham.

Based on the reports of MIT's own expert (GEI), MIT's proposed lowered dam would create a substantial risk of downstream flooding and related property damage and potential loss of life **which is not present with the existing configuration of the dam** in a non-failure scenario. This heightened risk of new flooding is associated not just with a 50-year flood but also with lower intensity, higher frequency floods expected in the future. Further, it appears that the risk of loss of life or significant property damage **is not appreciably diminished** when comparing the results of a failure of the lowered dam versus the potential failure of the currently configured main dam.

The Hydraulic and Hydrologic Analyses section of MIT's EENF shows that **during a 50-year flood, under a non-failure scenario, only one home would experience minor flooding with the currently configured main dam. With a lowered dam, 5 homes would experience up to 3.8 feet of flooding and Route 109 would also flood.** ()These 5 homes would likely also experience flooding during less intense but more frequent storms. (See Section F; Tables 5-17, **particularly Table 9**).

MIT's submissions do not indicate that there is any imminent danger of flooding from the current dam that would warrant waiving an EIR filing. But those submissions do lay out **the substantial flooding risk that the proposed project will cause** – one that is not present with the existing dam structure.

Additionally, the dam lowering proposal plainly violates the deeded property rights of several abutters, including ours. This **irrevocable** license, dating back to 1928, which provides for the use and enjoyment of the pond, as well as an interest in the dam itself, was duly noted in MIT's 2003 deed from Bradford Endicott. We appreciate that MIT conducted two years of planning in generating its dam lowering proposal, but we are puzzled that MIT could have done so without considering its legal duty not to lessen the utility of the abutters' easements.

Finally, MIT's assertion that the pond and surrounding area is not environmentally sensitive, and that the pond is not an important water source, is unsubstantiated. We see the draining of 70% of Weld Pond as a potential environmental travesty for the environment. In a thickly settled urban environment such as Dedham, Weld pond is a significant lifeline to its surrounding watershed, nearby vernal pool, nearby Dedham water wells, many wildlife habitats supported by the pond and to Dedham residents who have enjoyed Weld Pond for more than 150 years.

Secretary Tapper, if any project should require an Environmental Impact Report – this project proposed by MIT should warrant such.

Sincerely,

Roberta & John Shaw

159 Meadowbrook Rd

Dedham, MA 02026

Attachments

Update Status

Status

Accepted

SUBMIT

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Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

June 23, 2025

Rebecca L. Tepper, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: Dedham
Weld Pond Dam Lowering Project
EEA # 16945

Attn: MEPA Unit

Dear Secretary Tepper:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Expanded Environmental Notification Form (EENF) for the proposed Weld Pond Dam Lowering Project in Dedham. MassDEP provides the following comments.

Wetlands

Epsilon Associates, Inc. has submitted an Expanded Environmental Notification Form on behalf of the Massachusetts Institute of Technology for the proposed lowering of Weld Pond Dam, located at 43 Meadowbrook Road in Dedham, MA. The Weld Pond Dam is classified as a High Hazard Dam in poor condition by the Office of Dam Safety.

The proposed project will lower the dam by five feet, which will reduce the hazard rating to Low Hazard. This work includes lowering the crest of the dam and constructing a new concrete face on its downstream side. The spillway will also be reconstructed to accommodate the lower pond level. Lowering the pond will lower the permanent water level of Weld Pond and is anticipated to increase Bordering Vegetated Wetlands (BVW) surrounding the pond.

Approximately 18.6 acres of Land Under Water (LUW) is proposed to be converted to BVW as a result of the lowering of the water level. Areas of exposed substrate will be allowed to naturally revegetate, and areas of direct disturbance will be planted with a native seed mix.

It is unlikely that this process will result in the entirety of the exposed substrate successfully converting to BVW. A hydrological study should be performed which explores the likelihood of successful resource area conversion based on topography and post-lowering hydrology.

It is also likely that invasive species will vegetate the area. An invasive species management plan should be provided as well as a planting plan that includes herbaceous, woody shrubs, and tree species.

The project requires an Order of Conditions (OOC) issued by the Dedham Conservation Commission, or a Superseding Order of Conditions issued by MassDEP in the event of an appeal. The project also requires a 401 Water Quality Certification (401 WQC) for impacts to vegetated wetlands and Land Under Water (LUW) greater than 5,000 square feet. A previous 401 WQC was issued allowing 4,500 square feet (sf) of temporary impact to LUW within a turbidity curtain for dredging of 90 cubic yards of material and 16,000 square feet of combined temporary impacts to BVW and LUW for drawdown. This necessitated the requirement for a Major 401 WQC under DEP Transmittal Number: 23-WW10-0018-APP.

Drinking Water

Dedham maintains eleven groundwater sources (Wells 307300-02G, 03G, 04G, 05G, 14G, 15G, 16G, 17G, 20G, 21G, and 22G) located approximately 0.83 miles northeast of Weld Pond. The proposed project does not include any areas located within the water supply protection Zones I or II for these public water system (PWS) sources or any other PWS. There is also no increased flooding risk on any PWS or associated protective zones based on the consultants 500-Year, 24-Hour Flood Map model.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Kristin.Divris@mass.gov at (508) 887-0021 for further information on these water resource issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (857) 276-3161.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission,
Eric Worrall, Kristin Divris, Jill Provencal, Kyle Lally, Melissa Dwinell, Michael McLean, MassDEP-NERO