Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)

Mill Street (Tel-Electric) Dam Removal / West Branch Housatonic River Revitalization Project
Pittsfield, Massachusetts

Project Proponent:
City of Pittsfield, Community Development Department
Park, Open Space, and Natural Resource Program

Prepared by:
Massachusetts Department of Fish and Game
Division of Ecological Restoration (DER)

Revised Engineering Designs Plans by:
Milone and MacBroom, Inc. (under contract to DER)

EEA #15510

October 31, 2018
Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
Mill Street Dam Removal / West Branch Housatonic River Revitalization Project (EEA #15510)
Pittsfield, Massachusetts

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October 31, 2018

Secretary Matthew Beaton  
Executive Office of Energy and Environmental Affairs / MEPA Unit  
100 Cambridge Street, Suite 900  
Boston, Massachusetts 02108

Re: Mill Street Dam Removal / West Branch Housatonic River Revitalization Project  
MEPA Single Notice of Project Change (NPC) and Environmental Impact Report (SEIR)  
EEA Number: 15510

Dear Secretary Beaton:

On behalf of the City of Pittsfield, attached is Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR) for the proposed Mill Street Dam Removal / West Branch Housatonic River Revitalization Program, prepared pursuant to the Massachusetts Environmental Policy Act and Section 11.06 of the MEPA regulations (310 CMR 11.00).

The City of Pittsfield filed an Expanded Environmental Notification Form (EENF) for the project that was noticed in the Environmental Monitor on May 11, 2016. Accompanying the EENF was a request by the City that the Secretary waive the preparation of a mandatory EIR. The Secretary's Certificate on the EENF, issued on July 29, 2016, declined this request and instead requested the preparation of a Single Environmental Impact Report (SEIR). In response to input from the EENF process, the City and partners have developed a revised approach to sediment management for the project. This Single EIR has been prepared in response to the requested scope of work provided in the Secretary's Certificate, and also includes a Notice of Project Change (NPC) to document and describe those changes. Together, the attached provides a complete and detailed description and analysis of the project and its alternatives, an assessment of its potential environmental impacts, proposed Section 61 mitigation measures sufficient for the appropriate State agencies to fulfill their obligations in accordance with MGL c. 30, Section 61, and responses to all comments received on the Expanded ENF. Agencies and persons receiving copies of this Single EIR are listed in Appendix G.

We appreciate the guidance that your staff has provided the City and partners as this SEIR and NPC was being prepared. Please feel free to contact me if you have any questions or need clarification with any of the information contained herein.

Sincerely,

Alex Hackman, Restoration Ecologist  
Massachusetts Division of Ecological Restoration
# Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

## EEA # 15510

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Mill Street (Tel-Electric) Dam Removal and West Branch Housatonic River Revitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address:</td>
<td>Mill Street</td>
</tr>
<tr>
<td>Municipality:</td>
<td>Pittsfield</td>
</tr>
<tr>
<td>Watershed:</td>
<td>Housatonic</td>
</tr>
<tr>
<td>Universal Transverse Mercator Coordinates:</td>
<td>642776.58 E 4700884 N</td>
</tr>
<tr>
<td>Latitude:</td>
<td>42° 26' 48.75&quot; N</td>
</tr>
<tr>
<td>Longitude:</td>
<td>73° 15' 49.13&quot; W</td>
</tr>
<tr>
<td>Estimated commencement date:</td>
<td>June 2019</td>
</tr>
<tr>
<td>Estimated completion date:</td>
<td>June 2020</td>
</tr>
<tr>
<td>Project Type:</td>
<td>Dam removal / river restoration</td>
</tr>
<tr>
<td>Status of project design:</td>
<td>75% complete</td>
</tr>
<tr>
<td>Proponent:</td>
<td>City of Pittsfield</td>
</tr>
<tr>
<td>Street Address:</td>
<td>City Hall, 70 Allen Street</td>
</tr>
<tr>
<td>Municipality:</td>
<td>Pittsfield</td>
</tr>
<tr>
<td>State:</td>
<td>MA</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>01201</td>
</tr>
<tr>
<td>Name of Contact Person:</td>
<td>James McGrath, Park, Open Space, and Natural Resource Program Manager</td>
</tr>
<tr>
<td>Firm/Agency:</td>
<td>City of Pittsfield</td>
</tr>
<tr>
<td>Street Address:</td>
<td>City Hall, 70 Allen Street</td>
</tr>
<tr>
<td>Municipality:</td>
<td>Pittsfield</td>
</tr>
<tr>
<td>State:</td>
<td>MA</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>01201</td>
</tr>
<tr>
<td>Phone:</td>
<td>413-499-9344</td>
</tr>
<tr>
<td>Fax:</td>
<td>E-mail: <a href="mailto:jmcgrath@pittsfieldch.com">jmcgrath@pittsfieldch.com</a></td>
</tr>
</tbody>
</table>

With this Notice of Project Change, are you requesting:

- a Single EIR? (see 301 CMR 11.06(8))
  - [ ] Yes  [x] No  This NPC is filed WITH an SEIR
- a Special Review Procedure? (see 301CMR 11.09)
  - [ ] Yes  [ ] No
- a Waiver of mandatory EIR? (see 301 CMR 11.11)
  - [ ] Yes  [ ] No
- a Phase I Waiver? (see 301 CMR 11.11)
  - [ ] Yes  [ ] No

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

- 11.03 (3) (a) (4) – Structural alteration of an existing dam that causes an expansion of 20% or any decrease in impoundment capacity.
- 11.03 (3) (b) (1) (b) – Alteration of 500 or more linear feet of bank along a fish run or inland bank.
- 11.03 (3) (b) (1) (f) – Alteration of one half or more acres of any other wetlands. The "other wetlands" to be altered include Land Under Water (former impoundment) which is anticipated to transition to Bordering Vegetated Wetland, Riverfront Area, and Land Subject to Flooding.

Which State Agency Permits will the project require?

- Wetlands Protection Act Notice of Intent (NOI) & Restoration Order of Conditions

Effective January 2011
(Pittsfield Conservation Commission)
- Combined Chapter 91 Waterways Permit & 401 Water Quality Certification (MA DEP)
- Chapter 253 Dam Permit (MA DCR Office of Dam Safety)

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

The Massachusetts Department of Fish and Game (MDF&G) Division of Ecological Restoration (DER) has provided in-kind support (project management) since 2006, and direct cash funding of $30,000 (for the 2006 project feasibility study). In 2008, the project was approved by the Massachusetts SubCouncil of the Housatonic River Trustee Council as a preferred restoration alternative in the Final Restoration Plan and Supplemental Environmental Assessment for the first round of funding under the GE/Housatonic natural resource damages settlement, and awarded $850,000 in project support. DER secured additional federal funding ($1,000,000) in 2014 from the U.S. Department of Interior. In 2018, the City was awarded $400,000 from the MA Executive Office of Energy and Environmental Affairs Dam and Seawall Repair or Removal Program.

**PROJECT INFORMATION**

In 25 words or less, what is the project change? The sediment management approach for the project has been revised; in-stream sediment management is no longer proposed as a part of the project. Sediment will now be managed through removal and stabilization. The temporary access road will remain as a permanent gravel pathway and public greenway.

See project change description below.

Date of publication of availability of the ENF in the Environmental Monitor: (Date: May 11, 2016)

Was an EIR required? □ Yes □ No; if yes,  
was a Draft EIR filed? □ Yes (Date: ) □ No  
was a Final EIR filed? □ Yes (Date: ) □ No  
was a Single EIR filed? ☒ Yes (Date: 10/31/18) □ No Filed commensurate with the NPC

Have other NPCs been filed? □ Yes (Date(s): ) ☒ No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to ATTACHMENTS & SIGNATURES. N/A

**PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER**

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: dd w/ list of State Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits). A list of required state agency permits is provided above on this form. No permits have been filed to date. The funding sources for the project (including state and federal sources) are described above on this form.

Are you requesting a finding that this project change is insignificant? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, height, depth or other relevant measures of the physical dimensions of the Project of less than 10%
over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it results solely in an increase in Impacts of less than 25% of the level specified in any review threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that were not previously met or exceeded. (see 301 CMR 11.10(6)) □ Yes □ No; if yes, provide an explanation of this request in the Project Change Description below.

**FOR PROJECTS SUBJECT TO AN EIR**

If the project requires the submission of an EIR, are you requesting that a Scope in a previously issued Certificate be rescinded? □ Yes □ No; if yes, provide an explanation of this request__________________.

If the project requires the submission of an EIR, are you requesting a change to a Scope in a previously issued Certificate? □ Yes □ No; if yes, provide an explanation of this request__________________.

**SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS**

<table>
<thead>
<tr>
<th>Summary of Project Size &amp; Environmental Impacts</th>
<th>Previously reviewed</th>
<th>Net Change</th>
<th>Currently Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LAND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total site acreage</td>
<td>3.111</td>
<td>0</td>
<td>3.111</td>
</tr>
<tr>
<td>Acres of land altered</td>
<td>0 (this was an error in the prior filing)</td>
<td>2.25</td>
<td>2.25</td>
</tr>
<tr>
<td>Acres of impervious area</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Square feet of bordering vegetated wetlands alteration</td>
<td>30,995 (BVW creation from LUW post dam removal)</td>
<td>29,989 (more BVW creation from LUW based on revised design)</td>
<td>60,984 (total created from conversion of LUW)</td>
</tr>
<tr>
<td>Square feet of other wetland alteration</td>
<td>29,079 (this was an error in the prior filing; should have been 47,916 LUW)</td>
<td>23,958 (LUW)</td>
<td>71,874 (LUW converted to BVW post dam removal)</td>
</tr>
<tr>
<td>Acres of non-water dependent use of tidelands or waterways</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>STRUCTURES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross square footage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of housing units</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum height (in feet)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>TRANSPORTATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle trips per day</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Parking spaces</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>WATER/WASTEWATER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallons/day (GPD) of water use</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GPD water withdrawal</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GPD wastewater generation/ treatment</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Length of water/sewer mains (in miles)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Does the project change involve any new or modified:
1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?  □Yes □No
2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?  □Yes □No
3. impacts on Rare Species?  □Yes □No
4. demolition of all or part of any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?  □Yes □No
5. impact upon an Area of Critical Environmental Concern?  □Yes □No

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:
(a) a brief description of the project as most recently reviewed
(b) a description of material changes to the project as previously reviewed,
(c) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a draft of the modified Section 61 Finding (or it will be required in a Supplemental EIR).

The primary elements of the project that have changed between this NPC/SEIR filing and the 2016 EENF filing are in relation to the proposed sediment management approach. The sediment management approach changes are highlighted in the table below and described in more detail in the project narrative.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower impoundment.</td>
<td>Control water, excavate sediment from channel, dewater, separate trash, and haul off-site for authorized re-use and/or disposal.</td>
<td>No change</td>
</tr>
<tr>
<td>Approximately 3,000 cubic yards (CY) of impounded sediment located between the dam and upstream railroad bridges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper impoundment.</td>
<td>Allow river channel to re-form naturally in this reach, eroding sediment, and passively redistributing material downstream during storm events.</td>
<td>In-stream sediment management is no longer proposed as a part of the project. Construct in-stream grade controls (rock) immediately upstream of the CSXT railroad bridges to maintain the existing upstream channel slope, and stabilize the existing sediment in place. Establish construction access routes along the eastern bank within an existing sewer easement; convert later to permanent public greenway.</td>
</tr>
<tr>
<td>Approximately 6,000 CY of impounded sediment located between the upstream railroad bridge and the West Street Bridge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upstream of the impoundment. Additional sediment stored in the river channel upstream of the West Street Bridge (volume unknown)</td>
<td>Install large rocks in river bed just downstream of West Street Bridge to provide grade control, protect utility lines in river, and maintain</td>
<td>Eliminate large rock installation just downstream of West Street. The same protection and maintenance of existing conditions is accomplished via the</td>
</tr>
<tr>
<td>existing conditions.</td>
<td>installation of in-stream grade control in the river bed upstream of the CSXT railroad bridges (described in row above).</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the above changes, the previously proposed temporary access road along the eastern side of the river between West Street and the Mill Street Dam is now proposed to remain as a permanent future public pathway to be constructed of gravel or similar non-paved surface. Given the results of recent subsurface investigations, the abandoned railroad bridge located just upstream from the dam will no longer be removed as part of the project. All other project changes are minor in nature and described in the project narrative.
ATTACHMENTS & SIGNATURES

Attachments:
1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

01/19/18  

Date  Signature of Responsible Officer  

JAMES MCUIGRAH  
Name (print or type)  

CITY OF PITTSTFORD, NY  
Firm/Agency  

70 ALLEN ST.  
Street  

(413) 499-9344  
Phone  

07/19/2018  

Date  Signature of person preparing NPC (if different from above)  

ALEX HACKMAN  
Name (print or type)  

MA DFG Division of Ecological Restoration  
Firm/Agency  

251 Causeway St., Ste 400  
Street  

(617) 626-1048  
Phone  

PITTSFIELD, MA 01201  
Municipality/State/Zip  

BOSTON, MA 02114  
Municipality/State/Zip
Section III. Narrative

1. Summary

The City of Pittsfield proposes to remove the Mill Street (Tel-Electric) Dam located on the West Branch of the Housatonic River. The purpose of the project is to decommission aging and unsafe infrastructure, restore ecological processes, improve water quality, and promote revitalization of a blighted section of the City. This effort is receiving technical and financial support from the Massachusetts Department of Fish and Game’s Division of Ecological Restoration, the U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, Massachusetts Department of Environmental Protection, Massachusetts SubCouncil of the Housatonic River Trustee Council for the GE/Housatonic Natural Resource Damages settlement, and the Massachusetts Executive Office of Energy and Environmental Affairs Dam and Seawall Repair or Removal Program. Numerous studies have been completed since 2006, including a feasibility assessment, multiple rounds of sediment sampling, hydrologic and hydraulic modeling, geotechnical investigations, and engineering design. Most of these studies were included in an Expanded Environmental Notification Form (EENF) filed under the Massachusetts Environmental Policy Act (MEPA) in April 2016.

Public and agency comments received during the MEPA process in 2016 included concerns about the proposed sediment management strategy associated with the dam removal project. Specifically, that the proposed passive release of a portion of the impounded sediment (i.e. “in-stream sediment management”) would have significant impacts to downstream resources. The MEPA Certificate (Appendix A) - issued in July 2016 – noted these concerns and required the preparation of the Single Environmental Impact Report (SEIR) to specifically “provide additional information on the proposed passive release of sediment.”

In response to these concerns, a revised sediment management approach has been developed for the project. In-stream sediment management is no longer proposed as a part of the project. Instead, impounded sediment will be (1) dredged and removed from the river channel, (2) disposed at an authorized off-site location, and (3) stabilized in place during channel and floodplain reconstruction activities. Fundraising is in progress to address the increase in project costs associated with this project change. Engineering designs have been revised to incorporate the staging, access, and sequencing necessary to accomplish this work, safely remove the dam, and protect the surrounding infrastructure.

Other project changes are proposed based upon new site information and engineering. The abandoned railroad bridge located just upstream from the Mill Street Dam is no longer proposed for removal as part of the project. In addition, in-stream riffle grade control features will be installed just upstream of the active railroad bridges to maintain existing channel grades and water levels upstream of railroad bridges. A similar grade-control feature was previously described in the EENF for installation near West Street for utility line protection; however, this new location eliminates the need for in-stream construction near the West Street Bridge. In order to stabilize the river channel in the lower project area and reduce risk to adjacent infrastructure, boulder revetments will be installed to address scour and prevent erosion. Some areas within the main channel will be permanently secured with grouted boulders (i.e., rounded riprap). The bank areas will be seeded and planted to provide a natural aesthetic and maximum habitat value. Finally, a temporary access route will be installed on the eastern side of the impoundment along an existing City-owned utility right-of-way. At the end of the construction period, the access route will be converted to a public greenway, long envisioned by the City at this location to increase public access (see the City of Pittsfield Urban River Visions Plan here:}
Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
Mill Street Dam Removal / West Branch Housatonic River Revitalization Project (EEA #15510)

https://www.cityofpittsfield.org/city_hall/community_development/open_space_program/greenway_planning.php), pending successful fundraising.

Remaining elements of the project remain as generally described in the EENF, and include carefully sequenced dam demolition activities, water controls, erosion and sediment controls, staging, removal of debris and polluted sediment, and restoration of the West Branch of the Housatonic River between the dam and West Street Bridge (about 1,200 feet upstream). The project will require the same permits and approvals as described in the EENF, including a Combined Chapter 91 Waterways Permit and 401 Water Quality Certification (Mass DEP), Chapter 253 Dam Alteration Permit (MA Office of Dam Safety), approval of a Pre-Construction Notice (US Army Corps of Engineers) under the Massachusetts General Permit (Section 404 Clean Water Act), and an Order of Conditions from the City of Pittsfield Conservation Commission under the Massachusetts Wetlands Protection Act. The project will also require compliance with the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act, and Section 106 of the National Historic Preservation Act. The project will require an approved Stormwater Pollution Prevention Plan from the US EPA and access agreements with adjacent private landowners, including CSXT for work within the railroad Right-Of-Way.

2. Description of Project

The Mill Street (aka Tel-Electric) Dam (Nat ID MA019770) is a privately-owned structure located on the West Branch of the Housatonic River in Pittsfield, Massachusetts (latitude N42.447º and longitude W73.264º). It is considered a ‘run-of-river’ dam, meaning the structure provides negligible flood storage capacity. The dam was originally built to provide water power for a nearby mill. The dam is approximately 18 feet high and 40 feet wide, with a 30 foot long slightly curved spillway face. A secondary spillway is situated on the river left of the primary spillway and leads to a 9-foot diameter metal bypass conduit. A low-level outlet exists on river-left of the spillway, and is controlled by a dropgate installed circa 2014. The dam is founded on bedrock and was originally constructed of masonry block and later overlain with concrete with a thickness of approximately 1-foot at the crest.

The dam is located in a highly urbanized section of Pittsfield, and surrounded by infrastructure. It is structurally connected to the adjacent industrial building immediately to the west of the dam. Concrete and masonry retaining walls extend from the dam upstream along the western bank approximately 75 feet, providing structure for the former mill race entrance to the building and the adjacent parking lot and paved access to the factory building. The industrial building and an associated concrete retaining wall extends approximately 200 feet downstream along the west bank of the river. On the east bank, a concrete retaining wall also extends downstream of the dam to the Mill Street Bridge. The concrete arch Mill Street Bridge crosses the West Branch of the Housatonic River approximately 200 feet downstream of the dam. The Mill Street Bridge currently has a weight limit restriction due to its condition. The project team understands that MassDOT is designing a replacement bridge and has scheduled construction for 2021. The Mill Street Bridge will not be altered as part of this project. A 39" diameter sewer line crosses the river between concrete abutments on the downstream side this bridge. Approximately 75 feet upstream of the Mill Street Dam is an abandoned railroad trestle supported by steel-cased cylinder piles (RR Bridge #1). Ownership of this relic structure has been investigated for several years and remains unknown. Approximately 130 feet upstream of the dam is a second railroad bridge (RR Bridge #2) that supports two tracks; it is a full-span riveted steel truss structure between masonry abutments topped with concrete. Approximately 171 feet upstream of the dam is third railroad bridge (RR Bridge #3) that is a full-span riveted steel deck plate girder, supports an active rail line, and is also supported by masonry and concrete abutments. RR Bridges #2 and #3 are owned by
Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
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CSXT. The West Street Bridge and associated water and sewer lines are located approximately 1,270 feet upstream of the dam and are not anticipated to be impacted as part of this project.

In 2000, the Massachusetts Office of Dam Safety (ODS) found the Mill Street Dam to be in overall poor condition with significant operational or maintenance deficiencies. Subsequent discussion between the dam owners, City of Pittsfield, and MA Department of Fish and Game’s (DFG) Riverways Program (now part of DER) led to the consideration of dam removal within a broader context of neighborhood revitalization and greenway construction (for more on the Pittsfield Urban River Visions Plan, see: https://www.cityofpittsfield.org/city_hall/community_development/open_space_program/greenway_planning.php). In 2006, the Commonwealth designated the dam removal as a Priority Project for river restoration. In 2015, the U.S. Fish and Wildlife Service joined the Project Team as the Lead Federal Agency.

Prior studies to inform dam removal design

Since the 2006 Priority Project designation, and in light of the project’s public safety and environmental benefits, the City of Pittsfield and DER have partnered and managed technical investigations to support dam removal on behalf of the dam owner and other partners. These include the following, which informed the 2016 MEPA EENF and the current dam removal designs:

- Kleinschmidt Energy and Water Resources Consultants (Kleinschmidt), 2006. Mill Street (Tel-Electric) Dam Removal Feasibility Study – Final Report. This document provided an overview of the site and watershed, preliminary cost estimates, and conceptual level designs.

- Kleinschmidt, 2006. Mill Street (Tel-Electric) Dam Hydraulic and Scour Analysis for Dam Removal Feasibility Study. This work included the development of a hydrologic and hydraulic model for the project and initial assessment of upstream railroad bridges.

- Haley & Aldrich, Inc. (subcontractor to Kleinschmidt), 2009. Sediment Sampling and Testing Results, Mill Street Dam, Pittsfield, Massachusetts. This study provided the first estimate of impounded sediment quantity and quality.

- Princeton Hydro, LLC, 2011. Final Report – Sediment Management Evaluation, West Branch Housatonic River Restoration Project, Mill Street (Tel-Electric) Dam Removal. This work focused on the costs and technical options for sediment dredging, dewatering, transportation, and disposal.

- Tighe & Bond, 2012. Technical Memorandum – Rapid Field Assessment. This work included ground surveying (including an extended long profile), refinement of sediment volume estimates, and sediment sampling.

- Tighe & Bond, 2014. Technical Memorandum – Supplemental Sediment Evaluation. This work includes two borings immediately upstream of the dam, and 11 other sediment samples upstream and downstream, as well as laboratory analysis for pollutants and physical characteristics.

- Princeton Hydro, LLC, 2015. Tel-Electric Dam Removal Engineering Design Memo. This study was prepared to accompany the MEPA EENF, and described critical elements of
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the site, structures, sediment, as well as the approach for the dam removal and restoration of the project reach of the West Branch of the Housatonic River.

- Massachusetts Division of Ecological Restoration, 2016. Sediment Management Plan (Draft) for the Mill Street (Tel-Electric) Dam Removal / West Branch Housatonic River Restoration Project. This report described the quantity and quality of sediment upstream, within, and downstream of the dam impoundment, described potential risks to human health, ecology, and infrastructure. It suggested a preferred sediment management approach for the project, which was part of the MEPA EENF, that would involve partial dredging (of the most polluted material) and partial erosion and downstream release (of much less polluted material similar to upstream and downstream background concentrations).

- Princeton Hydro, LLC, 2016. Tel-Electric Dam Removal Designs (Preliminary). This 14-sheet engineering design plan set included a description of the site, proposed actions, construction sequence, temporary and permanent impacts to regulated resource areas, and other elements of the project as part of the MEPA EENF.

- Gomez & Sullivan Engineer, DPC, 2018. Mill Street Dam Removal Project: Subsurface Investigation. This study was completed to investigate the subsurface conditions around the various railroad bridges in order to determine bridge stability in a dam-out scenario. This study located bedrock in much of the project area and found that the railroad bridges are founded on competent subsurface materials.

Proposed activities (similar to 2016 design)

The following activities have remained the same or similar since the 2016 MEPA EENF filing. Other elements of the project have changed in response to the EENF process and through subsequent data collection. The elements that have changed are described in Section III.3 - Project Changes of this narrative.

- Removal of the primary spillway and the appurtenant structures (i.e. low flow outlet, secondary outlet and bypass flume). The intent is to remove the full vertical extent of the dam and enough of the lateral extent of the spillway to restore channel connectivity between upstream and downstream reaches and to restore aquatic species passage to pre-dam conditions.

- Installation of scour countermeasures around portions of the abutments for Railroad Bridge #2 and #3. New information obtained during 2018 subsurface investigation now informs this work in more detail.

- Excavation of sediment and debris in the lower impoundment to allow for the above construction activities, remove pollutants from the river, and achieve stable final grades. Approximately 3,000 cubic yards of sediment and debris is expected to be mechanically removed from the river, dewatered, and staged on-site to allow for removal of large debris prior to transport. Following final approval, the sediment and debris will be trucked for off-site disposal or beneficial re-use as daily cover at an in-state or out-of-state landfill.

- Construction of temporary access pads to move heavy equipment into the river at select locations (e.g., at the dam, near the railroad bridges, and downstream of West Street if necessary).
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- Installation and maintenance of water control measures to divert flow around the work area as necessary. A final plan for water control will be developed by the selected contractor and be submitted for review and approval by the City, project engineer, and regulatory agencies.

- Final site restoration activities including stabilization of soils, seeding, and planting.

As with any dam removal project, these elements will continue to be refined during the upcoming final engineering and permitting phases. Any further revisions will be communicated to the public and agency reviewers via revised design plans and written descriptions provided with permit applications.

3. **Project Changes**

**The sediment management approach for the project has been changed.** In-stream sediment management is no longer proposed as a part of the project. Instead, all impounded sediment will be actively managed via dredging, off-disposal, and on-site stabilization. The changes are summarized below in Table 1:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower impoundment.</strong></td>
<td>Control water, excavate sediment from channel, dewater, separate trash, and haul off-site for authorized re-use and/or disposal.</td>
<td>No change</td>
</tr>
<tr>
<td>Approximately 3,000 cubic yards (CY) of impounded sediment located between the dam and upstream railroad bridges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Upper impoundment.</strong></td>
<td>Allow river channel to re-form naturally in this reach, eroding sediment, and passively redistributing material downstream during storm events.</td>
<td>In-stream sediment management is no longer proposed as a part of the project. Construct in-stream grade controls (rock) immediately upstream of the CSXT railroad bridges to maintain the existing upstream channel slope, and stabilize the existing sediment in place. Establish construction access routes along the eastern bank within an existing sewer easement; convert later to permanent public greenway.</td>
</tr>
<tr>
<td>Approximately 6,000 CY of impounded sediment located between the upstream railroad bridge and the West Street Bridge</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Upstream of the impoundment.</strong></td>
<td>Install large rocks in river bed just downstream of West Street Bridge to provide grade control, protect utility lines in river, and maintain existing conditions.</td>
<td>Eliminate large rock installation just downstream of West Street. The same protection and maintenance of existing conditions is accomplished via the installation of in-stream grade control in the river bed upstream of the CSXT railroad bridges (described in row above).</td>
</tr>
<tr>
<td>Additional sediment stored in the river channel upstream of the West Street Bridge (volume unknown)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The revised sediment management approach requires **active construction of a restored stream channel within the existing dam impoundment.** The revised project design includes an access route along the eastern side of the river along an existing City-owned sewer easement. Ideally, and pending fundraising,
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this temporary access route will be converted to a **permanent future public pathway** managed by the City. The path will be constructed of gravel or other similar non-paved surface in order to facilitate future maintenance of the City sewer line that lies beneath it. In order to avoid possible project segmentation, this potential outcome is described herein, shown on the attached revised design plans (Appendix B), and included in the assessment of temporary and permanent impacts provided below.

The revised sediment management approach will increase temporary impacts in the existing impoundment during the construction phase (approximately 6 months) related to water management, mechanical excavation, placement of rock, and stabilization of banks. The ecological benefits of this work, however, are expected to be permanent and include improved water quality and habitat value as the river returns to more free-flowing condition in the now impounded and degraded reach. Downstream of the dam, temporary impacts will be reduced from this revised sediment management approach. Up to 6,000 CY of impounded sediment will no longer be passively released during the dam removal. The revised sediment management approach will increase project costs, but is responsive to the public and agency concerns raised during the MEPA EENF comment period in 2016.

The MEPA Certificate issued for the project in July 2016 required additional sampling, analyses, and modeling to support the *prior* sediment management approach of passive sediment release. Specifically, the Certificate required the City “to document that downstream impacts of the release of sediment will be minimized” by performing “sediment transport modeling, risk assessments, and/or additional analysis and sampling of sediment and soil.” Given that passive sediment release (i.e. “in-stream sediment management”) is no longer proposed as part of the project, the associated downstream risks have changed. The requirements for related assessment, therefore, are no longer applicable and have **not** been performed as part of this submittal.

Several other project changes are proposed as a result analyses completed in 2018. For example, the elevation of bedrock in the river channel is now better understood, along with the bottom elevations of the active railroad bridge abutments. A ground-penetrating radar (GPR) survey of the impoundment was completed in 2017-2018 by Gomez and Sullivan Engineers (GSE) under contract to DER. Please refer to Appendix C. The revised preliminary engineering design by MMI (2018) is based upon this improved understanding of subsurface conditions, river slope, and bridge abutment construction. Specific minor project changes since the EENF filing include:

- Installation of an in-stream riffle grade control feature—comprised of large rock—in the river bed upstream of the CSXT railroad bridges. These features will maintain the existing upstream river slope, protect upstream infrastructure, and promote stabilization of existing sediment upstream of the feature.
- Installation of boulder clusters in the river bed between the dam and upstream railroad bed. These features provide habitat and fish passage value by offering lower flow refugia in the channel. By slowing velocities in the channel, these features also help redirect flows and reduce scour on surrounding infrastructure including the existing retaining wall on both river banks downstream of the dam and the railroad bridge abutments.
- Installation of planted boulder revetments along the river banks from the Mill Street Bridge upstream to just north of the CSTX railroad bridges. This common bank stabilization method\(^1\) involves the use of large rock to provide stability to the toe of the bank slope and prevent

erosion. In this case, the existing stream banks are already severely degraded or hardened. The boulder revetments will provide additional protection to the surrounding retaining walls and other infrastructure that will be subject to increased velocities and scour post dam removal.

- Installation of a temporary access route along the eastern river bank and conversion to future greenway path. A similar access route was shown in the project plans submitted with the 2016 EENF. To provide access to the project area during construction, a gravel path will be installed along the eastern river bank between the dam and West Street. The access route will be located within the existing City sewer easement (refer to revised plan set in Appendix B). Once the dam removal project is complete, the access route will be decommissioned and permanently converted to a future greenway path. Future design work and coordination with the City is still required and will be completed in the next 6 months.

- The abandoned bridge will no longer be removed as part of this project. The bridge will remain in place and not be altered as part of this dam removal project.

4. Alternatives to the Project

This section includes a discussion of overall project alternatives, as well as more detailed technical alternatives for sediment management. The primary overall alternatives to the project have not changed since the 2016 EENF. As described below, these include (1) no action, (2) dam repair, and (3) dam removal and river restoration. For numerous reasons including public safety, ecological restoration, and the wishes of the dam owners, the preferred alternative remains (3) to remove the dam and implement a river restoration project. Dam repair and installation of hydropower facilities is not a feasible alternative, and pursuant to the guidance in the Secretary’s Certificate, is not analyzed herein. To be responsive to the SEIR scope described in the MEPA Certificate, an additional description of sediment management alternatives is included below.

**Alternative #1 - No Action**
Taking no action is equivalent to allowing the dam to persist in its current state. This alternative is not advisable for several reasons. First, the dam is in poor condition due to the age and degradation of concrete and appurtenant structures. Leaving the dam in place has inherent risks, including future failure, uncontrolled release of impounded sediment, and potential destabilization of surrounding infrastructure. With poor ratings from Dam Safety inspections, the dam owner is compelled to take some action. The dam also presents a direct public safety concern; the area is known for attracting vandalism / illegal activities that require police attention and on one such occasion resulted in a drowning death. The combination of these reasons renders the “no action” unacceptable to both the dam owner and the City of Pittsfield.

**Alternative #2 - Dam Repair or Modification**
As the dam no longer serves a purpose, there is no imperative for the dam owner to perform costly repairs or on-going maintenance that would be required to satisfy requirements for dam safety. Funding for the dam repair alternative has not been identified, nor is likely.

**Alternative #3 - Dam Removal and River Restoration**
Dam removal meets the dam owners interests in eliminating future costs and liability associated with a structure that no longer serves a commercial or industrial purpose. Dam removal is also the primary interest of the City of Pittsfield in order to address an attractive nuisance and potential safety hazard, encourage revitalization of a blighted area, and be part of a new public greenway. The state and federal
agency partners view dam removal as the best alternative for meeting ecological goals, including restoring aquatic connectivity and improving water quality. For these reasons, dam removal is the preferred alternative.

To accomplish Alternative #3 (Dam Removal and River Restoration), a number of technical challenges must be addressed; specifically: (a) management of impounded sediment, and (b) protection of surrounding infrastructure. Both relate to changes in the slope of the river post dam removal, and the predicted changes in water velocity and scour potential. These specific engineering considerations were assessed by the project engineer (MMI) and used in the 2018 project re-design. To help reduce changes to the slope of the river post dam removal – and decrease potential risks to surrounding infrastructure – the revised design proposes the use of an in-stream riffle grade control feature installed in the river bed. A similar approach was described in the 2016 EENF. In this 2018 re-design, the location of these rock structures in the river bed is shifted approximately 1,000 feet south, or downstream. The expected result of holding grade at the proposed location will be to maintain approximate existing water levels, velocities, and scour upstream of the riffle. As a result, no changes resulting from the project are expected to occur to the utilities lines crossing the river bed near the West Street Bridge. The use of the in-stream riffle grade control will help to stabilize the river bed slope and coincides with the newly proposed sediment management plan.

Sediment dredging involves (1) removal methods (mechanical and hydraulic), (2) dewatering, (3) transportation, and (4) off-site disposal or beneficial reuse. The alternatives for each were studied in detail by Princeton Hydro, LLC under contract to DER in 2011. Please refer to Section 7 below and Appendix D. The findings from that study will help inform the final design of the project; for example, mechanical excavation will be the preferred option of sediment removal. Hydraulic dredging is not considered practical due to the presence of trash and debris in the river which would clog the machinery. Options for landfill disposal or beneficial reuse of the dredged sediment were also examined in the 2011 study. These options will be revisited in the final engineering design phase and include disposal facilities located outside of the City of Pittsfield. The project team will retain the services of a Massachusetts Licensed Site Professional to assist with locating acceptable alternatives for sediment disposal facilities.

5. Existing Environment

The project site is located on the West Branch of the Housatonic River. It is located in an urbanized section of Pittsfield with seven river crossings in the vicinity of the dam. The river flows over the dam in a generally north-south direction. The site is bordered to the west by a former mill building that is currently used for commercial storage. Mill Street crosses the river on a bridge approximately 200 feet south (downstream) of the dam. East of the dam, the site is bordered by Mill Street, commercial uses and parking lots, and a City sewer easement. Three railroad bridges cross the river between 75 and 170 feet north upstream) of the dam. Based on findings from the 2018 subsurface investigation, the railroad bridges are believed to be founded on competent subsurface materials such as bedrock and glacial till. Upstream of the railroad bridges, a residential complex is located on the west side of the river and commercial uses on the east side of the river. The West Street Bridge crosses the river approximately 1,200 feet upstream of the dam. Two water lines and a sewer line cross the river immediately downstream of the bridge and a double sewer line crosses the river 140 feet upstream of the bridge. Rock fill is located in the river just downstream of the West Street Bridge, presumable to protect the above-referenced utility lines. Just north of the West Street Bridge is the City owned
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Dorothy Amos Park; a remediation project involving soil and sediment removal was completed at this
site in 2011 (MassDEP release tracking number 1-11953).

This reach of the West Branch of the Housatonic River is designated as a Class B waterway in the
Massachusetts Surface Water Quality Standards (314 CMR 14.00) for aquatic habitat. The river is
generally a low-gradient meandering stream with long pools and floodplain vegetation along its banks
separated by urban encroachment. The Massachusetts Department of Environmental Protection's
(MassDEP) 2014 Integrated List of Waters classified the majority of the river (identified as MA21-18) as a
Category 5 Water impaired for multiple uses and requiring the development of Total Maximum Daily
Loads (TMDL). MassDEP found that the river is impaired due to combined biota/habitat bio-
assessments, debris/floatables/trash, fecal coliform, presence of polychlorinated biphenyls (PCB), and
taste and odor. The poor water quality and habitat value is reflected in the impoundment, which is
trash-filled, stagnant, and devoid of natural vegetation. Approximately one mile downstream of the
dam and just before its confluence with the East Branch of the Housatonic, the river enters the Upper
Housatonic River Area of Critical Environmental Concern (ACEC). The confluence of the West and East
Branches of the Housatonic River also marks the boundary of the "Rest of River" investigation area of
the Environmental Protection Agency's (EPA) GE-Pittsfield/Housatonic River cleanup site.

According to the Massachusetts Historical Commission (MHC), several structures at or in the vicinity of
the project site are listed in the Inventory of Historic and Archaeological Assets of the Commonwealth
(Inventory). The site is adjacent to the Eaton, Crane & Pike Company Factory Historic District (MHC #
PIT.H), which is listed in the State and National Registers of Historic Places. The railroad bridges
upstream of the dam are listed in the Inventory, including: the Boston and Maine (B&M) Railroad Spur
Line Bridge (PIT.914); the section of the B&M Railroad Bridge over Mill Street (PIT.910); the B&M
Railroad Bridge (PIT.909); and the Conrail Bridge (PIT.911). The Mill Street Bridge (PIT.919) downstream
of the dam is also listed in the Inventory. Of these bridges, only the B&M Railroad Bridge (PIT.909) is
eligible for listing in the National Register of Historic Places. The Board of Underwater Archaeological
Resources (BUAR) believes the area is archaeologically sensitive due to the historic presence of mill
sites. Coordination with MHC and BUAR is on-going, and will include a construction phase Historical
Properties Avoidance and Protection Plan (HPAPP), as well as notification procedures in the event that
archaeological resources are encountered during the dam removal construction.

6. Additional Sediment and Hydraulic Analyses (Sediment Management)

The Secretary’s 2016 MEPA Certificate required the City to perform additional sediment and hydraulic
studies to assess potential downstream impacts of passive sediment release. As noted above, the
project has been changed to eliminate downstream sediment release as part of the dam removal
project. Therefore, an assessment is downstream impacts is no longer warranted.

To advance engineering design and consider elements such as restored channel geometry, slope, and
scour, additional hydrologic and hydraulic (H&H) modeling has been completed since the 2016 EENF.
This H&H work informed the project design as is proposed in MMI’s revised design plans (Appendix B).
No new hydraulic analyses were performed in relation to sediment transport as these studies were
deemed unnecessary given the new project sediment management approach.

7. Analysis of Alternative Dredging Techniques (Sediment Management)
The Secretary's Certificate required the City to include in the SEIR an "analysis of alternative dredging techniques, including hydraulic dredging." Moreover, the Certificate stated that this analysis should "identify the feasibility of available techniques and compare the environmental impacts of each of land alteration, wetlands, and water quality." These same issues were reviewed in a technical study (Sediment Management Evaluation) managed by DER and prepared by Princeton Hydro, LLC in 2011. Please refer to Appendix D. A summary of findings is presented below.

The 2011 Sediment Management Evaluation reviewed feasible options to remove sediment from the impoundment, including mechanical dredging, hydraulic dredging, and sediment release. Additionally, the report examined sediment dewatering techniques including passive dewatering of mechanically dredged material and geotextile tubes and a proprietary Rapid Dewatering System™ (RDS) for hydraulically dredged sediment. The benefits and disadvantages of each technique were reviewed. Due to the significant quantity of debris observed in the river and expected to be contained with the accumulated sediment, it was determined that hydraulic dredging would not be a viable alternative due to the high probability of clogging of the cutter-head and suction piping and subsequent downtime and loss of productivity. Mechanical dredging was identified as more efficient and could easily segregate debris from the excavated sediment. Staging and stockpiling of dredged material was also found to be simpler and require less room than for hydraulic dredging as mechanical excavation would not tend to increase the volume or moisture content of sediment compared to hydraulic approaches.

To determine the most appropriate access routes and staging areas, the 2011 report assessed surrounding land uses based on topography and proximity to the impoundment. As a result of the analysis of on-site dredging, access, and staging, it was determined that the most appropriate site locations for staging include the Western Massachusetts Electric and the Berkshire Eagle/Clock Tower properties. Access from the river right and the use of the Riverview Condominiums was ruled out due to the lack of upland area to stage equipment and materials, as well as the steep slopes, elevated upland area, and potential conflict with residential uses. The City of Pittsfield Public Works property was eliminated due to its distance from the project site. A benefit to accessing the impoundment on river left adjacent to the Western Massachusetts Electric property would also be the infrastructure (road) needed to install a future pedestrian greenway as envisioned by the City of Pittsfield (see https://www.cityofpittsfield.org/city_hall/community_development/open_space_program/greenway_planning.php).

Princeton Hydro evaluated disposal options for sediment and resolved that the sediment would require disposal at a regulated facility due to the existence of contaminants within the sediment matrix. Upon review of the data, with assistance from the contractor sub-consultant, Maxymilian Technologies, a number of in-state and out of state disposal locations were identified as most cost effective. It was determined that 71% of the sediment could be disposed of in-state, while the remaining sediment would be disposed of out of state, due to exceedances of specific contaminants of the Massachusetts DEP policy on disposal of soils at landfills. While solid waste permits could be obtained to allow for in-state disposal of this material, this would least cost as much as and would possibly outweigh the cost of simply transporting the sediment to out-of-state landfills. Disposal sites identified as the most appropriate and cost effective included the Northampton Landfill in Northampton, MA and the Oneida-Herkimer Landfill in Boonville, NY; however, landfill identification will be revisited during the 401 Water Quality Certificate permitting process and during final design.

The costs associated with each approach to dredging was evaluated including dry mechanical dredging (dewatering the impoundment), mechanical dredging without dewatering, hydraulic dredging with
either geotextile tubes or the RDS, a combination of wet and dry mechanical dredging, and a combination of dry mechanical dredging with a partial release of sediment. Costs for each approach included a scenario with 12,000 cubic yards and 16,000 cubic yards, which was the expected range of sediment volumes thought to require management when the 2011 report was completed. The analysis included a number of assumptions, including the percentage of sediment to remain in-state, percentage of solid debris in the sediment (10%), engineering, permitting and construction administration costs (7.5%), and percentage of sediment requiring treatment to mitigate against the categorization as hazardous waste (25%). Cost estimates were developed for each, and ranged from approximately $3 to $7 million.

The cost estimates contained in the 2011 report are no longer considered accurate for several reasons. For one, the volume of sediment that requires management has been refined through numerous investigations since that time, and is now predicted to be much lower. In addition, several rounds of additional sediment testing have identified lower average pollutant concentrations in the impounded sediment than previously found. However, the technical assessment of the various dredging, dewatering, and disposal options is still considered applicable to the project. For the reasons outlined above and detailed in the report, mechanical sediment removal is considered to be the best option for dredging, debris management, and dewatering for off-site hauling.

8. Statutory and Regulatory Standards and Requirements

Agency Coordination
The City of Pittsfield and partners have coordinated with federal, state, and local regulatory bodies during project development; specifically:

- DER has coordinated with the Massachusetts Department of Environmental Protection (DEP) since 2012, including staff from the Western Regional and Boston offices, about sediment sampling, laboratory results, risk implications, and management alternatives.
- In 2010 and 2016, DER met with staff from the U.S. Army Corp of Engineers to discuss potential project funding and permitting.
- The U.S. Fish and Wildlife Service, in their role as Lead Federal Agency, has invited tribes and organizations to be consulting parties in the section 106 process under 36 CMR 88.2 of the National Historic Preservation Act. In June 2016, coordination letters were mailed to the Mashpee Wampanoag Indian Tribal Council, Narragansett Indian Tribe, Stockbridge-Munsee Mohican Tribe, Wampanoag Tribe of Gay Head, Massachusetts Bureau of Underwater Archeology, and Pittsfield Historical Commission.
- During the MEPA EENF process in 2016, the City and DER hosted a public meeting and site walk attended by local residents, organizations, and agencies.
- Also in 2016, DER met with the City of Pittsfield Conservation Agent and project engineer to look ahead to future local permitting needs.
- In 2018, a pre-application meeting was held with the MEPA staff of the Executive Office of Energy and Environmental Affairs to guide the preparation of this SEIR and NPC.

Applicable Permit Requirements
Implementation of the Mill Street Dam Removal Project will require various approvals from state agencies including the Executive Office of Environmental Affair MEPA Unit and Massachusetts Department of Environmental Protection (Combined Chapter 91 Waterways Permit and 401 Water
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Quality Certification). Federal level permitting and compliance will be required from the Environmental Protection Agency through the NPDES program, the U.S. Army Corp of Engineers via the Massachusetts General Section 404 permit, and the U.S. Fish and Wildlife Service as Lead Federal Agency with the preparation of National Environmental Policy Act (NEPA) documentation and compliance with Section 106 of the National Historic Preservation Act. The local permitting includes the Pittsfield Conservation Commission for approval under the Massachusetts Wetlands Protection Act and local by-law. Dam removal projects across Massachusetts are regularly permitted via this regulatory roadmap.
## Table 2: Project Permit Requirements for the Mill Street Dam Removal Project

<table>
<thead>
<tr>
<th>Permit</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. State Permits</strong></td>
<td></td>
</tr>
<tr>
<td>Executive Office of Environmental Affairs – MEPA</td>
<td></td>
</tr>
<tr>
<td>Expanded Environmental Notification Form</td>
<td>Submitted May 11, 2016. Secretary’s Certificate issued July 29, 2016 that required a Single EIR.</td>
</tr>
<tr>
<td>Notice of Project Change / Single EIR</td>
<td>Submitted October 31, 2018</td>
</tr>
<tr>
<td>Department of Environmental Protection</td>
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<tr>
<td>Combined Chapter 91 Waterways Permit and 401 Water Quality Certificate</td>
<td>To be submitted</td>
</tr>
<tr>
<td>Department of Conservation and Recreation</td>
<td></td>
</tr>
<tr>
<td>Chapter 253 Dam Permit (Office of Dam Safety)</td>
<td>To be submitted</td>
</tr>
<tr>
<td>Massachusetts Historical Commission</td>
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</tr>
<tr>
<td>Project Notification Form</td>
<td>Submitted October 29, 2015</td>
</tr>
<tr>
<td><strong>2. Federal Permits and Notices</strong></td>
<td></td>
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<tr>
<td>U.S. Army Corps of Engineers</td>
<td></td>
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<tr>
<td>Massachusetts Section 404 General Permit (Pre-Construction Notice)</td>
<td>To be submitted</td>
</tr>
<tr>
<td>U.S. Environmental Protection Agency</td>
<td></td>
</tr>
<tr>
<td>NPDES Construction General Permit</td>
<td>To be filed by the construction contractor</td>
</tr>
<tr>
<td>National Historic Preservation Act</td>
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</tr>
<tr>
<td>Section 106 Historical Review</td>
<td>To be completed as part of the Section 404 Pre-Construction Notice</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service (USFWS)</td>
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<tr>
<td>National Environmental Policy Act (NEPA)</td>
<td>To be prepared by USFWS as Lead Federal Agency</td>
</tr>
<tr>
<td><strong>3. Local Permits</strong></td>
<td></td>
</tr>
<tr>
<td>Pittsfield Conservation Commission</td>
<td></td>
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<tr>
<td>Order of Conditions</td>
<td>To be submitted</td>
</tr>
</tbody>
</table>

### Funding Assistance

The City has secured funding assistance from state and federal government agencies. The DER has provided in-kind support (project management) since 2006, and direct cash funding of $30,000 (for the 2006 project feasibility study). In 2008, the project was approved by the Massachusetts Sub Council of the Housatonic River Trustee Council as a preferred restoration alternative in the Final Restoration Plan and Supplemental Environmental Assessment for the first round of funding under the GE/Housatonic natural resource damages settlement, and awarded $850,000 in project support. DER secured $1M in additional federal funding in 2014 from the U.S. Department of Interior’s Hurricane Sandy Relief Fund. In 2018, the City was awarded $400,000 from the Massachusetts Executive Office of Energy and Environmental Affairs Dam and Seawall Repair or Removal Fund.

### 9. Mitigation Measures

This Section provides a description of proposed actions that will either result in positive, long-term benefits as a result of the project, or that are planned to avoid, minimize or mitigate short-term (construction-related) impacts.
Positive, Long-Term Benefits
The proposed dam removal project offers positive environmental and public safety benefits to the local community. These include (1) elimination of an attractive nuisance and public safety hazard where a drowning death occurred in 2014, (2) pro-active decommissioning of unused and poor-condition infrastructure within a public waterway; (3) a permanent solution to prior Dam Safety Orders issued to the owners; (4) removal and off-site disposal of several thousand cubic yards of polluted sediment, as well as debris such as shopping carts and tires; (5) restoring of ecological processes that promote river restoration, including the natural movement of water, sediment, organic matter, and organisms; and, (6) rejuvenation of a blighted section of the City. In order to achieve these permanent benefits, short-term construction period impacts are unavoidable. However, as detailed below and within this document, multiple coordinated practices will be used to limit short term construction period impacts.

Short-term (Construction-Related) Impacts and Mitigation Measures
The dam removal will involve the use of heavy machinery operating within and around regulated resource areas. Achieving project objectives — including removal of the dam, excavation of polluted sediment, protection of surrounding infrastructure, and restoration of the river channel — are not otherwise possible. To help reduce short term impacts and lower associated risks, the following construction period mitigation measures are planned:

- Establish and clearly demarcate access, staging, and work areas for the project, and limit the movement of heavy equipment outside of these areas. This work will be part of the implementation of a Historic Properties Avoidance and Protection Plan (HPAPP), now in development, to also help address potential risks to nearby structures. On-site monitoring during the construction phase will be performed by a qualified architectural historical (under contract to DER) to ensure compliance with the HPAPP.

- Install and maintain erosion and sediment controls during project implementation. Protective measures will be used to limit the movement of upland soils into the river channel from access route and staging areas. The construction contractor will be responsible for routine monitoring and maintenance, with regular reporting to the project engineer and City during construction meetings (estimated at a weekly interval) in accordance with the US EPA approved Storm Water Pollution Prevention Plan (SWPPP).

- Observe time-of-year restrictions for local sensitive species that may be required, such as for the Northern Long-Eared Bat (*Myotis septentrinalis*). Details for such TOY restrictions on construction activities will be coordinated through the U.S. Fish and Wildlife Service during the project NEPA process. Any potential restrictions will be included in the construction bid documents and assumed by the selected contractor.

- Install native vegetation along the restored river channel and floodplain. The project involves conversion of Land Under Water (LUW) to Bordering Land Subject to Flooding (BLSF), Riverfront Area, and Bordering Vegetated Wetland (BVW). To promote development of native species, reduce the spread of invasive plants, and enhance habitat value, a program of seeding and planting will follow the heavy earthwork and demolition. Monitoring will be performed by the construction contractor for a period of two-years to monitor and ensure plant establishment in these areas. Photographic monitoring of the entire project area will be
performed by DER and partners to help assess the restoration trajectory of the river corridor in the years following dam removal.

- Install boulder revetments and in-stream riffle features along and within the restored stream channel. These measures are required in order to prevent bank erosion and risk to surrounding infrastructure. The design includes consideration of valley slope, predicted post dam removal water velocities, and scour potential. To monitor the performance and stability of these features, several years of post-construction surveying will be performed. Immediately after construction, an as-built survey will be performed by the construction contractor. The City proposes to perform follow-up surveys of channel geometry and profile at an annual interval for two years after the project is complete.

- Use water controls and dewatering active work areas to limit mobilization of sediment to downstream areas. Excavation of sediment in the lower impoundment, channel construction, and dam removal all has the potential to mobilize polluted sediment. To help reduce this risk, the project plans will include water diversion and control measures. The selected construction contractor will be required to submit technical details of the proposed approach for water control to the City and project engineer for review and approval. This review and approval process will also involve coordination with MassDEP and the Office of Dam Safety as part of the upcoming permitting processes.

- Develop and implement a construction debris management plan. The selected contractor will be required to submit plan to re-use and recycling of debris associated with the dam demolition, sediment excavation, and debris sorting/removal process. The City and project engineer will review and approve the plan prior to the commencement of site work.

- Install and maintain spill prevention and response features. During construction, the contractor will be required to install and maintain a spill prevention kit on site, as well as oil booms downstream of the work area. The contractor will be required to submit a spill prevention and response plan for City and project engineer approval.

- Establish notification procedures for the potential discovery of oil and/or hazardous material identified in the project work area. An emergency contact list will be developed and maintained on site at all times. Representatives from the local fire department and MassDEP regional office will be invited to the pre-construction meeting with the selected contractor and project engineer.

- Establish notification procedures for the potential discovery of archeological resources within the project work area. As part of the HPAPP, notification procedures will be developed, including assignment of roles and responsibilities, during the construction period.

Post-Construction Monitoring Plan
The City and partners propose a four (4) part monitoring plan to assess initial project outcomes. Specific monitoring activities, described below, include channel dimensions and stability, water quality, vegetation, and visual change.
Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
Mill Street Dam Removal / West Branch Housatonic River Revitalization Project (EEA #15510)

- **Channel dimensions and stability** – Channel stabilization measures are planned to address potential risks of migration and head-cutting that could increase risks to nearby infrastructure. To confirm construction to plans, the City will contract with the project engineer to complete a post-construction as-built survey. The survey will include representative cross sections from West Street Bridge to the Mill Street Bridge, as well as a longitudinal profile. The survey will be repeated annually for two years post construction. The results will be compared with the initial survey results to assess channel scour and potential shifts in the constructed channel and grade stabilization features.

- **Water Quality** – Several years of baseline water quality data including temperature and dissolved oxygen have been collected by UMass Amherst in partnership with DER. This work will extend for at least one year post dam removal to assess changes in water quality. The City and partner expect water quality improvements, including lower temperatures and increased dissolved oxygen, within and below the former dam impoundment.

- **Vegetation** – Installation of native seed and plants are planned to help restore the riparian corridor of the impoundment post dam removal. The construction contractor will be required to monitor and maintain the condition of all plantings for two years post dam removal.

- **Photographic monitoring** – To document overall ecological and visual changes within and around the project area, the City and partners will establish monumented photographic monitoring stations following established protocols². Baseline photographs taken prior to and during construction will be compared with subsequent data collection in years 1, 2, and 5 following dam removal to document and communicate change.

10. **Proposed Section 61 Findings**

As required by the Secretary’s Certificate on the EENF, this section provides a consolidated overview of the proposed mitigation and other environmental and community benefits proposed in order to minimize potential impacts from the dam removal project. A draft template for Section 61 Findings is also provided pursuant to the Secretary’s Certificate and in accordance with Massachusetts General Laws (MGL) Chapter 30, Section 61 that states: "Any determination made by any agency of the Commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all reasonable measures have been taken to avoid or minimize said impacts." State agencies from which a permit will be required for the project include the Department of Environmental Protection (Combined Chapter 91 Waterway Permit and 401 Water Quality Certification) and the Department and Conservation and Recreation (Chapter 253 Dam Permit).

Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
Mill Street Dam Removal / West Branch Housatonic River Revitalization Project (EEA #15510)

Executive Office of Energy and Environmental Affairs
Massachusetts Department of Environmental Protection
Bureau of Resource Protection / Wetlands and Waterways Program

Draft Findings Pursuant to MGL Ch. 30, Section 61

Project Name: Mill Street Dam Removal / West Branch Housatonic River Revitalization Project
Project Location: Pittsfield, Massachusetts
Project Proponent: City of Pittsfield
EEA Number: 15510

Permit: Combined Chapter 91 Waterways Permit and 401 Water Quality Certification (BRP WW 26)

Project Description: The City of Pittsfield and project partners propose to remove the Mill Street Dam from the West Branch of the Housatonic River. The project includes the establishment of access and staging areas, removal and off-site disposal of polluted sediment, demolition of the dam, reconstruction of the river channel, protection of infrastructure, and restoration of the riparian corridor within this reach. The project goals include decommissioning an unsafe and deteriorating structure that poses potential public safety hazards, restoration of natural ecological processes to improve environmental conditions in the river, and revitalization of this blighted area of the West Side neighborhood.

MEPA History: The MEPA review was initiated on May 11, 2016 with the filing of an Expanded Environmental Notification Form (EENF) that was noticed in Volume 86, Issue 01 of the Environmental Monitor. The Secretary issued a Certificate on July 29, 2016 that requested a Single Environmental Impact Report (SEIR). The SEIR was submitted on October 31, 2018 along with a Notice of Project Change to address stakeholder comments received during the EENF process.

Project Impacts and Mitigation: Refer to Table A for a list of impacts and corresponding mitigation measures relative to the dam removal and river restoration project.

Table A: Summary of Project Impacts and Mitigation Measures

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Proposed Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of heavy equipment and work within regulated resource areas to accomplish dam removal, sediment removal, and channel restoration and protection</td>
<td>A Notice of Intent (NOI) will be submitted and an Order of Conditions (OOC) issued by the Pittsfield Conservation Commission for all regulated resource areas where construction activities will occur. All work areas will be restored to pre-existing conditions, or improved to enhanced ecological condition compared with the pre-existing state. Work in these areas will be performed in accordance with the OOC, and will include the installation and maintenance of erosion and sediment controls by the construction contractor. The project engineer and contractor will be required by the City to perform post-construction surveys for grading accuracy, planting success, and channel stability.</td>
</tr>
<tr>
<td>Potential short term water quality impacts during the construction period</td>
<td>The City will file a combined application for Chapter 91 waterways permit and 401 Water Quality Certification to MassDEP. In-stream activities will be performed in accordance with permit conditions, including water controls and other protective measures. Per permit approval, polluted sediment will be removed from the river channel, dewatered in an authorized manner on site, and transported off-site for lawful re-use or disposal. Oversight of construction activities will be performed by the project engineer to ensure that no adverse long-term impacts occur as a result of the construction period.</td>
</tr>
<tr>
<td>Ineffective dam removal resulting in unintended impacts to river hydrology, local infrastructure, and flooding</td>
<td>Implementation of dam removal and channel reconstruction per final engineering plans, hydrologic, and hydraulic modeling. Review and approval of said plans and modeling by the DCR Office of Dam Safety and issuance of a Chapter 253 dam permit. Use of dam removal best practices including removing the full vertical extent of the structure, and removing the lateral extent to provide maximum hydrologic transparency.</td>
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**Findings:** Based in its review of the MEPA documents, public comments, and with implementation by the Proponent of the mitigation measures described in the attached Table A, all practical means and measures will be taken to avoid or minimize the adverse impacts to the environment related to the Project. MassDEP will include appropriate conditions associated with this Section 61 Finding in the Combined Chapter 91 Waterways Permit and 401 Water Quality Certification.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**BY**

**DATE**
Project Name: Mill Street Dam Removal / West Branch Housatonic River Revitalization Project
Project Location: Pittsfield, Massachusetts
Project Proponent: City of Pittsfield
EEA Number: 15510
Permit: Chapter 253 Dam Permit

Project Description: The City of Pittsfield and project partners propose to remove the Mill Street Dam from the West Branch of the Housatonic River. The project includes the establishment of access and staging areas, removal and off-site disposal of polluted sediment, demolition of the dam, reconstruction of the river channel, protection of infrastructure, and restoration of the riparian corridor within this reach. The project goals include decommissioning an unsafe and deteriorating structure that poses potential public safety hazards, restoration of natural ecological processes to improve environmental conditions in the river, and revitalization of this blighted area of the West Side neighborhood.

MEPA History: The MEPA review was initiated on May 11, 2016 with the filing of an Expanded Environmental Notification Form (EENF) that was noticed in Volume 86, Issue 01 of the Environmental Monitor. The Secretary issued a Certificate on July 29, 2016 that requested a Single Environmental Impact Report (SEIR). The SEIR was submitted on October 31, 2018 along with a Notice of Project Change to address stakeholder comments received during the EENF process.

Project Impacts and Mitigation: Refer to Table A for a list of impacts and corresponding mitigation measures relative to the dam removal and river restoration project.

Table A: Summary of Project Impacts and Mitigation Measures

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<td>Use of heavy equipment and work within regulated resource areas to accomplish dam removal, sediment removal, and channel restoration and protection</td>
<td>A Notice of Intent (NOI) will be submitted and an Order of Conditions (OOC) issued by the Pittsfield Conservation Commission for all regulated resource areas where construction activities will occur. All work areas will be restored to pre-existing conditions, or improved to enhanced ecological condition compared with the pre-existing state. Work in these areas will be performed in accordance with the OOC, and will include the installation and maintenance of erosion and sediment controls by the construction contractor. The project engineer and contractor will be required by the City to perform post-construction surveys for grading accuracy, planting success, and channel stability.</td>
</tr>
</tbody>
</table>
### Potential short term water quality impacts during the construction period

The City will file a combined application for Chapter 91 Waterways Permit and 401 Water Quality Certification to MassDEP. In-stream activities will be performed in accordance with permit conditions, including water controls and other protective measures. Per permit approval, polluted sediment will be removed from the river channel, dewatered in an authorized manner on site, and transported off-site for lawful re-use or disposal. Oversight of construction activities will be performed by the project engineer to ensure that no adverse long-term impacts occur as a result of the construction period.

### Ineffective dam removal resulting in unintended impacts to river hydrology, local infrastructure, and flooding

Implementation of dam removal and channel reconstruction per final engineering plans, hydrologic, and hydraulic modeling. Review and approval of said plans and modeling by the DCR Office of Dam Safety and issuance of a Chapter 253 dam permit. Use of dam removal best practices including removing the full vertical extent of the structure, and removing the lateral extent to provide maximum hydrologic transparency.

### Findings:
Based in its review of the MEPA documents, public comments, and with implementation by the Proponent of the mitigation measures described in the attached Table A, all practical means and measures will be taken to avoid or minimize the adverse impacts to the environment related to the Project. MA DCR will include appropriate conditions associated with this Section 61 Finding in the Chapter 253 Dam Permit.

**DEPARTMENT OF CONSERVATION AND RECREATION**

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Section IV.  Response to Comments

The EENF for the proposed Mill Street Dam Removal was noticed in the Environmental Monitor on May 11, 2016 and the Secretary’s Certificate on the EENF was issued on July 29, 2016. The comments received on the EENF are summarized in the Certificate. The Certificate and comment letters are provided in Appendix A. The comments received and responses to these comments are provided below.

1. MEPA

The Certificate specifies a Scope for the SEIR that is “limited to providing additional sediment and hydraulic analysis, identifying additional mitigation measures, responding to comments, and providing draft Section 61 Findings for each State Agency that will issue permits.” The Certificate requests that the following be performed or provided specifically as part of the SEIR (provide verbatim in italics below). Responses from the City and project partners are included for each bullet below.

- “The focus of the Single EIR should be providing additional analysis, sediment and hydraulic analysis to demonstrate that downstream impacts will be minimized.” The City and project partners have revised the sediment management approach for the project to eliminate passive release and downstream redistribution. Therefore, additional sediment and hydraulic analysis to assess impacts of downstream sediment release is not applicable. Downstream impacts will be minimized by the revised sediment management approach of active dredging and removing potentially mobile sediment from the restored river channel. Additional sediment testing will be performed to help identify suitable off-site reuse of disposal locations, and provided as part of the application to MassDEP for 401 Water Quality Certification.

- “The Single EIR should identify any changes and design refinements to the project since filing the EENF.” Project changes are described in Section III.3.

- “The Single EIR should include existing and proposed conditions plans at a legible scale to provide context for the limited Scope and Response to Comments.” A revised project engineering plan set including existing and proposed conditions in provided in Appendix B.

- “The Single EIR should provide a brief description and analysis of applicable statutory and regulatory standards and requirements, and a description of how the project will meet those standards.” Refer to Section III.8.

- “The Single EIR should include a list of required State Agency Permits, Financial Assistance, or other State approvals, as well as any local or federal permitting.” As described in Section III.8., the project requires a Combined Chapter 91 Waterways Permit and 401 Water Quality Certification from MassDEP, a Chapter 253 Dam Alteration Permit from MA DCR Office of Dam Safety, approval of a Pre-Construction Notification under the Massachusetts Section 404 General Permit from the U.S. Army Corps of Engineers, and an Order of Conditions from the City of Pittsfield Conservation Commission. Financial assistance for the project is being provided by DER, the U.S. Fish and Wildlife Service, the National Fish and Wildlife Foundation, the Massachusetts Executive Office of Energy and Environmental Affairs Dam and Seawall Repair or Removal Fund, and the Massachusetts SubCouncil of the Housatonic River Trustee Council as a preferred restoration alternative in the Final Restoration Plan and Supplemental Environmental
Assessment for the first round of funding under the GE/Housatonic Natural Resource Damages settlement.

- "The City should consult with BUAR and the Single EIR should acknowledge the need to prepare a contingency plan in the event that historic or archeological resources are discovered during the construction period." To support the City's efforts to minimize and avoid construction period impacts to historical or archeological resources, DER is under contract with the Public Archeological Laboratory (PAL), Inc. PAL will assist the City and project team to develop a Historic Properties Avoidance and Protection Plan (HPAPP) and perform construction period monitoring. The plan and PAL field oversight will be used during project implementation, and include notification procedures to BUAR in the event that archeological resources are discovered during the construction period.

- "The Single EIR should include a post-construction monitoring plan for assessing the success of the project in restoring river habitat, such as downstream areas that are currently sediment-starved and the revegetated areas upstream of the dam, and the effectiveness of scour control measures to protect infrastructure." The project has been redesigned to eliminate downstream release as a sediment management approach; therefore, an assessment of the downstream beneficial impacts of such sediment release is no longer applicable. Impoundment revegetation will be monitored visually by the City for the contractor performance period, during which watering and success tracking is required. Following the initial successful establishment of vegetation in areas upstream of the dam, no further monitoring is proposed. An as-built plan will be completed by the design engineer following construction to document compliance with the proposed design. The scour countermeasures and any key channel bed or bank features will be surveyed as part of the as-built plan. The design of the scour countermeasures is still in progress and will be completed during final design. One post-construction monitoring survey will be completed in the year following dam removal in order to document any geomorphic changes that occurred within the project area including changes to the proposed scour countermeasures and/or key channel bed or bank features. DER will complete photographic monitoring of the site annually in the years following dam removal. In addition, river temperature and dissolved oxygen levels will be monitored in various locations above, at, and below the dam prior to and following dam removal. DER and UMass Amherst have begun this work and expect to continue the water quality monitoring for at least the first year following dam removal. A comprehensive monitoring report will be developed in the first year following dam removal and supplemented in each of the subsequent years of the required monitoring period. Post-construction monitoring is further described in Section III.9.iii.

- "The Single EIR should provide results and analysis of any additional sediment or soil samples collected since the filing of the EENF. At a minimum, the Single EIR should include sediment transport modeling, risk assessments, and/or additional analysis and sampling of sediment and soil to document potential downstream impacts." No further assessment of potential downstream impacts is planned or proposed given the change in project sediment management approach. By eliminating downstream release as part of the revised sediment management approach, downstream impacts will be minimized. Additional sediment testing is required to finalize permitted landfills to accept the material, and the results will be included in a revised Sediment Management Plan prepared as part of the application to MassDEP for 401 Water Quality Certification.
• "The Single EIR should explore the feasibility of identifying contaminant hot spots in the sediment and soils to be removed from the impoundment for upland disposal to minimize the concentration of these contaminants in the sediment to be passively released." The revised project plans do not include passive sediment release. Therefore, additional hotspot analyses are not required to minimize concentrations of pollutants in sediment to be (no longer) passively released.

• "To the extent feasible, the Single EIR should address the extents to which contaminants that were released in the 2012 drawdown of the dam contributed to background levels." It is not feasible to assess the contribution of the 2012 dam breach to background pollutant concentrations. Available evidence suggests that river sediment already contained elevated pollutant concentrations prior to the breach of the dam low level outlet. For example, sediment testing in the river after the dam breach identified elevated pollutant concentrations upstream of the dam and impoundment. These areas were clearly not affected, and provide evidence of background levels of pollutants already within and moving through the river system. Moreover, prior testing documented significantly elevated pollutant concentrations in the river, just downstream of the dam, in 2009 (Kleinschmidt Associates, under contract to DER). This report was not included in the 2016 EENF due to the age of the data and availability of more recent data. However, it clearly documents elevated pollutant concentrations downstream of the dam, especially PAHs. Decades of sediment testing in the main stem of the Housatonic River downstream of the dam has also documented elevated pollutant concentrations. Assessing the relative contribution of the dam breach and limited sediment release to an already polluted background condition is therefore not feasible.

• "The Single EIR should describe any post-construction monitoring that will be performed to assess the sediment modeling." This comment is not applicable given the change in the project sediment management approach.

• "The Single EIR should include an analysis of alternative dredging techniques, including hydraulic dredging. It should identify the feasibility of available techniques and compare the environmental impacts of each on land alteration, wetlands, and water quality." In 2011, DER commissioned a study by Princeton Hydro, LLC to assess various methods and costs associated with dredging, dewatering, and disposal of polluted sediment. The findings are summarized in Section III.7 and full report is provided in Appendix D.

• The Single EIR should report on the City's progress in obtaining these landowner approvals [i.e. access agreements from adjacent landowners and CSXT] and any potential changes to the project or construction procedures." An access agreement was secured from CSXT to work beneath and around the active railroad bridges in 2017 and 2018 during the subsurface investigation by GSE (see Appendix C). Additional access agreements will be required for construction; DER has an active contract with CSXT to fund their upcoming engineering review and approval process for this project. Potential staging and dewatering locations for the dredged sediment are still under development, and the City expects further coordination with abutters in the period leading up to implementation. In the months ahead, additional details will be developed and provided with the application for 401 Water Quality Certification to MassDEP.
• "The City should consult with the Massachusetts Department of Transportation (MassDOT) regarding the potential need for an approval to demolish the bridge or other construction activities in the railroad right-of-way, such as an approval under M.G.L. Chapter 40, Section 54A." Demolition of the upstream abandoned railroad bridge (ownership unknown) was described in the EENF as part of the project. Given new information on local geology that resulted from the GSE subsurface investigation (2018), and subsequent modeling by the project engineer (MMI), removal of this structure is no longer planned as part of the project. Coordination with CSXT for the active railroad bridges is on-going and a necessary step for future project advancement.

• "According to the EENF, the project may generate significant volumes of demolition debris. The Single EIR should include a disposal plan, including recycling or reusing as much of the material as possible." The most significant source of potential demolition debris was the abandoned upstream railroad bridge. Now that demolition of this structure is not part of the project, the overall amount of demolition debris is expected to be modest. Within dredged sediment, contractors are expected to encounter shopping carts, railroad ties, and other debris visible in the channel now. The dam itself is comprised of granite blocks covered in a concrete cap. Reuse of the granite blocks will be reviewed during final design, and disposal considered unlikely. To test for the presence of potential asbestos containing material (ACM) within and near the dam, DER has contracted with a licensed testing firm. The findings from that assessment will be available in the next several months, and will guide the ultimate disposal plan. A final construction debris management plan will be developed by the City’s selected construction contractor. This plan will be a required technical submittal of the contractor, with review and approval by the project engineer and City.

• "The Single EIR should include a section that summarizes proposed mitigation measures and provides draft Section 61 Findings for each State Agency Action. The Single EIR should contain clear commitments to implement these mitigation measures (including monitoring), estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The Section 61 mitigation measures are described in Section III.10.

• "Reconstruction of the dam to incorporate hydropower would not be consistent with the project purpose, which is to remove a potential hazard and restore the ecological connectivity of the river. Therefore, I am not requiring analysis of this alternative." "In order to ensure that the issues raised by commenters are addressed, the Single EIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the Single EIR beyond what has been expressly identified in this certificate." The response to comments below does not include a discussion about hydropower, which is not part of the project. The MEPA office previously determined that further study of the hydropower alternative was not warranted.

2. Massachusetts Department of Environmental Protection (MassDEP)

• "MassDEP has adequate authority through the 401 WQC permitting process to determine the potential environmental impacts from the project and to ensure that all feasible measures are
taken to avoid, minimize and mitigate any negative impacts, as necessary." The City and partners look forward to working with MassDEP during the 401 WQC permitting process, which will include a full description of the revised sediment management plan for the project.

- "The proponent should implement measures to alleviate dust, noise, and odor nuisance conditions that may occur during the construction and demolition activities. Such measures must comply with the MassDEP's Bureau of Waste Prevention Regulations 310 CMR 7.01, 7.09, and 7.10." The City will require the selected contractor to develop and submit a construction period mitigation plan to address dust, noise, and odor nuisance conditions. The plan will be reviewed and approved by the project engineer and the City.

- "MassDEP believes it is necessary to mitigate the construction-period impacts of diesel emissions to the maximum extent feasible and thus recommends that the project proponent participate in the MassDEP Diesel Retrofit Program. Pursuant to 40 CFR 80.510, all non-road engines shall be operated using only ultra-low sulfur diesel (ULSD) with a sulfur content of 15 ppm." The City will include this requirement in the construction bid documents.

- "The proponent shall properly manage and dispose of all solid waste generated by this proposed project pursuant to 310 CMR 16.00 and 310 CMR 19.000, Including the regulations at 310 CMR 19.017 (waste ban). The BUD regulations at 310 CMR 19.060 establish levels of assessment for four categories of beneficial use. These regulations would be applicable to reuse of any materials generated by this project that would otherwise be considered solid waste." The City appreciates this guidance, and will include these specific citations in the construction bid documents, which will required the selected contractor to develop a construction debris management plan for City and engineer approval.

- "A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential on-site activity releases. In addition, due to the work being conducted in a fishery, the Proponent should specify non-petroleum based lubricants in the construction equipment." The selected contractor will be required to submit, for City and engineer approval, a spill prevention and response plan. Requirements for said plan will be included in the project bid documents.

3. Berkshire Environmental Action Team (BEAT)

- "BEAT strongly supports the removal of the Mill Street Dam and restoration of the West Branch of the Housatonic River. BEAT has worked for more than a decade with many other organizations and hundreds of volunteers to remove trash from the West Branch of the Housatonic River, and the river is much, much cleaner as a result of our continuous efforts." The City and partners are grateful to BEAT for their past and on-going work.

- "Dams do much more than block fish passage. Dams prevent many aquatic organisms from moving up and downstream, but perhaps more importantly dams prevent the nutrients and sediments from moving downstream...By removing the dam, the river's ecosystem will be restored. Areas that were inundated above the dam will become floodplain forest, and the
river below the dam will receive sediment that will, after a year or two, support a riverine foodweb." The City and partners agree.

- "Currently the area surrounding the dam is incredibly dangerous. We stopped holding river cleanups near the dam or canoe trips ending near the dam because of this. The conduit pipe around the dam has always been terrifying, and in 2014 a young person lost their life after being swept into this pipe. In addition, the area across from the old mill building and under the railroad tracks has become a “party spot” with drug and alcohol use evident and an incredible amount of trash. There is also a small, dead end road along the river under the railroad tracks that people use to drive in and dump large amounts of trash, contractor waste, and other debris. Removal of the 1940’s era bridge, leaving the historic bridge, will greatly increase the attractiveness of this area. We hope active use of the area for canoeing will also deter the use of the area for illegal dumping as well as for drug and alcohol. The City and partners agree. Although the abandoned bridge is no longer planned for removal as part of this project, removal of the dam and associated cleanup and restoration of the river channel will greatly improve the appearance and safety of this area.

4. Berkshire Regional Planning Council (BRPC)

- "We are concerned that no site-specific studies have been conducted to determine impacts to aquatic habitat and life for the species living there....BRPC requests that the DER provide to MEPA and the public a summary of the fisheries community below the dam and findings from the literature and from past dam removal sites to demonstrate that a site-specific fisheries impact study is not needed for the Tel-Electric Dam removal project." The project has been revised, and in-stream sediment management (i.e. downstream release) is no longer a part of the proposed project, thereby reducing the short and long term impacts to resident fish. For additional information concerning dam removal and associated responses in river ecosystems, please refer to:
  
  
  

- We are concerned with the apparent lack of financial commitment to the project from the dam owner...We urge the City of Pittsfield and the DER to get a financial commitment from the dam owner that would at a minimum cover the cost of reinforcing and stabilizing the foundation of the mill building that he owns." The City is currently in the process of securing the funding required to implement a safe and effective dam removal project, and considering all potential options with the owner and partners.
• "The City, the Commonwealth and their contractor(s) should be legally held harmless from any damage to the building caused by efforts to remove the dam or to stabilize the structure [the downstream retaining wall on river right and associated Mill Building]." Legal protections and agreements with the owner will be developed as the project nears bidding and implementation phases.

• "At a minimum, if the DEP allows the proponent to remove only 1/3 the total amount of contaminated sediment and allow "passive" release of 6,000 CY of contaminated sediment, it seems prudent to at least require the proponents to selectively remove hot spot areas and areas where contamination concentrations are greatest. While this may entail additional detailed sediment sampling, it is more protective of the downstream environment in the long term." Passive sediment release associated with dam removal is no longer proposed as part of the project.

5. Massachusetts Bureau of Underwater Archeology (BUAR)

• "Based on the results of this review, the Board cannot determine there are no submerged cultural resources in the project area. Therefore, the Board considers this area to be archaeologically sensitive." The City and partners will include notification procedures to BUAR in the upcoming Historic Properties Avoidance and Protection Plan and construction monitoring to be performed by PAL under contract to DER.

6. Citizens for PCB Removal

• "Furthermore, it is easily visibly noted that the retaining wall that is connected to this dam, which is below and part of the structure of the mill building above it is heavily compromised, with a large section missing near the outflow, and many cracks in it along the length of the building’s foundation...To us this is a very big issue and no further work should be done until these issues are hammered out with the site owners, with the majority of the liability/cost of insurance for such falling on them." Safely detaching the dam from the Mill Building prior to removal is an integral part of the engineering design for this project. The project includes measures to help stabilize the mill building features that are in the river and could be affected by higher velocities post dam removal; for example, the downstream retaining wall on river right. The project does not, however, include additional measures to improve the long term condition of the mill building, which would be the responsibility of the building owners.

• "We are very concerned that requests by our sister organization, HEAL, for disclosure of more data from past testing has gone unanswered and unsatisfied. We are also concerned that the level of testing done thus far post outflow failure and release to characterize the current components of contamination and their levels components is inadequate, suspect and subject to further testing." In a series of email communications between DER and HEAL in June 2016, the prior sediment testing (Haley and Aldrich, 2009) that was not included in the EENF (due to age of the data and more recently available studies) was transmitted to HEAL. To address concerns about sediment release worsening downstream conditions, the project has been revised. Downstream sediment release is no longer part of the project approach to sediment management.
Notice of Project Change (NPC) and Single Environmental Impact Report (SEIR)
Mill Street Dam Removal / West Branch Housatonic River Revitalization Project (EEA #15510)

- "This project also does nothing to address flooding issues at Wahconah Park and neighborhoods along the West Branch, and no consideration or funding has been given to moving large critical urban structures such as water and sewer lines to get them out of harm's way of this river in the long term, especially in light of massive storm events that will have no impediment once the dam is gone." This project is not intended to address flooding issues at Wahconah Park and neighborhoods along the West Branch, as the dam itself does not contribute to flooding in those areas. Removal and replacement of water and sewer lines is also not part of the project; protection of those utilities lines by maintaining existing grades and not increasing scour potential was investigated and addressed as part of this project design.

- And lastly, we do not see this area as becoming a "Greenway" park or project without it attracting the same type of criminal element that it currently does. How do you keep one type of person out of such a Greenway, and yet allow others access? How do the neighbors that directly abut this area feel about making this an even more 'public' place? Since this proposed Greenway area dead ends at private, commercial property (Clock Tower Business Park,) how is the City going to police it from becoming a way to trespass on that private property or reverting back to what it already is? The project intends to reduce public safety risks associated the existing dam, and promote rejuvenation of the area. These actions have long been envisioned by the City, including as part of the Urban River Visions Plan for the Westside Riverway (see https://www.cityofpittsfield.org/city_hall/community_development/open_space_program/docs/Westside_Riverway_plan.pdf). These actions jumpstart positive change, but are not a solution to all of the area’s problems. Additional online resources that describe urban trails and public safety include:
  - Is It Safe? Crime and Perceptions of Safety on Urban Trails, a short video that addresses personal safety on trails by visiting three urban pathways that have dealt with these issues head-on and have succeeded in creating trails that are well-used community assets. The video can be viewed on YouTube at https://www.youtube.com/watch?v=TzhF-YsGkvM.

7. Connecticut Department of Energy and Environmental Protection (DEEP)

- "While there may be local benefits to removing the Tel-Electric Dam, the management of contaminated sediments as currently proposed for this project is unacceptable to Connecticut because it will likely result in increased transport of contamination downstream which may ultimately impact Connecticut." The sediment management approach for the project has been revised; in-stream sediment management is no longer proposed as a part of the project. Note: The comments from CT DEEP included additional assertions and questions about the proposed downstream release of sediment as part of this project. Given the change in sediment management approach, these additional comments are not addressed separately herein as they are no longer applicable.

- "Connecticut recommends that natural channel design principles be used to establish the final configuration of the restored river banks and upland areas in order to minimize the potential for erosion and downstream transport of contamination from these areas. This will also have the added benefit of providing a more natural environment for the river at that location." Areas of
channel reconstruction upstream of the dam require the use of planted, boulder revetments to prevent erosion from the predicted increased velocities and scour potential. These areas will also be seeded to enhance habitat value.

8. Housatonic River Commission (HRC)
   • “Allowing an estimated 6,000 cubic yards of contaminated sediment to redistribute downstream is unacceptable. Although the HRC has advocated for the removal of dams, this removal project needs to be managed to prevent more toxic sediments from entering the Housatonic River.” The sediment management approach for the project has been revised; in-stream sediment management is no longer proposed as a part of the project. Note: HRC provided additional comments suggesting additional testing, modeling, and consideration of dredging options. As described previously, the City and partners will be performing additional testing to confirm off-site sediment disposal or reuse locations. Methods of dredging have previously been investigated (see Appendix D), and mechanical excavation will be the preferred approach for a variety of reasons. Additional details including measures to limit short term impacts during sediment removal – such as water diversion and controls – are under engineering development and will be described in the upcoming application to MassDEP for 401 Water Quality Certification.

9. Housatonic River Initiative (HRI) and Housatonic Environmental Action League (HEAL)
   • “On the basis of existing sampling data, a comprehensive Environmental Impact Report must be conducted. The current sampling indicates concentrations of contaminants, especially PAHs, is too high to allow these contaminated sediments to move down river after dam removal.” The sediment management approach for the project has been revised; in-stream sediment management is no longer proposed as a part of the project. Note: The comments letter included additional discussion about the risks of PAHs to aquatic organisms and human health, which are not responded to separately here, given the change in project sediment management approach.

10. Housatonic Valley Association (HVA)
    • “HVA also strongly supports the removal of this dam, and look forward to the revitalization and restoration of the West Branch of the Housatonic River.” The City and partners appreciate the work and support of HVA to improve the river and public access to it.

11. Kathy Kessler
    • “At this time it is more urgent to take this single opportunity to restore the river ecology and connect sections of the developing greenway in the Pittsfield area, to enhance the quality of life for local residents and to support and encourage appreciation for the fragile and important natural resources that organizations like BEAT and others have worked for decades to protect and restore...Removing the Mill Street Dam will help accomplish all of those things in a cost effective and timely way.” The City and partners agree and appreciate the support.
12. **Ken Egnaczak** – Mr. Egnaczak’s comments focused on hydropower development of the site, which is not a project alternative considered. The City has been directed by MEPA that responses to hydropower issues raised in comment letters are not required as part of this SEIR.

13. **Massachusetts Department of Conservation and Recreation (DCR)**

   - “The Project aims to restore river connectivity, improve water quality, restore passage of aquatic organisms, and restore floodplains and riparian wetlands. The removal of the Mill Street dam is also removing a known public safety hazard. The DCR supports this dam removal project as it benefits the environment, public safety, and public recreation.” The City and partners agree and appreciate the support of DCR on this project.

14. **Mass Audubon**

   - “Mass Audubon supports the proposed removal of the Tel-Electric Dam on the West Branch of the Housatonic River in Pittsfield.”
   - “The dam removal project will improve public safety, riverine habitat and connectivity, and water quality. In addition to the removal of the barrier imposed by the dam, and restoring the impoundment to a free-flowing stream, the project will involve removal of accumulated trash, debris and sediment.” The City and partners agree and appreciate the support of Mass Audubon on this project.

15. **Mass Wildlife** – Provided comments to support the requested Waiver of the Mandatory EIR. No City response required.

16. **Massachusetts Historical Commission (MHC)**

   - “The MHC will review the project under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), and looks forward to consultation and a determination of effect by the lead federal agency (36 CFR 800.2(a)(2) for the project.” The U.S. Fish and Wildlife Service (USFWS) is the Lead Federal Agency for the project. The City and partners look forward to working with USFWS and MHC during the Section 106 process.

   - “In the MHC's staff opinion, the project could be developed to have no adverse effect (3 6 CFR 800 .5(b ); 950 CMR 71.07(2)(b)(2)) on significant historic properties provided that the following condition is met: the development and implementation of a historic properties avoidance and protection plan for the Conrail Bridge (PIT.911; EENF RR Br. #3), B&M Railroad Bridge (PIT.909; EENF RR Br. #2) and the West Street Bridge (PIT. 917).” The City and partners are currently working to develop a Historic Properties Avoidance and Protection Plan (HPAPP), as described.
Appendix A

Secretary's Certificate and Comment Letters

Available for download here: https://app.box.com/v/Pittsfield
Appendix B

Revised Project Engineering Plans
(Milone and MacBroom, Inc., 2018)

Available for download here: https://app.box.com/v/Pittsfield
Appendix C

Subsurface Investigation of Upstream Railroad Bridges
(Gomez and Sullivan Engineers, June 2018)

Available for download here: https://app.box.com/v/Pittsfield
Appendix D

Sediment Management Evaluation (Alternatives and Costs)
(Princeton Hydro, June 2011)

Available for download here: https://app.box.com/v/Pittsfield
Appendix E

Previously Submitted Project Plans
(Princeton Hydro, March 2016)

Available for download here: https://app.box.com/v/Pittsfield
Appendix F

Site Locus / USGS Topographic Map

Available for download here: https://app.box.com/v/Pittsfield
Appendix G

NPC / SEIR Circulation List

Available for download here: https://app.box.com/v/Pittsfield