

FEDERAL ENERGY REGULATORY COMMISSION

Washington, DC 20426

September 27, 2018

OFFICE OF ENERGY PROJECTS

Project No. 2790-072 – Massachusetts
Lowell Hydroelectric Project
Boott Hydropower, LLC

**Subject: Scoping Document 2 for the Lowell Hydroelectric Project,
P-2790-072**

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by Boott Hydropower, LLC (Boott) for relicensing the Lowell Hydroelectric Project (FERC No. 2790). The project is located on the Merrimack River in Middlesex County, Massachusetts and Hillsborough County, New Hampshire. The project does not occupy lands of the United States.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff intends to prepare an environmental assessment (EA), which will be used by the Commission to determine whether, and under what conditions, to issue a license for the project. To support and assist our environmental review, we have conducted a public scoping process to ensure that all pertinent issues are identified and analyzed, and that the EA is thorough and balanced.

Our preliminary review of the environmental issues to be addressed in our EA was contained in Scoping Document 1 (SD1), which was issued on June 15, 2018. We requested comments on SD1 and held scoping meetings on July 17, 2018, to hear the views of all interested entities on the scope of issues to be included in the EA. We revised SD1 based on the oral comments we received at the scoping meetings, and written comments we received throughout the scoping process. The enclosed Scoping Document 2 (SD2) describes the proposed action and alternatives, the environmental analysis process we will follow to prepare the EA, and a revised list of issues to be addressed in the EA.

Project No. 2790-072

2

We appreciate the participation of government agencies, non-governmental organizations, Indian tribes, and the general public in the scoping process. ***Key changes from SD1 are identified in bold, italicized type.*** SD2 is being distributed to all entities on the Commission's mailing list for this project. SD2 can also be accessed online at: <http://www.ferc.gov/docs-filing/elibrary>.

The enclosed SD2 supersedes the June 15, 2018 SD1. SD2 is issued for informational use by all interested entities; no response is required. If you have any questions about SD2, the scoping process, or how Commission staff will develop the EA for this project, please contact Steve Kartalia at (202) 502-6131 or stephen.kartalia@ferc.gov. Additional information about the Commission's licensing process and the Lowell Hydroelectric Project may be obtained from our website, <http://www.ferc.gov>.

Enclosure: Scoping Document 2

SCOPING DOCUMENT 2
LOWELL HYDROELECTRIC PROJECT
MASSACHUSETTS
FERC PROJECT NO. 2790-072



Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Licensing
Washington, DC

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TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.1 PURPOSES OF SCOPING	4
2.2 COMMENTS, SCOPING MEETINGS, AND ENVIRONMENTAL SITE REVIEW	4
2.2.1 Issues Raised During Scoping	5
3.0 PROPOSED ACTION AND ALTERNATIVES.....	11
3.1 NO-ACTION ALTERNATIVE	11
3.1.1 Existing Project Facilities	11
3.1.2 Existing Project Operation	17
3.2 APPLICANT’S PROPOSAL	17
3.2.1 Proposed Project Facilities and Operation	17
3.2.2 Proposed Environmental Measures	17
3.3 DAM SAFETY.....	17
3.4 ALTERNATIVES TO THE PROPOSED ACTION	17
3.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY	17
3.5.1 Decommissioning	18
4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES.....	18
4.1 CUMULATIVE EFFECTS	18
4.1.1 Resources that could be Cumulatively Affected.....	18
4.1.2 Geographic Scope	18
4.1.3 Temporal Scope	19
4.2 RESOURCE ISSUES.....	19
4.2.1 Aquatic Resources.....	19
4.2.2 Terrestrial Resources.....	20
4.2.3 Threatened and Endangered Species	20
4.2.4 Recreation, Land Use, and Aesthetic Resources	20
4.2.5 Cultural Resources	21
4.2.6 Developmental Resources.....	21
5.0 PROPOSED STUDIES	21
6.0 EA PREPARATION	21
7.0 PROPOSED EA OUTLINE	22
8.0 COMPREHENSIVE PLANS.....	23

9.0 MAILING LIST 28

APPENDIX A—PROCESS PLAN AND SCHEDULE

LIST OF FIGURES

Figure 1. Location of the Lowell Hydroelectric Project and selected other FERC-licensed hydroelectric projects in the Merrimack Watershed (Source: Staff). 3
Figure 2. Plan View of Project Facilities (Source: Boott Hydropower, LLC). 166

SCOPING DOCUMENT 2

Lowell Hydroelectric Project No. 2790-072

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),¹ may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On April 30, 2018, Boott Hydropower, LLC (Boott) filed a notice of intent (NOI) stating that it intends to file an application for a new license for the Lowell Hydroelectric Project (project).²

The Lowell Hydroelectric Project is located on the Merrimack River in Middlesex County, Massachusetts and Hillsborough County, New Hampshire. The Project consists of the Pawtucket Dam on the Merrimack River and the Northern and Pawtucket Canal System that includes several small dams and gatehouses in the town of Lowell, Massachusetts. The project has a total installed capacity of 22.463 megawatts (MW).³ The total average annual generation of the Lowell Hydroelectric Project from 2008 to 2017 was 84,501 megawatt-hours. A detailed description of the project is provided in section 3.0 (Proposed Action and Alternatives). The location of the project is shown on Figure 1. The Lowell Hydroelectric Project does not occupy lands of the United States.

The National Environmental Policy Act (NEPA) of 1969,⁴ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of licensing the Lowell Hydroelectric Project as proposed, and also

¹ 16 U.S.C. § 791(a)-825(r) (2012).

² The current license for the project was issued with an effective date of May 1, 1973, for a term of 50 years, and expires on April 30, 2023. *Boott Mills and Proprietors of the Locks and Canals on Merrimack River*, 23 FERC ¶ 62,043 (1983).

³ On March 16, 2017, Boott filed an application with the Commission to amend the existing license by removing four generating units from the Bridge Street Power Station, and reduce the authorized generating capacity from 24.823 MW to 22.463 MW. On July 19, 2018, the Commission issued an order amending the license and approving the removal of the four generating units from the Bridge Street Power Station. *Boott Hydropower, Inc., and Eldred L. Field Hydroelectric Facility Trust*, 164 FERC ¶ 62,035 (2018).

⁴ 42 U.S.C. §§ 4321-4370(f) (2012).

consider reasonable alternatives to the proposed action. At this time, we intend to prepare an environmental assessment (EA) that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives.

Although our current intent is to prepare an EA, there is a possibility that an environmental impact statement (EIS) will be required. The scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

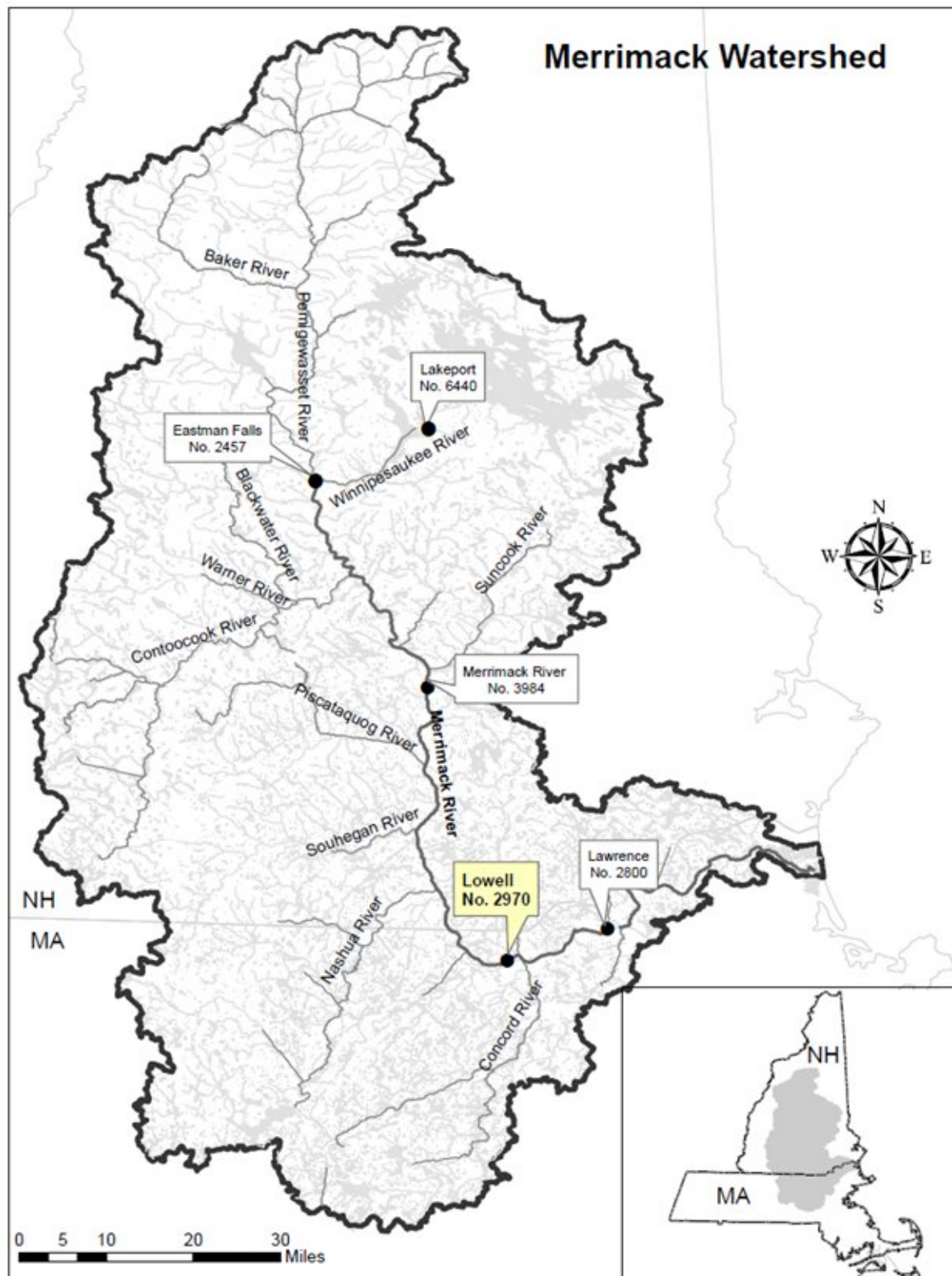


Figure 1: Location of the Lowell Hydroelectric Project and selected other FERC-licensed hydroelectric projects in the Merrimack Watershed (Source: Staff).

2.0 SCOPING

This Scoping Document 2 (SD2) is intended to advise all participants as to the proposed scope of the EA. This document contains: (1) a description of the scoping process and schedule for the preparation of the license application; (2) a description of the proposed action and alternatives; (3) a preliminary identification of environmental issues and proposed studies; (4) a proposed EA outline; and (5) a preliminary list of comprehensive plans that are applicable to the project.

2.1 PURPOSES OF SCOPING

Scoping is the process used to identify issues, concerns, and opportunities for enhancement or mitigation associated with a proposed action. In general, scoping should be conducted during the early planning stages of a project. The purposes of the scoping process are as follows:

- invite participation of federal, state, and local resource agencies; Indian tribes; non-governmental organizations (NGOs); and the public to identify significant environmental and socioeconomic issues related to the proposed project;
- determine the resource issues, depth of analysis, and significance of issues to be addressed in the EA;
- identify how the project would or would not contribute to cumulative effects in the project area;
- identify reasonable alternatives to the proposed action that should be evaluated in the EA;
- solicit from participants available information on the resources at issue, including existing information and study needs; and
- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

2.2 COMMENTS, SCOPING MEETINGS, AND ENVIRONMENTAL SITE REVIEW

Commission staff issued SD1 on June 15, 2018. On July 17, 2018, staff conducted scoping meetings in Lowell, Massachusetts. Public notice of the meetings was published in the Federal Register. A court reporter recorded and transcribed both of the scoping meetings. On July 18, 2018, staff conducted an environmental site review of the project.

In addition to the oral comments received during the scoping meetings, written comments were received from the following agencies and entities:⁵

<u>Commenting Entity</u>	<u>Filing Date</u>
American Whitewater	August 8, 2018
Massachusetts Division of Fisheries and Wildlife	August 10, 2018
New Hampshire Fish and Game Department	August 13, 2018
National Marine Fisheries Service	August 14, 2018
U.S. Department of the Interior ⁶	August 14, 2018

All comments received are part of the Commission's official record for the project. Information in the official file is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street, NE, Room 2A, Washington, DC 20426, or by calling (202) 502-8371. Information also may be accessed through the Commission's eLibrary system using the "Documents and Filings" link on the Commission's webpage at <http://www.ferc.gov>. Call (202) 502-6652 for assistance.

2.2.1 Issues Raised During Scoping

The issues raised by participants in the scoping process are summarized and addressed below. The comments received at the scoping meetings are similar to the written comments submitted to the Commission. Note that the primary purpose of SD2 is to identify issues to be analyzed in the EA. The summaries below do not account for every oral and written comment made during the scoping process. We revised SD1 to address comments relating directly to scoping and the items listed in section 2.1 of this document. We do not address comments that are recommendations for license conditions, such as protection, mitigation, and enhancement (PM&E) measures, as these comments will be addressed in the EA or any license order that is issued for this project. We will request final terms, conditions, recommendations, and comments when we issue our Ready for Environmental Analysis notice, following the filing of the license application. Finally, we do not address comments or recommendations that are administrative in nature, such as requests for changes to the mailing lists. Those items will be addressed separately.

Key changes from SD1 are identified below in *bold, italic type*.

⁵ The Massachusetts Department of Conservation and Recreation submitted comments on August 15, 2018, following the August 14, 2018 deadline established in SD1.

⁶ The U.S. Department of Interior's comments include contributions from the U.S. Fish and Wildlife Service and the National Park Service.

Project Decommissioning

Comment: The U.S. Fish and Wildlife Service (FWS) disagrees with Commission staff's proposal in SD1 to eliminate project decommissioning from detailed study in the EA. FWS states that Commission staff did not supply supporting information to justify its statement that there would be significant costs involved with decommissioning the project and/or removing any project facilities. FWS states that studies conducted as part of the relicensing process could identify impacts that either cannot be mitigated or would be prohibitively expensive to mitigate. Interior also states that there might not be a net loss of regional energy production if the project is decommissioned, given the substantial increase in the number of proposed renewable energy projects in the region.

Response: Prior to conducting a detailed decommissioning analysis, the Commission waits until a licensee actually proposes to decommission a project, or a participant in a licensing proceeding demonstrates, with supporting evidence, that there are serious resource concerns that cannot be mitigated if the project is licensed.⁷ Here, the potential license applicant has filed a notice of intent to seek a license for the project and there is currently no evidence of a serious resource concern that cannot be mitigated with license terms and conditions. Therefore, at this time, we do not consider project decommissioning to be a reasonable alternative to licensing the project with appropriate environmental enhancement measures. Based on FWS's comments, we revised section 3.5.1 (*Decommissioning*) to clarify that ***no participant has recommended project retirement, there are no critical resource concerns, and we have no basis for recommending project retirement at this time.***

Costs associated with retiring a project's powerhouse and appurtenant facilities could be significant, regardless of whether or not project retirement involves dam removal. Project retirement without dam removal would involve retaining the dam and disabling or removing equipment used to generate power. Removing the dam would be more costly than retiring it in place, and removal could have substantial, negative environmental effects. We revised section 3.5.1 (*Decommissioning*) to clarify that there ***could*** be significant costs involved with decommissioning the project and/or removing any project facilities.

Project Effects on Flooding

Comment: Several commenters expressed concern about the project's effects on flooding in the city of Lowell, particularly in the Clay Pit Brook area of the

⁷ See, generally, Project Decommissioning at Relicensing; Policy Statement, FERC Stats. & Regs., Regulations Preambles (1991-1996), ¶ 31,011 (1994).

Pawtucketville neighborhood, located upstream of the Pawtucket Dam. One commenter stated that flooding could affect property values in the Pawtucketville neighborhood. Another commenter provided Commission staff with a copy of an August 18, 2015 Clay Pit Brook Backwater Study that was conducted by the city of Lowell. The Backwater Study analyzes the impact of flooding on the Clay Pit Brook area and the surrounding Pawtucketville neighborhood. On July 24, 2018, Commission staff submitted the Backwater Study to the public record for the project.

Response: *We added a bullet under section 4.2.1 (Aquatic Resources) to include operation-related flooding effects along the shoreline of the impoundment and surrounding areas.* We also note that the licensee is in the process of installing a 5-foot-high pneumatic crest-gate system to, *inter alia*, help alleviate upstream backwater and flooding effects. Installation of the pneumatic crest-gate system was approved by the Commission on April 18, 2013 through an amendment of the existing license,⁸ which included consultation with state and local agencies, and members of the public in a separate NEPA process. Installation of the pneumatic crest-gate system began on April 18, 2015, with a scheduled completion date of mid-2019.

Comment: Several commenters asked Commission staff to consider holding additional scoping meetings in the Pawtucketville neighborhood or another location in Lowell to discuss flooding and other issues of concern to the local community.

Response: We initiated the scoping process for the project on June 15, 2018 to identify pertinent issues related to the environmental analysis of the project. SD1 solicited comments and suggestions on Commission staff's preliminary list of issues and alternatives to be addressed in the EA. The public scoping meetings held on July 17, 2018 were noticed in the Federal Register, published in the local newspaper, and held at an easily accessible site in close proximity to the project. All interested agencies, Indian tribes, non-governmental organizations, and individuals were invited to attend one or all of these meetings. For interested stakeholders that could not attend the meetings, transcripts of the meetings were posted to the Commission's website on August 23, 2018, and are available at the following link: <http://www.ferc.gov/docs-filing/elibrary>.

Going forward, there are numerous opportunities for stakeholders to continue to participate in the relicensing process and provide input on the type and scope of studies; study results; recommended protection, mitigation, and enhancement measures; and Commission staff's environmental analysis. The process plan in Appendix A lists the upcoming opportunities for stakeholder input and their respective dates. Section 9.0, *Mailing List*, also provides information on how to receive future mailings for the project

⁸ *Boott Hydropower, Inc., and Eldred L. Field Hydroelectric Facility Trust*, 143 FERC ¶ 61,048 (2013).

and notifications of new filings and issuances related to the project.

Given the early stage of the relicensing process and the additional opportunities for stakeholders to participate in the process, we do not plan on holding additional on-site public scoping meetings at this time.

Aquatic Resources

Comment: FWS and NMFS recommend that the geographic scope of the Commission’s cumulative effects analysis extend from Eastman Falls Dam (FERC Project No. 2457) on the Pemigewasset River and Lake Winnepesaukee on the Winnepesaukee River, downstream to the Atlantic Ocean. FWS states that this geographic scope represents the extent to which river herring and American eel are managed in the basin.⁹

Response: In SD1, Commission staff identified the geographic scope for migratory fisheries to include the Merrimack River from its origin in Franklin, New Hampshire at the confluence of the Winnepesaukee and Pemigewasset Rivers until it enters the Atlantic Ocean. The Eastman Falls Dam (at river mile 1 of the Pemigewasset River) and the Lakeport Dam (at river mile 17 of the Winnepesaukee River, and 4 miles downstream from the outlet of Lake Winnepesaukee) are more appropriate upstream boundaries for the migratory fisheries analysis than the confluence of the two rivers because the confluence does not actually represent a migration barrier. The Eastman Falls and Lakeport Dams represent the upstream limits to which river herring and American eel are managed within the river basin. ***Accordingly, we modified the geographic scope for the cumulative effects analysis of migratory fish in section 4.1.2 to state that the geographic scope for migratory fisheries includes the Pemigewasset River from the Eastman Falls Dam and the Winnepesaukee River from the Lakeport Dam, to the confluence of the Winnepesaukee and Pemigewasset Rivers (which form the Merrimack River), and the Merrimack River downstream to the Atlantic Ocean.***

⁹ In the context of its recommendation to broaden the geographic scope of the cumulative effects analysis, FWS referenced “impacts to cumulatively affected fishery, water quantity, and water quality resources.” In SD1, Commission staff identified migratory fisheries as a resource that could be cumulatively affected by the project, and did not include water quantity or water quality as resources that could be cumulatively affected. FWS did not provide any additional information or justification for including water quantity or water quality as cumulatively affected resources, and no other parties have suggested that these resources could be cumulatively affected by the project. We have no basis for modifying the proposed scope of the cumulative effects analysis to include water quantity and water quality at this time.

Comment: FWS states that Commission staff’s analysis of the “effects of turbine entrainment should not be limited to fish, but should include impacts to food web interactions and overall ecosystem productivity.”

Response: FWS does not provide sufficient detail for its recommendation to analyze food web interactions and overall ecosystem productivity, including the basis and scope of its recommendation. In SD1, staff listed several aquatic resource issues that would be addressed in the EA, including the effects of continued project operation on streamflow, water quality, resident and migratory fisheries resources, the aquatic macroinvertebrate community, and fish passage. These analyses will include an assessment of the effects of turbine entrainment on fisheries resources and the effects of the project on the broader aquatic community. Commission staff will attempt to evaluate all ongoing and potential project effects to the aquatic community, to the extent that information exists to do so. Therefore, no change to SD2 appears to be needed at this time.

Comment: FWS, NMFS, and Massachusetts Division of Fisheries and Wildlife state that the existing upstream and downstream fish passage facilities at the project are not efficient at passing fish. FWS sought clarification at the scoping meeting that, in addition to evaluating the effectiveness of the existing project fishways, possible new or modified fishways would also be considered in the EA.

Response: In SD1, staff stated that the EA would address the effects of continued project operation on resident and migratory fisheries resources in the impoundment, canal system, bypassed reach, and Merrimack River. In addition, staff stated that the EA would address the effectiveness of the existing fish passage facilities at passing migratory fish, including American shad, river herring, and American eel. These analyses are the first step in addressing issues related to fish passage at the project. After establishing the baseline conditions at the project, the EA will evaluate the need for additional measures at the project, including new or modified fishways. ***We modified the bullet related to fish passage in section 4.2.1 to make it more comprehensive by stating that the EA will address the effects of continued project operation on fish passage for migratory species, including American shad, river herring, and American eel.***

Terrestrial Resources

Comment: During the scoping meeting, Mr. Kennedy requested that the environmental analysis account for bald eagle nesting in the project vicinity.

Response: Staff stated in section 4.2.2 (*Terrestrial Resources*) of SD1 that the EA would address the effects of continued project operation, including maintenance activities (e.g., vegetation management) on wildlife habitat and associated wildlife. The species raised by Mr. Kennedy will be addressed in the EA, and no change to SD2 is needed.

Recreation, Land Use, and Aesthetic Resources

Comment: During the scoping meeting, Mr. Tamaro, representing American Whitewater, requested that the environmental analysis address recreational access to the river below the Pawtucket Dam. American Whitewater states that there is extremely limited recreation access to the bypassed reach below the Pawtucket Dam and that no portage routes exist around the Pawtucket Dam to allow boaters to navigate the Merrimack River through the project boundary. American Whitewater also states that current project operation disrupts the natural flow regime in the bypassed reach, which eliminates the possibility for boating in the natural river channel and impacts opportunities for angling

Response: Staff stated in section 4.2.4 (*Recreation, Land Use, and Aesthetic Resources*) of SD1 that the EA would address the effects of project operation on recreational use in the project area, including the adequacy of existing recreational access, and the adequacy and capacity of existing recreational facilities. The issues raised by American Whitewater will therefore be addressed in the EA, and no change to SD2 is needed.

Comment: Massachusetts Department of Conservation and Recreation (Massachusetts DCR) states that ongoing operation of the Pawtucket Dam could potentially affect water levels at the Rynne Bathhouse and the Rourke Brothers Boat Ramp (located upstream of the dam) during the prime recreational season (late May through early October). Massachusetts DCR states that certain structures and landscaping areas that are owned by Massachusetts DCR have been adversely impacted by heavy machinery that is being used to conduct project activities, including Massachusetts DCR's Gatekeeper's House, Barn, and Blacksmith Shop.

Response: In SD1, staff stated in section 4.2.4 (*Recreation, Land Use, and Aesthetic Resources*) that the EA would address the effects of continued project operation on recreational use and land use in the project area. Therefore, no change to SD2 is needed.

Comment: NPS states that one of the top public complaints regarding aesthetics relates to the presence of trash and the overgrowth of vegetation that collects additional trash. During the scoping meeting, staff from the Lowell National Historical Park stated that the city of Lowell and the Lowell National Historic Park receive frequent requests regarding the need for trash removal.

Response: In SD1, staff stated in section 4.2.4 (*Recreation, Land Use, and Aesthetic Resources*) that the EA would address the effects of continued project operation on land use and aesthetic resources in the project area. Therefore, no change to SD2 is needed.

Cultural Resources

Comment: NPS states that several cultural resources are in need of repair at the project, including: (1) the Great River Wall, which may be affected by vegetation management, water levels, and other factors related to Boott's operation; (2) gate repairs at the Hydro Locks (referred to in PAD as Northern Gatehouse Canal House); (3) damages to the Northern Canal Waste Gatehouse (referred to in PAD as Pawtucket Gatehouse); associated with the water level in the Northern Canal; (4) Moody Street Feeder Gatehouse Gate, which includes a hole that was cut by Boott; (5) the Lower Locks Fill Valve that is owned by Boott and necessary to operate the Lower Locks (referred to in PAD as Lower Locks and Dam); (6) the Hall Street and Lawrence Dams; and (7) gates in the Western Canal that are needed to isolate water levels within the system. During the scoping meeting, staff from the Lowell Historic Board stated that the Great River Wall of the Northern Canal is leaking in various places.

Response: In SD1, staff indicated in section 4.2.5 (*Cultural Resources*) that we would address the effects of continued project operation and maintenance on historic resources that are included or may be eligible for inclusion in the National Register of Historic Places. Therefore, no change to SD2 is needed.

3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA, the environmental analysis will consider the following alternatives, at a minimum: (1) the no-action alternative, (2) the applicant's proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the Lowell Hydroelectric Project would continue to operate as required by the current project license (*i.e.*, there would be no change to the existing environment). No new environmental protection, mitigation, or enhancement measures would be implemented. We use this alternative to establish baseline environmental conditions for comparison with other alternatives.

3.1.1 Existing Project Facilities

The existing Lowell Project consists of: (1) the 1,093-foot-long, 15-foot-high Pawtucket Dam; (2) a 720-acre impoundment with a normal maximum water surface elevation of 92.2 feet National Geodetic Vertical Datum of 1929 (NGVD); (3) the 5.5-mile-long Northern and Pawtucket Canal System that includes several small dams and gatehouses; (4) generating facilities, including: (a) one powerhouse facility located on the mainstem of the Merrimack River (E. L. Field Powerhouse), with a total authorized installed capacity of 17.3 MW and a 1,000-foot-long tailrace to the Merrimack River; and

(b) four power stations located in the Northern and Pawtucket Canal System (Hamilton Power Station, Assets Power Station, Bridge Street Power Station, and John Street Power Station), with a total combined authorized capacity of **5.2 MW**; (5) a 4.5-mile-long, 13.8-kilovolt transmission line that connects the project generating facilities to the regional electric grid; (6) upstream and downstream fish passage facilities; (7) a visitor center; and (8) appurtenant facilities.

The project bypasses approximately two miles of the Merrimack River, including a 0.7-mile-long bypassed reach from the Pawtucket Dam to the E.L. Field Powerhouse tailrace and an approximately 1.3-mile-long bypassed reach from the E.L. Field Powerhouse tailrace to the confluence of the Merrimack and Concord Rivers.

A detailed description of the project facilities is presented below and shown on Figure 2.

Pawtucket Dam and Impoundment

The 1,093-foot-long, 15-foot-high Pawtucket Dam includes a 980.5-foot-long spillway crest length that is mounted with a pneumatically-operated crest gate system. The crest gate system consists of 20-foot-long steel panels supported on their downstream side by tubular rubber air bladders. A fishway ladder is located on the northern end of the Pawtucket Dam and the intake structure for the Northern Canal is located at the southern end of the Pawtucket Dam.

The 720-acre impoundment formed by the Pawtucket Dam extends approximately 23 miles upstream from the Pawtucket Dam, and has a gross storage capacity of approximately 3,600 feet between the maximum normal water surface elevation of 92.2 feet NGVD and the minimum water surface elevation of 87.2 feet NGVD when all five pneumatic gates are fully lowered.

Northern and Pawtucket Canal System

The 5.5-mile-long Northern and Pawtucket Canal System includes the principal Northern and Pawtucket Canals that feed several smaller canals. Water entering the Northern Canal passes through the Pawtucket Gatehouse that abuts the Pawtucket Dam and includes ten, 8-foot-wide, 15-foot-high timber sliding gates and a small navigation lock used for tour boats. Water flows approximately 2,200 feet through the Northern Canal to the Northern Canal Gatehouse, which is used to maintain the water elevation in the canal for the E.L. Field Powerhouse. A boat navigation lock is also located at the Northern Canal gatehouse. From the Northern Canal Gatehouse, the Northern Canal continues for approximately 2,050 feet to the Tremont Gatehouse, which includes two 9-foot-wide gates that control flow to the 600-foot-long, 30-foot-wide Tremont Wasteway. The Tremont Wasteway forms a passage between the Northern Canal and the Hall Street Dam. The Hall Street Dam is an approximately 115-foot-long, 15-foot-high rubble

masonry dam that is fitted with 1.5-foot-high flashboards. From the Hall Street Dam, water passes immediately downstream to the approximately 100-foot-long, 12-foot-high rock-filled, timber-crib Lawrence Dam. The Lawrence Dam is located at the head of the Lawrence Wasteway, which passes water back into the Merrimack River. A small feeder canal also enters just upstream of the Lawrence Dam.

The Pawtucket Canal stems directly from the Merrimack River, upstream from the Pawtucket Dam and the Northern Canal. Water from the Merrimack River flows through the Pawtucket Canal for approximately 1,700 feet until it reach a historic flood protection complex known as the Guard Locks and Gates facility, which consists of a five-bay gatehouse and an adjacent boat navigation lock. From the Guard Locks and Gates facility, water flows for approximately 4,500 feet to a point where the Pawtucket Canal diverges into the Western Canal, Merrimack Canal, Lower Pawtucket Canal, and the Hamilton Canal.

The Western Canal carries flows from the Pawtucket Canal to the Tremont Wasteway, before emptying into the Merrimack River. The Moody Street Feeder Canal also provides flows from the Western Canal to the Merrimack Canal.

Flow to the Merrimack Canal from the Pawtucket Canal is controlled by the 9-foot-high, concrete Merrimack Gate Dam that includes a 10-foot-wide, 6-foot-high timber gate. The 62.5-foot-long, 22.5-foot-wide Moody Street Feeder Gatehouse controls flows from the Moody Street Feeder Canal to the Merrimack Canal. Two consecutive dam structures occur downstream of the Moody Street Feeder Gatehouse on the Merrimack Canal, including the 8-foot-high Merrimack Dam and the 19-foot-high Rolling Dam. At this point, the Merrimack Canal flows into the Merrimack Wasteway, which flows into the Merrimack River.

Flow to the Lower Pawtucket Canal from the Pawtucket Canal is controlled by the 15-foot-high Swamp Locks and Dam structure that includes a two-chamber boat navigation lock and sluiceway. The Assets Power Station and the Hamilton Power Station also discharge into the Lower Pawtucket Canal. Further downstream, the Lower Pawtucket Canal turns into the Eastern Canal at the 12-foot-high Lower Locks and Dam structure, which houses a two-chamber boat navigation lock and a gated sluiceway. The Eastern Canal provides flows to the John Street and Bridge Street Power Stations, and includes the 7-foot-high Boott Dam. Downstream of the Lower Locks and Dam, the Lower Pawtucket Canal discharges into the Concord River before the Concord River joins the Merrimack River.

The Hamilton Canal provides flows to the Hamilton Power Station.

Generating Facilities

The E.L. Field Powerhouse, which is located downstream of the Pawtucket

Gatehouse in the Northern Canal, receives flows from the Northern Canal and discharges into the Merrimack River. The 109-foot-long by 96-foot-wide reinforced concrete powerhouse contains two horizontal Kaplan turbine-generator units with a total authorized capacity of 17.3 MW.

The Hamilton Power Station, which is located in a non-project mill building adjacent to the Hamilton Canal, receives flows from the Hamilton Canal and discharges into the Lower Pawtucket Canal. The Hamilton Power Station contains five Leffel single runner turbine-generator units with a total authorized capacity of 1.18 MW.

The Assets Power Station, which is located in a non-project mill building adjacent to the Lower Pawtucket Canal, receives flows from the Merrimack Canal and discharges into the Lower Pawtucket Canal. The Assets Power Station contains three Hercules double runner turbine-generator units with a total authorized capacity of 0.795 MW.

The Bridge Street Power Station, which is located in a non-project mill building adjacent to the Concord River, receives flows from the Eastern Canal and discharges into the Merrimack and Concord Rivers. ***The Bridge Street Power Station contains three Hercules single runner turbine-generator units with a total authorized capacity of 1.08 MW.***

The John Street Power Station, which is located in a non-project mill building adjacent to the Merrimack River, receives flows from the Eastern Canal and discharges into the Merrimack River. The John Street Power Station contains three Leffel single runner turbine-generator unit and an Allis Chalmers Single Runner turbine-generator unit with a total authorized capacity of 2.1 MW.

Fish Passage Facilities

Fish passage facilities include an upstream and downstream fishway at the E.L. Field Powerhouse, and an upstream fishway at the Pawtucket Dam.

The fish elevator at the powerhouse has a design discharge capacity of 200 cubic feet per second (cfs). Fish migrating upstream through the tailrace channel enter a collection gallery, where they are attracted to a crowding pool and then into the elevator. Once in the elevator, fish are lifted in a hopper to the exit channel. Fish then pass from the exit channel to the Northern Canal, where they swim upstream until they rejoin the Merrimack River upstream of Pawtucket Dam. The fish elevator system includes areas where fish can be counted or trapped before swimming from the exit channel to the Northern Canal.

The downstream fishway at the powerhouse consists of an adjustable-flow sluiceway and bypass adjacent to the powerhouse intake. Downstream migrating fish

entering the bypass are sluiced into a plunge pool located in the bypassed reach, next to the powerhouse.

The fish ladder at the Pawtucket Dam is designed for river flows up to 25,000 cfs, and has an operating flow of 500 cfs (including fish attraction flow). The fish ladder is a vertical-slot design with 13-foot-wide by 10-foot-long pools. A counting station and fish trap area are also provided at the upstream passage facility.

Recreation Facilities:

Boott operates and maintains the visitor center at the E.L. Field Powerhouse. The visitor center offers a view of the turbines and an interpretive display providing information about the project and the area.

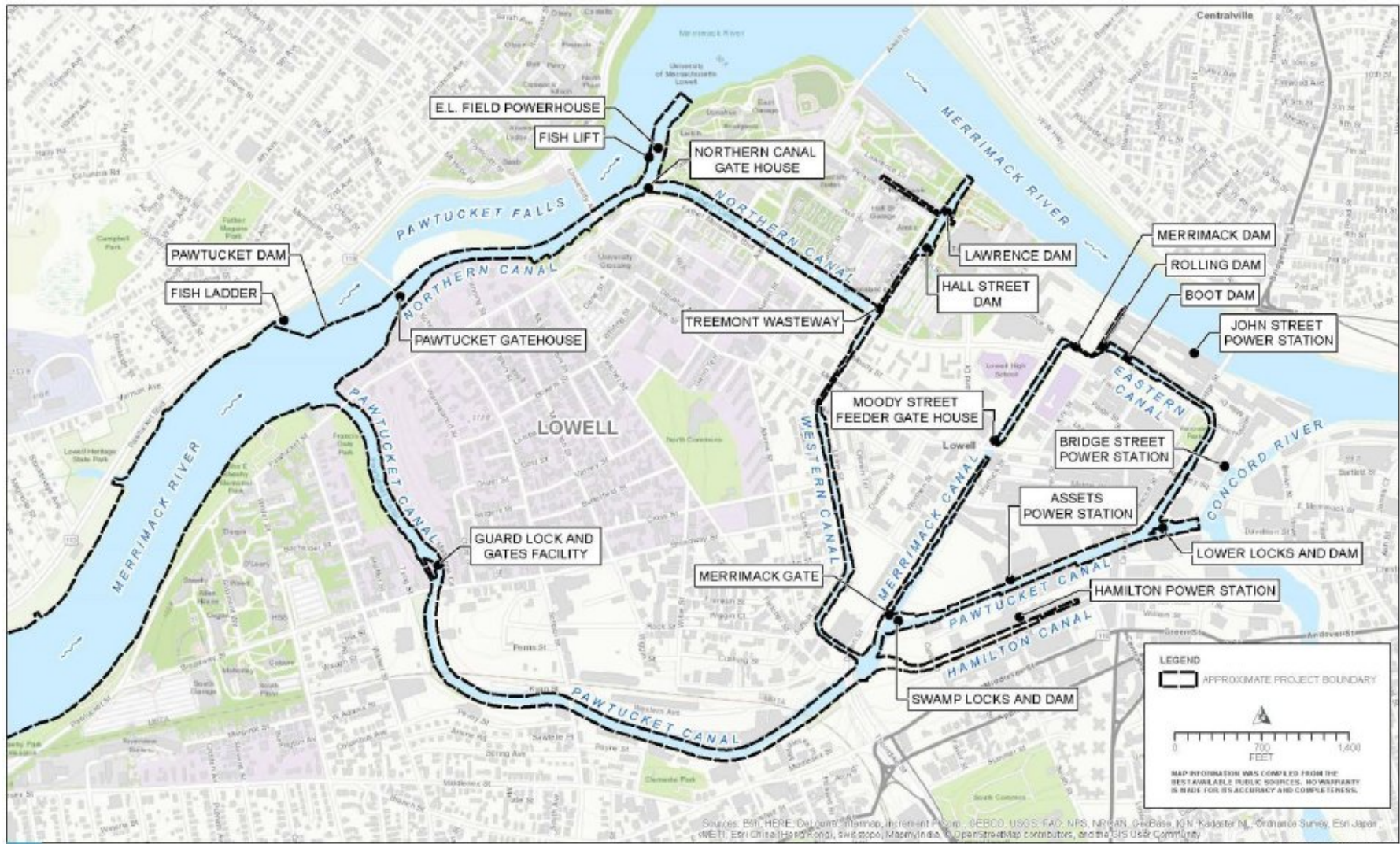


Figure 2. Plan View of Project Facilities (Source: Boott Hydropower, LLC).

3.1.2 Existing Project Operation

The project operates in a run-of-river mode. The current license requires an instantaneous minimum flow of 1,990 cfs or inflow, whichever is less, as measured immediately downstream of the project. The minimum flow is provided through spillage over the dam, discharge from the project turbines, or through the fish passage facilities.

The annual energy production of the project averaged 84,501 megawatt-hours from 2008 to 2017.

3.2 APPLICANT'S PROPOSAL

3.2.1 Proposed Project Facilities and Operation

Boott is not proposing any changes to project facilities or operation at this time.

3.2.2 Proposed Environmental Measures

Boott is not proposing any new protection, mitigation, and enhancement (PM&E) measures for the Lowell Hydroelectric Project at this time.

3.3 DAM SAFETY

It is important to note that dam safety constraints may exist and should be taken into consideration in the development of proposals and alternatives considered in the pending proceeding. For example, proposed modifications to the dam structure, such as fish passage facilities, could impact the integrity of the dam structure. As the proposal and alternatives are developed, the applicant must evaluate the effects and ensure that the project would meet the Commission's dam safety criteria found in Part 12 of the Commission's regulations and the engineering guidelines (<http://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide.asp>).

3.4 ALTERNATIVES TO THE PROPOSED ACTION

Commission staff will consider and assess all alternative recommendations for operational or facility modifications, as well as PM&E measures identified by staff, federal and state agencies, Indian tribes, NGOs, and the public.

3.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

At present, we propose to eliminate the following alternative from detailed study in the EA.

3.5.1 Decommissioning

Decommissioning of the project could be accomplished with or without dam removal. Either alternative would require denying the relicense application and surrender or termination of the existing license with appropriate conditions. There *could* be significant costs involved with decommissioning the project and/or removing any project facilities. The project provides a viable, safe, and clean renewable source of power to the region. With decommissioning, the project would no longer be authorized to generate power.

No participant has recommended project retirement, there are no critical resource concerns, and we have no basis for recommending project retirement at this time. Thus, we do not consider project decommissioning to be a reasonable alternative to licensing the project with appropriate environmental enhancement measures.

4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES

4.1 CUMULATIVE EFFECTS

According to the Council on Environmental Quality's regulations for implementing NEPA (40 C.F.R. 1508.7), a cumulative effect is the effect on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, including hydropower and other land and water development activities.

4.1.1 Resources that could be Cumulatively Affected

Based on information in the PAD for the Lowell Hydroelectric Project, and preliminary staff analysis, we have identified migratory fisheries as a resource that could be cumulatively affected by the proposed continued operation and maintenance of the Lowell Hydroelectric Project in combination with other dams on the Merrimack River.

4.1.2 Geographic Scope

Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other dams within the river basin. *We have identified the geographic scope for migratory fisheries to include the Pemigewasset River from the Eastman Falls Dam and the Winnepesaukee River from the Lakeport Dam, to the confluence of the Winnepesaukee and Pemigewasset Rivers (which form the Merrimack River), and the Merrimack River downstream to the Atlantic Ocean.* We

chose this geographic scope because the operation and maintenance of the Lowell Hydroelectric Project's Pawtucket Dam, in combination with several other dams on the Merrimack River,¹⁰ may affect migratory fisheries resources in the Merrimack River Basin. *The Eastman Falls Dam (at river mile 1 of the Pemigewasset River) and the Lakeport Dam (at river mile 17 of the Winnepesaukee River and 4 miles downstream from the outlet of Lake Winnepesaukee) are migration barriers that represent the upstream limits to which river herring and American eel are managed within the river basin.*

4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the EA will include a discussion of past, present, and reasonably foreseeable future actions and their effects on each resource that could be cumulatively affected. Based on the potential term of a new license, the temporal scope will look 30 to 50 years into the future, concentrating on the effect on the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource. The quality and quantity of information, however, diminishes as we analyze resources further away in time from the present.

4.2 RESOURCE ISSUES

In this section, we present a preliminary list of environmental issues to be addressed in the EA. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's record for the Lowell Hydroelectric Project, *including information received during the scoping process*. This list is not intended to be exhaustive or final, but contains the issues raised to date. After the scoping process is complete, we will review the list and determine the appropriate level of analysis needed to address each issue in the EA. Those issues identified by an asterisk (*) will be analyzed for both cumulative and site-specific effects.

4.2.1 Aquatic Resources

- *Effects of continued project operation on flooding along the shoreline of the project impoundment and surrounding areas.*
- Effects of continued project operation on streamflow in the impoundment, canal system, bypassed reach, and Merrimack River.

¹⁰ U.S. Army Corps of Engineers, *National Inventory of Dams* (Oct. 2016), available at <http://nid.usace.army.mil>.

- Effects of continued project operation on water quality in the impoundment, canal system, bypassed reach, and Merrimack River.
- Effects of continued project operation on resident and migratory* fisheries resources in the impoundment, canal system, bypassed reach, and Merrimack River.
- Effects of continued project operation on the aquatic macroinvertebrate community in the impoundment, canal system, bypassed reach, and Merrimack River.
- *Effects of continued project operation on fish passage for migratory species, including American shad, river herring, and American eel.*

4.2.2 Terrestrial Resources

- Effects of continued project operation on riparian, littoral, and wetland habitat and associated wildlife.
- Effects of continued project operation, including maintenance activities (*e.g.*, vegetation management) on wildlife habitat and associated wildlife.
- Effects of continued project operation and maintenance on the introduction and persistence of invasive plants within the project boundary.
- Effects of continued project operation and maintenance on Massachusetts and New Hampshire state-listed species.

4.2.3 Threatened and Endangered Species

- Effects of continued project operation and maintenance on the federally threatened northern long-eared bat.

4.2.4 Recreation, Land Use, and Aesthetic Resources

- Effects of continued project operation on recreational use in the project area, including the adequacy of existing recreational access, and the adequacy and capacity of existing recreational facilities.
- Effects of continued project operation on land use in the project area.
- Effects of continued project operation on aesthetic resources in the project area, including the historic industrial context of the project structures and features.

4.2.5 Cultural Resources

- Effects of continued project operation and maintenance on historic resources, archeological resources, and traditional cultural properties that are included or may be eligible for inclusion in the National Register of Historic Places.
- Effects of continued project operation and maintenance on properties of traditional religious and cultural importance to an Indian tribe.

4.2.6 Developmental Resources

- Economics of the project and the effects of any recommended environmental measures on the project's economics.

5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by Boott and the recommendations of the consulted entities, Boott will consider, and may propose, certain other measures to enhance environmental resources affected by the project as part of the proposed action. In its PAD, Boott stated it was not proposing any resource studies at this time. Studies may need to be added based on comments provided to the Commission and Boott from interested participants, including Indian tribes. The deadline for Boott to file its Proposed Study Plan with the Commission is September 28, 2018.

6.0 EA PREPARATION

At this time, we anticipate the need to prepare a draft and final EA. The draft EA will be sent to all persons and entities on the Commission's service and mailing lists for the Lowell Hydroelectric Project. The EA will include our recommendations for operating procedures, as well as environmental protection and enhancement measures that should be part of any license issued by the Commission. All recipients will then have 30 days to review the EA and file written comments with the Commission.

The major milestones, with pre-filing target dates are as follows:

<u>Major Milestone</u>	<u>Target Date</u>
Scoping Meetings	July 2018
License Application Filed	April 2021
Ready for Environmental Analysis Notice Issued	-
Deadline for Filing Comments, Recommendations, and Agency Terms and Conditions/Prescriptions	-

Draft EA Issued	-
Comments on Draft EA Due	-
Final EA Issued	
Deadline for Filing Modified Agency Recommendations	-
License Order Issued	-

Post-filing milestones will be established following the applicant's filing of the final license application. A copy of the process plan and schedule, which has a complete list of pre-filing licensing milestones for the Lowell Hydroelectric Project, including those for developing the license application, is attached as Appendix A to this SD2.

7.0 PROPOSED EA OUTLINE

The preliminary outline for the Lowell Hydroelectric Project EA is as follows:

TABLE OF CONTENTS
LIST OF FIGURES
LIST OF TABLES
ACRONYMS AND ABBREVIATIONS
EXECUTIVE SUMMARY

1.0 INTRODUCTION

- 1.1 Application
- 1.2 Purpose of Action and Need for Power
- 1.3 Statutory and Regulatory Requirements
 - 1.3.1 Federal Power Act
 - 1.3.1.1 Section 18 Fishway Prescriptions
 - 1.3.1.2 Section 10(j) Recommendations
 - 1.3.2 Clean Water Act
 - 1.3.3 Endangered Species Act
 - 1.3.4 Coastal Zone Management Act
 - 1.3.5 National Historic Preservation Act
- 1.4 Public Review and Comment
 - 1.4.1 Scoping
 - 1.4.2 Interventions
 - 1.4.3 Comments on the Application

2.0 PROPOSED ACTION AND ALTERNATIVES

- 2.1 No-action Alternative
 - 2.1.1 Existing Project Facilities
 - 2.1.2 Project Safety
 - 2.1.3 Existing Project Operation
 - 2.1.4 Existing Environmental Measures
- 2.2 Applicant's Proposal

- 2.2.1 Proposed Project Facilities
- 2.2.2 Proposed Project Operation
- 2.2.3 Proposed Environmental Measures
- 2.2.4 Modifications to Applicant’s Proposal—Mandatory Conditions
- 2.3 Decommissioning Alternative(s)
- 2.4 Staff Alternative
- 2.5 Staff Alternative with Mandatory Conditions
- 2.6 Other Alternatives (as appropriate)
- 2.7 Alternatives Considered but Eliminated from Detailed Study
- 3.0 ENVIRONMENTAL ANALYSIS
 - 3.1 General Description of the River Basin
 - 3.2 Scope of Cumulative Effects Analysis
 - 3.2.1 Geographic Scope
 - 3.2.2 Temporal Scope
 - 3.3 Proposed Action and Action Alternatives
 - 3.3.1 Aquatic Resources
 - 3.3.2 Terrestrial Resources
 - 3.3.3 Threatened and Endangered Species
 - 3.3.4 Recreation, Land Use, and Aesthetic Resources
 - 3.3.5 Cultural Resources
 - 3.4 No-action Alternative
- 4.0 DEVELOPMENTAL ANALYSIS
 - 4.1 Power and Economic Benefits of the Project
 - 4.2 Comparison of Alternatives
 - 4.3 Cost of Environmental Measures
- 5.0 CONCLUSIONS AND RECOMMENDATIONS
 - 5.1 Comparison of Alternatives
 - 5.2 Comprehensive Development and Recommended Alternative
 - 5.3 Unavoidable Adverse Effects
 - 5.4 Recommendations of Fish and Wildlife Agencies
 - 5.5 Consistency with Comprehensive Plans
- 6.0 FINDING OF NO SIGNIFICANT IMPACT (OR OF SIGNIFICANT IMPACT)
- 7.0 LITERATURE CITED
- 8.0 LIST OF PREPARERS

8.0 COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA, 16 U.S.C. section 803(a)(2)(A), requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. The staff has preliminarily identified and reviewed the plans listed below that may be relevant to the Lowell Hydroelectric Project, located in Massachusetts

and New Hampshire. Agencies are requested to review this list and inform Commission staff of any changes. If there are other comprehensive plans that should be considered for this list that are not on file with the Commission, or if there are more recent versions of the plans already listed, they can be filed for consideration with the Commission according to 18 CFR 2.19 of the Commission's regulations. Please follow the instructions for filing a plan at <http://www.ferc.gov/industries/hydropower/gen-info/licensing/complan.pdf>.

The following is a list of comprehensive plans currently on file with the Commission that may be relevant to the Lowell Hydroelectric Project:

Atlantic States Marine Fisheries Commission. 1998. Amendment 1 to the Interstate Fishery Management Plan for Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*). (Report No. 31). July 1998.

Atlantic States Marine Fisheries Commission. 1999. Amendment 1 to the Interstate Fishery Management Plan for shad and river herring. (Report No. 35). April 1999.

Atlantic States Marine Fisheries Commission. 2000. Interstate Fishery Management Plan for American eel (*Anguilla rostrata*). (Report No. 36). April 2000.

Atlantic States Marine Fisheries Commission. 2000. Technical Addendum 1 to Amendment 1 of the Interstate Fishery Management Plan for shad and river herring. February 9, 2000.

Atlantic States Marine Fisheries Commission. 2008. Amendment 2 to the Interstate Fishery Management Plan for American eel. Arlington, Virginia. October 2008.

Atlantic States Marine Fisheries Commission. 2009. Amendment 2 to the Interstate Fishery Management Plan for shad and river herring, Arlington, Virginia. May 2009.

Atlantic States Marine Fisheries Commission. 2010. Amendment 3 to the Interstate Fishery Management Plan for shad and river herring, Arlington, Virginia. February 2010.

Atlantic States Marine Fisheries Commission. 2013. Amendment 3 to the Interstate Fishery Management Plan for American eel. Arlington, Virginia. August 2013.

Atlantic States Marine Fisheries Commission. 2014. Amendment 4 to the Interstate Fishery Management Plan for American eel. Arlington,

Virginia. October 2014.

Massachusetts Department of Environmental Management. n.d. Commonwealth connections: A greenway vision for Massachusetts. Boston, Massachusetts.

Massachusetts Department of Fish and Game. 2006. Comprehensive wildlife conservation strategy. West Boylston, Massachusetts. September 2006.

Massachusetts Executive Office of Energy and Environmental Affairs. Statewide Comprehensive Outdoor Recreation Plan (SCORP): Massachusetts Outdoor 2006. Boston, Massachusetts.

Merrimack River Policy and Technical Committees. 1990. Strategic plan for the restoration of Atlantic salmon to the Merrimack River, 1990 through 2004. Concord, New Hampshire. April 1990.

National Marine Fisheries Service. 1998. Final Amendment #11 to the Northeast Multi-species Fishery Management Plan; Amendment #9 to the Atlantic sea scallop Fishery Management Plan; Amendment #1 to the monkfish Fishery Management Plan; Amendment #1 to the Atlantic salmon Fishery Management Plan; and Components of the Proposed Atlantic herring Fishery Management Plan for Essential Fish Habitat. Volume 1. October 7, 1998.

National Marine Fisheries Service. 1998. Final Recovery Plan for the shortnose sturgeon (*Acipenser brevirostrum*). Prepared by the Shortnose Sturgeon Recovery Team for the National Marine Fisheries Service, Silver Spring, Maryland. December 1998.

National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.

New Hampshire Office of State Planning. 1977. Wild, scenic, & recreational rivers for New Hampshire. Concord, New Hampshire. June 1977.

New Hampshire Office of State Planning. 1989. New Hampshire wetlands priority conservation plan. Concord, New Hampshire.

New Hampshire Office of Energy and Planning. New Hampshire Statewide Comprehensive Outdoor Recreation Plan (SCORP): 2008-2013. Concord, New Hampshire. December 2007.

New Hampshire Office of State Planning. 1991. Public access plan for New

Hampshire's lakes, ponds, and rivers. Concord, New Hampshire. November 1991.

New Hampshire Office of State Planning. 1991. Upper Merrimack River corridor plan-volume 2: management plan. Concord, New Hampshire. March 1991.

Policy Committee for Anadromous Fishery Management of the Merrimack River Basin. 1985. A strategic plan for the restoration of Atlantic salmon to the Merrimack River Basin, 1985 through 1999. Laconia, New Hampshire. May 1985.

State of New Hampshire. 1991. New Hampshire rivers management and protection program [as compiled from NH RSA Ch. 483, HB 1432-FN (1990) and HB 674-FN (1991)]. Concord, New Hampshire.

State of New Hampshire. 1991. New Hampshire rivers management and protection program: (1) 1994 Contoocook and North Branch Rivers, river corridor management plan; (2) 1994 Swift River corridor management plan; (3) 1999 Piscataquog River management plan; (4) 2006 Ashuelot River management plan; (5) 2007 Lamprey River management plan; (6) 2008 Lower Merrimack River corridor management plan; (7) 2009 Cold River watershed management plan; (8) 1994 Saco River corridor management plan; (9) 1999 Exeter River corridor and watershed management plan; (10) 2001 Pemigewasset River corridor management plan; (11) 2006 Souhegan River watershed management plan; (12) 2007 Upper Merrimack River management and implementation plan; and (13) 2008 Isinglass River management plan. Concord, New Hampshire.

U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

U.S. Fish and Wildlife Service. 1989. Atlantic salmon restoration in New England: Final environmental impact statement 1989-2021. Department of the Interior, Newton Corner, Massachusetts. May 1989.

U.S. Fish and Wildlife Service. 2010. A Plan for the Restoration of American Shad: Merrimack River Watershed. Concord, New Hampshire. 2010.

9.0 MAILING LIST

The list below is the Commission's official mailing list for the Lowell Hydroelectric Project (FERC No. 2790). If you want to receive future mailings for the Lowell Hydroelectric Project and are not included in the list below, please send your request by email to FERCOnlineSupport@ferc.gov or by mail to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, D.C. 20426. All written and emailed requests to be added to the mailing list must clearly identify the following on the first page: **Lowell Hydroelectric Project No. 2790-072**. You may use the same method if requesting removal from the mailing list below.

Register online at <https://www.ferc.gov/docs-filing/esubscription.asp> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

Official Mailing List for the Lowell Hydroelectric Project

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<p>Massachusetts Department of Public Utilities Electric & Gas Division One South Station Siting Division Boston, MA 02110</p>	<p>Office of Dam Safety Massachusetts Department of Conservation & Recreation John Augustas Hall 180 Beaman St. West Boylston, MA 01583-1109</p>
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<p>Massachusetts Office of the Governor Governor State House, Room 360 Boston, MA 02133</p>	<p>Russell Cohen Rivers Advocate Massachusetts Riverways Program 251 Causeway St., Suite 400 Boston, MA 02114-2119</p>

<p>Elizabeth Coughlin President Merrimack River Watershed Council, Inc. P.O. Box 706 Tyngsborough, MA 01879-0706</p>	<p>Dinell Clark President Williamsburg Condominium 197 Wellman Ave. North Chelmsford, MA 01863</p>
<p>Elizabeth Coughlin V.C. Elizabeth Coughlin Associates 61 Lakeview Avenue Tyngsboro, MA 01879</p>	<p>U.S. Coast Guard MSO Boston 447 Commercial St. Boston, MA 02109-1027</p>
<p>Regional Environmental Officer U.S. Department of Interior 408 Atlantic Ave. Suite 142 Boston, MA 02210</p>	<p>Office of the Solicitor U.S. Department of Interior 1849 C Street, NW, MS 6557 Washington, DC 20240</p>
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<p>Director U.S. Environmental Protection Agency Water Quality Control Branch (WQB) 5 Post Office Square, Suite 100 Boston, MA 02109-3946</p>	<p>Julianne Rosset U.S. Fish & Wildlife Service/NEFO 103 East Plumtree Rd. Sunderland, MA 01375</p>
<p>U.S. Fish and Wildlife Service Regional Director 300 Westgate Center Dr. Northeast Regional Office Hadley, MA 01035-9587</p>	<p>U.S. Geological Survey Massachusetts-Rhode Island Dist., WRD 10 Bearfoot Rd. Northborough, MA 01532-1528</p>
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APPENDIX A
LOWELL HYDROELECTRIC PROJECT PROCESS PLAN AND SCHEDULE

Shaded milestones are unnecessary if there are no study disputes. If the due date falls on a weekend or holiday, the due date is the following business day. Early filings or issuances will not result in changes to these deadlines. As appropriate, the process plan and schedule may be revised in the future.

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
Boott Hydropower, LLC	File NOI/PAD with FERC	4/30/18	5.5, 5.6
FERC	Tribal Consultation	5/30/18	5.7
FERC	Issue Notice of Commencement of Proceeding; Issue Scoping Document 1	6/15/18	5.8
FERC	Scoping Meetings and Project Site Visit	7/17/18-7/18/18	5.8(b)(3)(viii)
All stakeholders	PAD/SD1 Comments and Study Requests Due	8/14/18	5.9
FERC	Issue Scoping Document 2	9/27/18	5.10
Boott Hydropower, LLC	File Proposed Study Plan (PSP)	9/28/18	5.11(a)
All stakeholders	Proposed Study Plan Meeting	10/28/18	5.11(e)
All stakeholders	Proposed Study Plan Comments Due	12/27/18	5.12
Boott Hydropower, LLC	File Revised Study Plan	1/26/19	5.13(a)
All stakeholders	Revised Study Plan Comments Due	2/10/19	5.13(b)
FERC	Director's Study Plan Determination	2/25/19	5.13(c)
Mandatory Conditioning	Any Study Disputes Due	3/17/19	5.14(a)

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
Agencies			
Dispute Panel	Third Dispute Panel Member Selected	4/1/19	5.14(d)(3)
Dispute Panel	Dispute Resolution Panel Convenes	4/6/19	5.14(d)
Boott Hydropower, LLC	Applicant Comments on Study Disputes Due	4/11/19	5.14(i)
Dispute Panel	Dispute Resolution Panel Technical Conference	4/16/19	5.14(j)
Dispute Panel	Dispute Resolution Panel Findings Issued	5/6/19	5.14(k)
FERC	Director's Study Dispute Determination	5/26/19	5.14(l)
Boott Hydropower, LLC	First Study Season	2019	5.15(a)
Boott Hydropower, LLC	Initial Study Report	2/25/20	5.15(c)(1)
All stakeholders	Initial Study Report Meeting	3/11/20	5.15(c)(2)
Boott Hydropower, LLC	Initial Study Report Meeting Summary	3/26/20	5.15(c)(3)
All stakeholders	Any Disputes/Requests to Amend Study Plan Due	4/25/20	5.15(c)(4)
All stakeholders	Responses to Disputes/Amendment Requests Due	5/25/20	5.15(c)(5)
FERC	Director's Determination on Disputes/Amendments	6/24/20	5.15(c)(6)
Boott Hydropower, LLC	Second Study Season	2020	5.15(a)
Boott Hydropower, LLC	Updated Study Report due	2/25/21	5.15(f)
All	Updated Study Report Meeting	3/11/21	5.15(f)

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
stakeholders			
Boott Hydropower, LLC	Updated Study Report Meeting Summary	3/26/21	5.15(f)
All stakeholders	Any Disputes/Requests to Amend Study Plan Due	4/25/21	5.15(f)
All stakeholders	Responses to Disputes/Amendment Requests Due	5/25/21	5.15(f)
FERC	Director's Determination on Disputes/Amendments	6/24/21	5.15(f)
Boott Hydropower, LLC	File Preliminary Licensing Proposal	12/1/20	5.16(a)
All stakeholders	Preliminary Licensing Proposal Comments Due	3/1/21	5.16(e)
Boott Hydropower, LLC	File Final License Application	4/30/21 ¹¹	5.17
Boott Hydropower, LLC	Issue Public Notice of License Application Filing	5/14/21	5.17(d)(2)

¹¹ Pursuant to section 15 of the Federal Power Act and 18 C.F.R § 5.17, any application for a license for this project must be filed with the Commission at least 24 months prior to the expiration of the existing license. Because the current license expires on April 30, 2023, all applications for license for this project must be filed by April 30, 2021.

Document Content(s)

P-2790 Lowell Scoping Document 2.DOCX.....1-39