

FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426
April 16, 2024

OFFICE OF ENERGY PROJECTS

Project No. 2284-052 – Maine
Brunswick Hydroelectric Project
Brookfield White Pine Hydro LLC

VIA FERC Service

Reference: Scoping Document 1 for the Brunswick Hydroelectric Project, P-2284-052

To the Parties Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document, filed on February 21, 2024, by Brookfield White Pine Hydro LLC (Brookfield) for relicensing the Brunswick Hydroelectric Project No. 2284 (Brunswick Project or project). The project is located on the Androscoggin River in the towns of Brunswick and Topsham, Maine.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff will prepare either an environmental assessment (EA) or an environmental impact statement (EIS) (collectively referred to as the “NEPA document”), which will be used by the Commission to determine whether, and under what conditions, to issue a new license for the project. To support and assist our environmental review, we are beginning the public scoping process to ensure that all pertinent issues are identified and analyzed, and that the NEPA document is thorough and balanced. The Commission’s scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

We invite your participation in the scoping process and are circulating the attached Scoping Document 1 (SD1) to provide you with information on the project. We are also soliciting your comments and suggestions on our preliminary list of issues and alternatives to be addressed in the NEPA document. We are also requesting that you identify any studies that would help provide a framework for collecting pertinent information on the resource areas under consideration and necessary for the Commission to prepare the NEPA document for the project.

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We will hold two scoping meetings for the project to receive input on the scope of the NEPA document. A daytime scoping meeting will be held at 9:00 a.m. Eastern Daylight Time (EDT) on May 7, 2024, at the Brunswick Hotel in Brunswick, Maine. An evening scoping meeting will be held at 6 p.m. EDT on May 7, 2024, at the same location. We will also visit the Brunswick Project facilities on May 7, 2024, starting at 1 p.m. EDT.

We invite all interested agencies, Indian tribes, non-governmental organizations, and individuals to attend one or both of these meetings and participate in the environmental site visit. Further information on the scoping meetings and environmental site review is available in the enclosed SD1.

SD1 is being distributed to both Brookfield's distribution list and the Commission's official mailing list (see section 9.0, *Mailing List*, of the attached SD1). If you wish to be added to or removed from the Commission's official mailing list, please send your request by email to FERCOnlineSupport@ferc.gov. In lieu of an email request, you may submit a paper request. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. All written or emailed requests must specify your wish to be added to, or removed from, the mailing list, and must clearly identify the following on the first page: **Brunswick Hydroelectric Project (P-2284-052)**.

Please review the SD1 and, if you wish to provide comments, follow the instructions in section 6.0, *Request for Information and Studies*. If you have any questions about SD1, the scoping process, or how Commission staff will develop the NEPA document for this project, please contact Ryan Hansen at (202)-502-8074 or ryan.hansen@ferc.gov. Additional information about the Commission's licensing process and the project may be obtained from our website, www.ferc.gov. The deadline for filing comments is **June 20, 2024**. The Commission strongly encourages electronic filings.

Enclosure: Scoping Document 1

SCOPING DOCUMENT 1

BRUNSWICK HYDROELECTRIC PROJECT
(FERC NO. 2284-052)

MAINE



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

April 2024

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SCOPING DOCUMENT 1

Brunswick Hydroelectric Project (FERC No. 2284-052)

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 February 21, 2024, Brookfield White Pine Hydro (Brookfield) filed a notice of intent (NOI) and a pre-application document (PAD) for a new license for the Brunswick Hydroelectric Project (FERC No. 2284-052) (Brunswick Project or project).²

The project is located on the Androscoggin River in the towns of Brunswick and Topsham, Maine. The project straddles the border between Cumberland and Sagadahoc Counties (figure 1). The project has a total installed generating capacity of 19-megawatts (MW). The project's average annual energy production for 2013-2022 was 90,695 megawatt-hours (MWh). The project does not occupy any federal land. A detailed description of the project is provided in section 3.0.

The National Environmental Policy Act (NEPA) of 1969,³ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of licensing the project as proposed and consider reasonable alternatives to the proposed action. We will prepare either an environmental assessment (EA) or an environmental impact statement (EIS) (collectively referred to as the "NEPA document") 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. The Commission's scoping process will help determine the required level of analysis and satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

¹ 16 U.S.C. § 791(a)-825(r).

² The current license for the Brunswick Project was issued with an effective date of February 1, 1979, for a term of 50 years and expiring on February 28, 2029.

³ 42 U.S.C. §§ 4321-4370(f).

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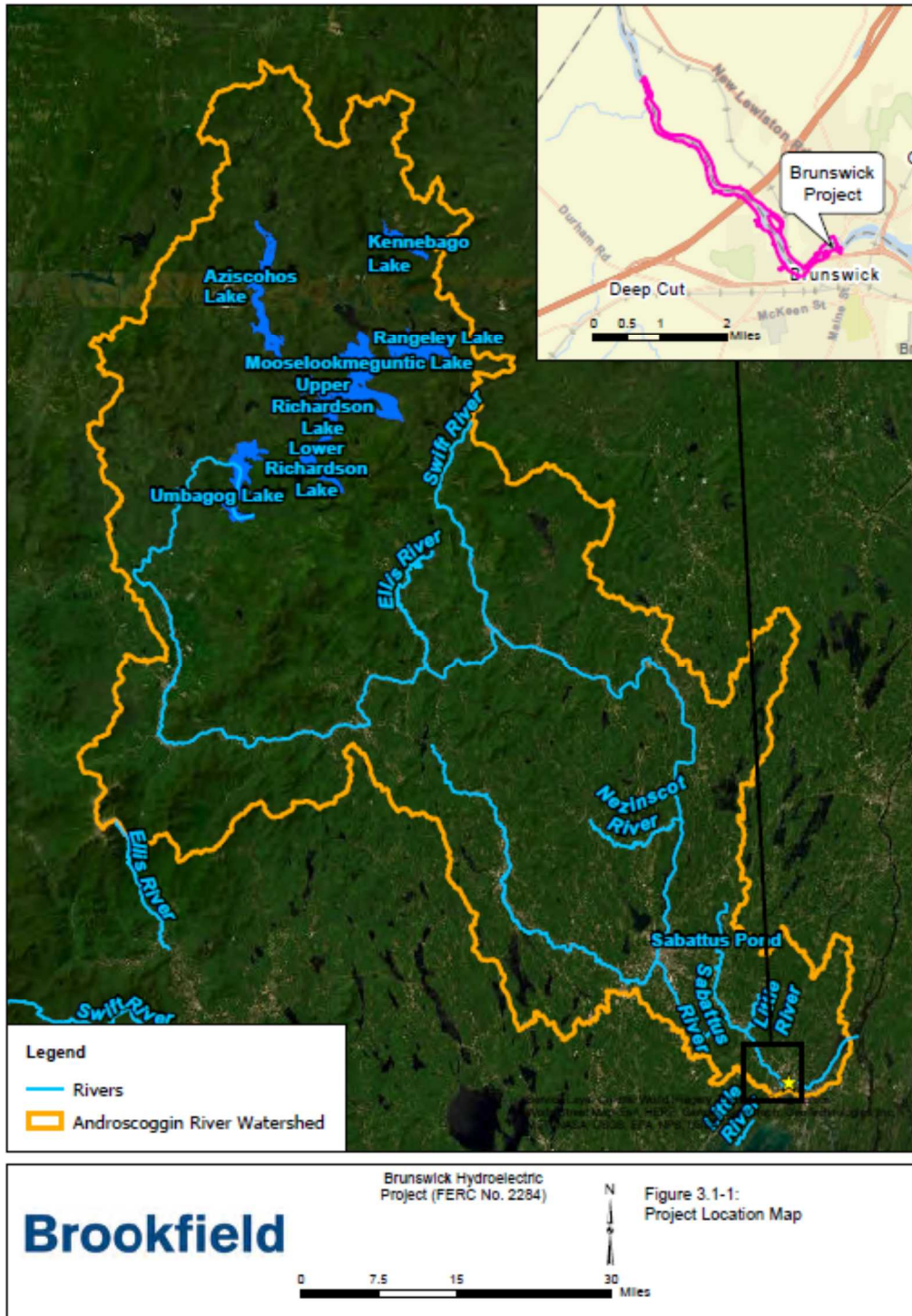


Figure 1: Location of the Brunswick Project (source: PAD).

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2.0 SCOPING

This Scoping Document 1 (SD1) is intended to advise all participants as to the potential scope of the NEPA documentation and to seek additional information pertinent to this analysis. This document contains: (1) a description of the scoping process and development of the license application, (2) a description of the proposed action and alternatives to the proposed action, (3) a preliminary identification of environmental issues, and (4) 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. According to NEPA, the process should be conducted early in the planning stage of the 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 NEPA document;
- 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 NEPA document;
- solicit available information on the resources at issue and study needs; and
- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

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2.2 COMMENTS, SCOPING MEETINGS, AND ENVIRONMENTAL SITE REVIEW

During preparation of the NEPA document, there will be several opportunities for the resource agencies, Indian tribes, NGOs, and the public to provide input. These opportunities will occur:

- during the public scoping process and study plan meetings, when we solicit oral and written comments regarding the scope of issues and analysis for the NEPA document;
- in response to the Commission's notice that the project is ready for environmental analysis; and
- after issuance of the NEPA document when we solicit written comments on the document.

In addition to written comments solicited by this SD1, we will hold two public scoping meetings and an environmental site review near the project. A daytime meeting will focus on concerns of the resource agencies, Indian tribes, and NGOs, and the evening meeting will focus on receiving input from the public. We invite all interested agencies, Indian tribes, NGOs, and the public to attend one or both meetings to assist us in identifying the scope of environmental issues that should be analyzed in the NEPA document. All interested parties are also invited to participate in the environmental site review. The times and locations of the meetings and environmental site review are as follows:

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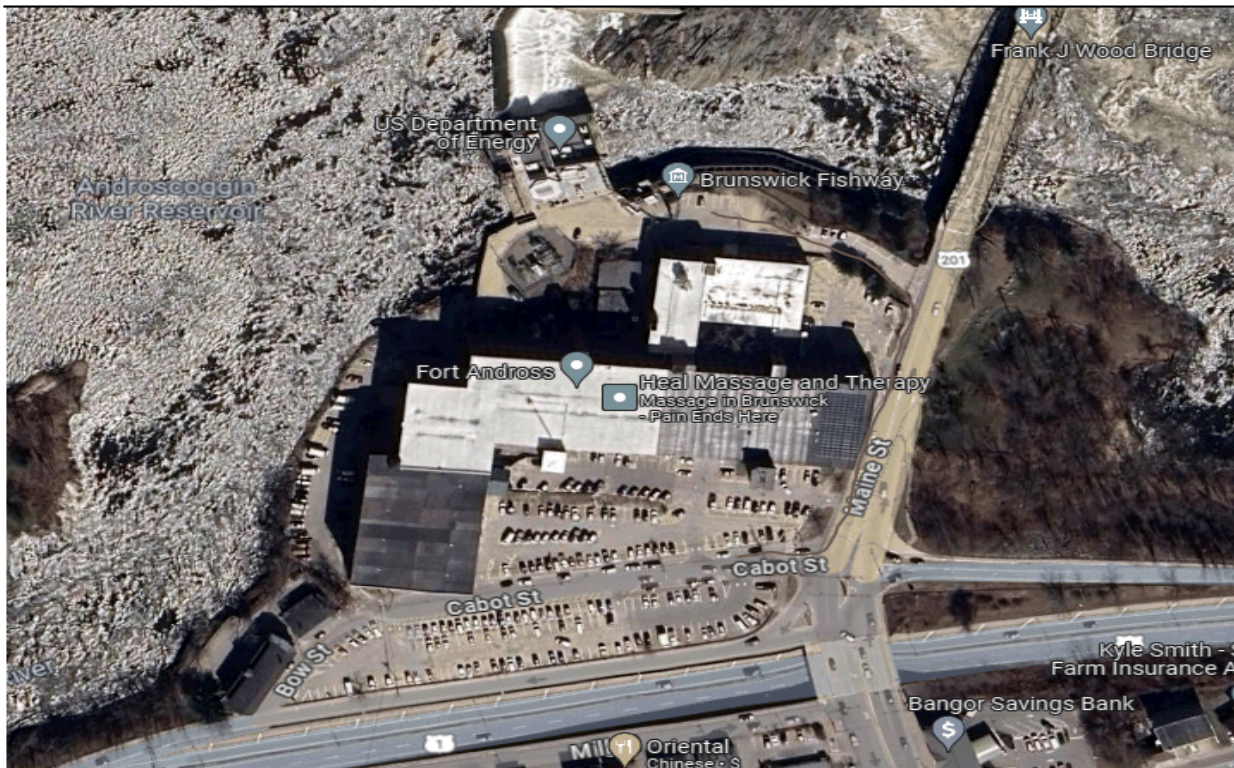
On-Site Environmental Site Review

DATE: May 7, 2024

TIME: 1 PM Eastern Daylight Time (EDT)

LOCATION: Brunswick Hydroelectric Project

Site visit participants will meet at the Brunswick Station and Fishway, with access off Main Street (Rt. 201) per the screenshot below. Parking will be limited at the Brunswick Station and Fishway and can handle five additional vehicles. Carpooling is encouraged. Participants can also use the public parking lot on Cabot Street, located south of the Brunswick Station. To access Brookfield property, please bring a hard hat, safety glasses and steel-toe shoes (no open toe shoes). Brookfield will provide a site safety review.



Please contact Michael Scarzello at Brookfield Renewable at (315) 566-0197, or via email at Michael.Scarzello@brookfieldrenewable.com, on or before May 3, 2024, if you plan to attend the site visit.

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Daytime Scoping Meeting

DATE: Tuesday, May 7, 2024

TIME: 9 AM- 12PM EDT

LOCATION: The Brunswick Hotel

ADDRESS: 4 Noble St, Brunswick, ME 04011

Evening Scoping Meeting

DATE: Tuesday, May 7, 2024

TIME: 6 PM- 8 PM EDT

LOCATION: The Brunswick Hotel

ADDRESS: 4 Noble St, Brunswick, ME 04011

Commission staff will moderate the scoping meetings. The meetings will begin promptly at their respective start times listed above. At the start of each meeting, staff will provide further instructions regarding the meeting setup, agenda, and how participants can provide their comments and questions during the meeting. The scoping meetings will be recorded by a court reporter, and all statements will become part of the Commission's public record for the project. Oral comments will initially be limited to 5 minutes in duration. Interested parties who choose not to speak or who are unable to attend the scoping meetings may provide written comments and information to the Commission as described in section 6.0, *Request for Information and Studies*. These meetings are posted on the Commission's calendar located on the internet at <https://www.ferc.gov/news-events/events> along with other related information. Click on the "Scoping Meeting" link on the left side of the page.

Please note, that if no participants join the meetings within 30 minutes after the start time, staff will end the meeting. The meetings will end after participants have commented or at the specified end time (listed above), whichever occurs first.

Meeting participants should be prepared to discuss their issues and/or concerns as they pertain to the licensing of the Brunswick Project. It is advised that participants review the PAD to prepare for the scoping meetings. Copies of the PAD may be viewed on the Commission's website (www.ferc.gov), using the "eLibrary" link. Enter the docket number, P-2284 to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

Following the scoping meetings and comment period, all issues raised will be reviewed and decisions made as to the level of analysis needed. If preliminary analysis

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indicates that any issues presented in this scoping document have little potential for causing significant effects, the issue(s) will be identified and the reasons for not providing a more detailed analysis will be given in the NEPA document.

If we receive no substantive comments on SD1, then we will not prepare a Scoping Document 2 (SD2). Otherwise, we will issue SD2 to address any substantive comments received. The SD2 will be issued for informational purposes only; no response will be required. The NEPA document will address recommendations and input received during the scoping process.

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) Brookfield's proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the Brunswick 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 Project Area

The Brunswick Project is located on the Androscoggin River at the head-of-tide at approximately river mile (RM) 6 in the towns of Brunswick and Topsham, Maine. The project straddles the border between Cumberland and Sagadahoc counties. The project dam is the first dam on the mainstem of the Androscoggin River. The drainage area at the project is 3,437 square miles.

3.1.2 Existing Project Facilities

The existing project facilities consist of: (1) a 40-foot-high⁴, 830-foot-long concrete gravity dam; (2) a 510-foot-long uncontrolled spillway with a crest elevation of 39.4 feet; (3) a 48-foot-wide emergency spillway with a crest elevation of 39.4 feet and a 57-foot-long, non-overflow section with a crest elevation of 55 feet; (4) an 80-foot-long

⁴ All elevations are mean sea level (msl).

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gate section with two 32.5-foot-wide by 22-foot-high Tainter gates with crest elevations of 20 feet; (5) a 110-foot-long, 65-foot-high concrete intake structure integral with the dam; (6) a 125-foot-wide and 135-foot-long powerhouse constructed of brick masonry and concrete, integral with the dam, containing three propeller style turbine generators with a combined rated capacity of 19 MW; (7) an approximately 300-acre reservoir at a normal water surface elevation of 39.4 feet extending 4.5 miles upstream; (8) a 570-foot-long vertical slot upstream fishway; (9) a downstream fish passage facility consisting of a surface sluice gate with an approximately 3.5-foot-wide and an 18-inch pipe that discharges to the tailrace; (10) a 60-foot-long, 12 kilovolt (kV) underground transmission line that leads to a non-project switchyard, and (11) appurtenant facilities. Figure 2 displays the major facilities associated with Brunswick Project.

The three project recreation facilities located within the project boundary include the summer street overlook, the 250th anniversary park, and the fishway viewing area. Non-project recreation sites located within or adjacent to the project boundary include the swinging bridge, the bridge-to-bridge trail, the riverwalk, a canoe portage, coffin pond recreation area, and Pejepscot dam recreation area. Figure 3 displays the project and non-project recreation facilities associated with the Brunswick Project.

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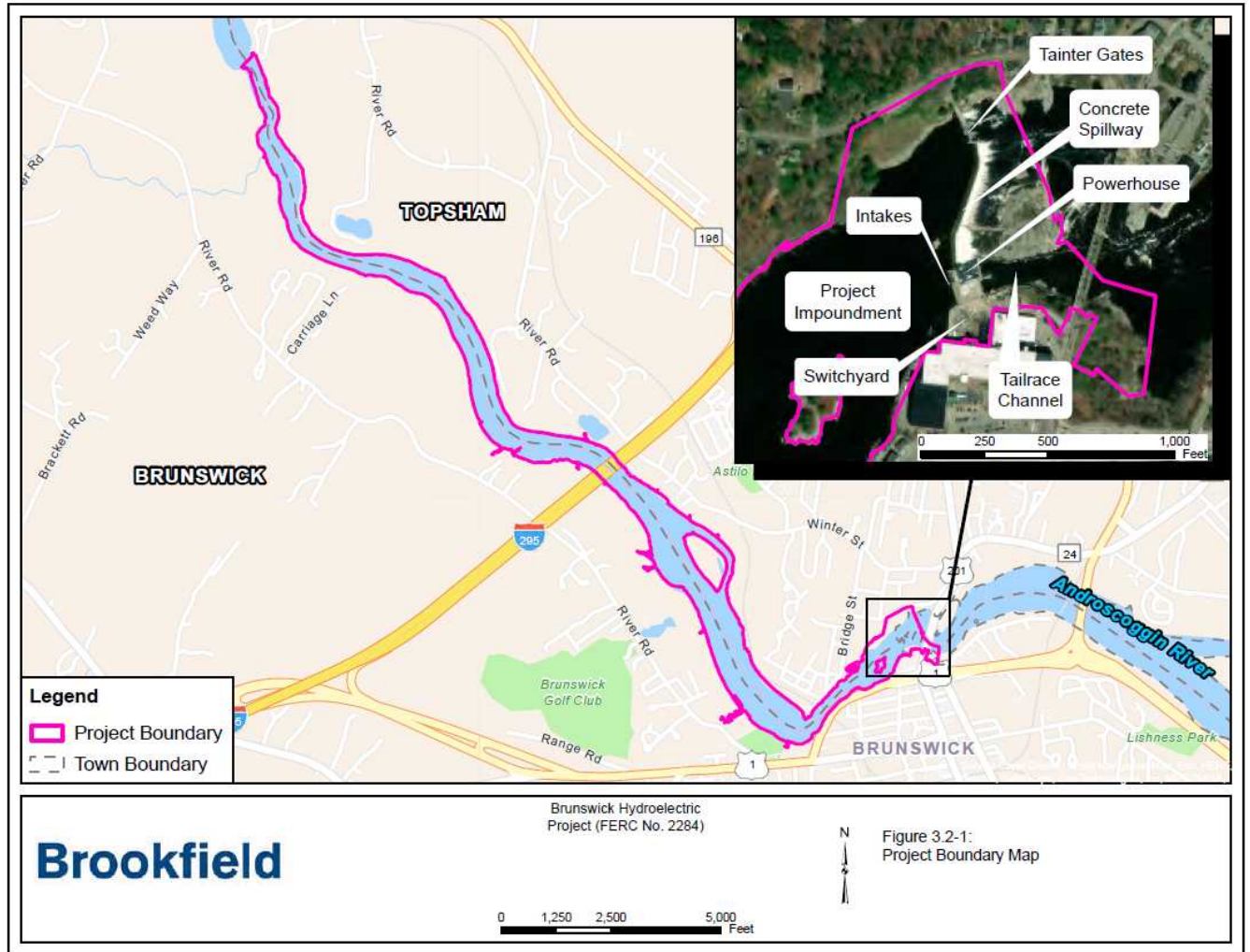


Figure 2. Major Facilities for the Brunswick Project (source: PAD).

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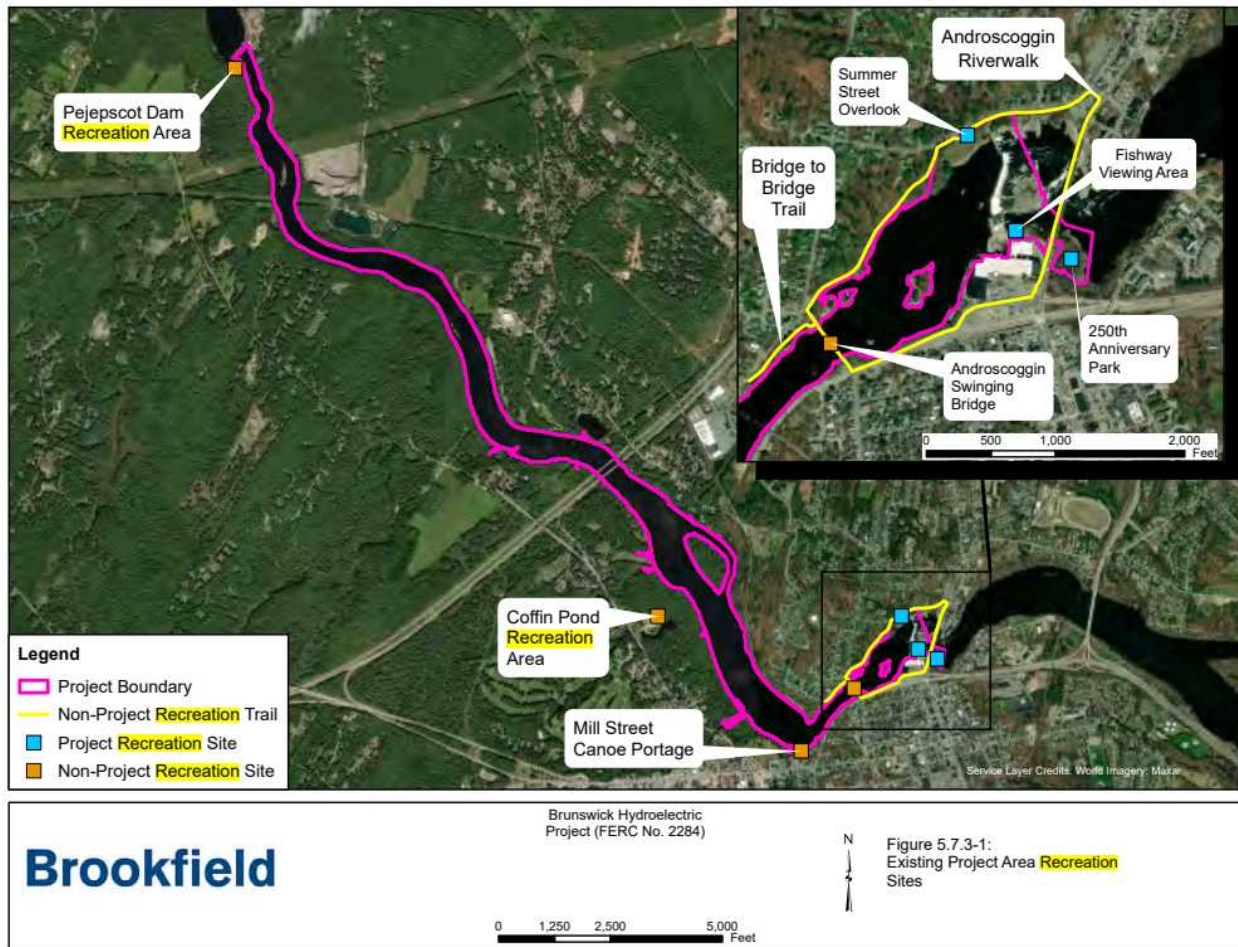


Figure 3. Project and non-project recreation facilities for the Brunswick Project (source: PAD).

3.1.3 Existing Project Operation

Brookfield operates the project in an automatic run-of-river mode with no storage or flood control capacity. A pond level sensor is installed near the intake to monitor the project impoundment level and to regulate the turbine-generator operation. The turbine-generator units 2 and 3 are not adjustable, they can only be completely off or on, and cannot be adjusted over a range of operating flows. Due to the on/off nature of these units and the small pond available, the impoundment fluctuates to allow these units to operate. Impoundment fluctuations related to this operation are limited to less than two feet below the top of the spillway crest as required by the current license.

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The project has a maximum hydraulic capacity of 7,475 cfs through the turbine-generator units, and a minimum hydraulic capacity of 1,200 cfs. Unit 1 typically operates at maximum efficiency during periods of river flow less than or equal to 4,400 cfs. During river flows of 4,400 cfs to 5,000 cfs, the unit discharge will typically approximate river flows and the pond level will be relatively constant. Units 2 and 3 normally come online at river flows of 7,400 cfs or greater.

There is no minimum flow requirement in the existing license, as the river reach below the project is backwatered and tidally influenced. However, during fishway operation (typically May 1 to November 15 as conditions allow, with the exact timing determined annually based on resource agency consultation), 100 cfs is passed through the upstream fishway flow and 60 cfs is passed via the downstream fishway flow regardless of unit operations.

Brookfield also provides nighttime spill flows at the project for downstream Atlantic salmon smolt migration based on a set of unit operational guidelines driven by total river flow at the project (Table 1). This unit prioritization is implemented during the downstream Atlantic Salmon passage season with the exact timing determined annually through resource agency consultation and is a condition of the final Atlantic Salmon Species Protection Plan that was incorporated into the project license in 2022⁵.

The annual average generation of the project between 2013 and 2022 was 90,695 megawatt-hours (MWh).

⁵ The Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic Salmon are a federally endangered species. The Project lies entirely within designated critical habitat for the GOM DPS of Atlantic salmon. Brookfield developed an Interim Species Protection Plan (ISPP) for the Brunswick Project. The ISPP was developed in consultation with the fishery resource agencies, and the FERC license was amended on December 13, 2013, to incorporate the terms and conditions of the ISPP. In 2019, upon expiration of the ISPP, Brookfield developed a final Species Protection Plan (SPP) for the project, the terms of which were incorporated into the project license by FERC on August 16, 2022. The purpose of both the ISPP and SPP is to guide project operation and management, including fishway operations until relicensing. Terms and conditions of the ISPP and SPP include provisions for fishway operation and monitoring, project operation, and the conduct of certain fish passage studies.

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Table 1. Unit Prioritization Scenarios for Atlantic Salmon Smolt Passage (source: PAD)

Total River Flow (cfs)	Unit Operations
<7,615	Unit 1 – online day; offline night Unit 2/3 – both online day; one offline night
7,615-18,275	Unit 1 – online day; offline night Unit 2/3 – both online day; both online night
>18,275	Unit 1 – online day and night Unit 2/3 – online day and night

3.2 APPLICANT’S PROPOSAL

3.2.1 Proposed Operation

Brookfield proposes to continue to operate the project in the same manner described above in section 3.1.3. No new or upgraded facilities, structural changes, or operational changes are proposed.

3.2.2 Proposed Environmental Measures

The environmental measures that are currently proposed by Brookfield are described below.

Aquatic Resources

- Continue to operate the project in a run-of-river mode by maintaining the impoundment within 2 feet of the spillway crest, such that inflow approximates outflow.
- Continue to operate upstream and downstream fish passage facilities.

Threatened and Endangered Species Resources

- Continue measures to protect Atlantic salmon, shortnose sturgeon, and Atlantic sturgeon.

Recreation and Land Use

- Continue to provide for public access and use of project lands and waters.

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3.3 PROJECT 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 the addition of 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>).

The project has been operating for more than 45 years under the current license and during this time Commission staff have conducted operational inspections focusing on the continued safety of the structure, identification of unauthorized modifications, efficiency and safety of operations, compliance with the terms of the license, and proper maintenance.

3.4 ALTERNATIVES TO THE PROPOSED ACTION

Commission staff will consider and assess all alternative recommendations for operational or facility modifications, as well as protection, mitigation, and enhancement measures identified by the Commission, the agencies, Indian tribes, NGOs, and the public.

3.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

At present, we propose to eliminate the following alternatives from detailed study in the NEPA document.

3.5.1 Federal Government Takeover

In accordance with § 16.14 of the Commission's regulations, a federal department or agency may file a recommendation that the United States exercise its right to take over a hydroelectric power project with a license that is subject to sections 14 and 15 of the FPA.⁶ We do not consider federal takeover to be a reasonable alternative. Federal takeover of the project would require congressional approval. While that fact alone would not preclude further consideration of this alternative, there is currently no evidence

⁶ 16 U.S.C. §§ 791(a)-825(r).

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showing that federal takeover should be recommended to Congress. No party has suggested that federal takeover would be appropriate, and no federal agency has expressed interest in operating the project.

3.5.2 Non-power License

A non-power license is a temporary license the Commission would terminate whenever it determines that another governmental agency is authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the non-power license. At this time, no governmental agency has suggested a willingness or ability to take over the project. No party has sought a non-power license, and we have no basis for concluding that the project should no longer be used to produce power. Thus, we do not consider a non-power license a reasonable alternative to relicensing the project.

3.5.3 Project Decommissioning

As the Commission has previously held, decommissioning is not a reasonable alternative to relicensing in most cases.⁷ Decommissioning can be accomplished in different ways depending on the project, its environment, and the particular resource needs.⁸ For these reasons, the Commission does not speculate about possible decommissioning measures at the time of relicensing, but rather waits until an applicant actually proposes to decommission a project, or a participant in a relicensing proceeding demonstrates that there are serious resource concerns that cannot be addressed with appropriate license measures and that make decommissioning a reasonable alternative.⁹

⁷ See, e.g., *Eagle Crest Energy Co.*, 153 FERC ¶ 61,058, at P 67 (2015); *Public Utility District No. 1 of Pend Oreille County*, 112 FERC ¶ 61,055, at P 82 (2005); *Midwest Hydro, Inc.*, 111 FERC ¶ 61,327, at PP 35-38 (2005).

⁸ In the unlikely event that the Commission denies relicensing a project or a licensee decides to surrender an existing project, the Commission must approve a surrender “upon such conditions with respect to the disposition of such works as may be determined by the Commission.” 18 C.F.R. § 6.2 (2023). This can include simply shutting down the power operations, removing all or parts of the project (including the dam), or restoring the site to its pre-project condition.

⁹ See generally *Project Decommissioning at Relicensing*; Policy Statement, FERC Stats. & Regs., Regulations Preambles (1991-1996), ¶ 31,011 (1994); see also *City of Tacoma, Washington*, 110 FERC ¶ 61,140 (2005) (finding that unless and until the Commission has a specific decommissioning proposal, any further environmental

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Brookfield does not propose decommissioning, nor does the record to date demonstrate there are serious resource concerns that cannot be mitigated if the project is relicensed; as such, there is no reason, at this time, to include decommissioning as a reasonable alternative to be evaluated and studied as part of staff's NEPA analysis.

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 (50 C.F.R. 1508.1(g)(3)), a cumulative effect is the effect on the environment that results from the incremental effect 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 Brunswick Project, and preliminary staff analysis, we have identified water quality, aquatic habitat, and migratory fisheries as resources that could be cumulatively affected by the proposed continued operation and maintenance of the Brunswick Project in combination with other hydroelectric projects and other activities in the Androscoggin River Basin.

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 hydropower and non-hydropower activities within the Androscoggin River Basin. We have identified the geographic scope for water quality and effects to aquatic habitat to include the Androscoggin River from the upstream extent of the Brunswick reservoir to where the Androscoggin River flows into Merrymeeting Bay. We chose this geographic scope because the operation and maintenance of the Brunswick Project, in combination with other developments in the Androscoggin River

analysis of the effects of project decommissioning would be both premature and speculative).

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Basin may affect water quality and/or aquatic habitat in this segment of the Androscoggin River.

We have identified the geographic scope for migratory fisheries to include the Androscoggin River Basin. We chose this geographic scope because the operation and maintenance of the Brunswick Project, in combination with other hydroelectric projects in the Androscoggin River Basin may affect migratory fisheries resources in the Androscoggin River Basin. There are no less than 28 dams on the mainstem Androscoggin River from its headwaters to the point where it flows into Merrymeeting Bay.

4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the NEPA document 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 NEPA document. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's record for the Brunswick Project. This list is not intended to be exhaustive or final, but contains those issues raised to date that could have substantial effects. 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 NEPA document. We have not identified issues relating to geology and soils, socioeconomics, or aesthetic resources at this time. 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 water quality from the project headwaters downstream to where the Androscoggin River flows into Merrymeeting Bay.*

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- Effects of continued project operation on aquatic habitat in the project area for migratory fish species.*
- Effects of continued project operation on passage of migratory fish species in the Androscoggin River.*

4.2.2 Terrestrial Resources

- Effects of project maintenance (e.g., vegetation management) on special status species including bats and migratory birds.
- Effects of the project on the spread and control of invasive species.

4.2.3 Threatened and Endangered Species

- Effects of project operation and maintenance on the Atlantic salmon and its critical habitat, Atlantic sturgeon and its critical habitat, shortnose sturgeon, and the Northern long-eared bat which are federally listed as endangered; the tri-colored bat which is federally proposed as threatened; and the monarch butterfly, which is a candidate species for federal listing.

4.2.4 Recreation and Land Use

- Effects of continued project operation and maintenance on recreational use and experience in the project area, including the adequacy of existing recreation access, education and interpretive opportunities, and facilities in meeting current and anticipated recreation needs.

4.2.5 Environmental Justice

- Effects of continued project operation and maintenance on identified environmental justice communities.

4.2.6 Cultural and Tribal Resources

- Effects of continued project operation and maintenance activities on historic and archaeological resources, traditional cultural properties, and access to exercise traditional practices and treaty rights.

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4.2.7 Developmental Resources

- Effects of proposed environmental measures and associated costs on project economics.

5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by Brookfield and the recommendations of the consulted entities, Brookfield will consider, and may propose certain other measures to enhance environmental resources affected by the project as part of the proposed action. Brookfield’s initial study proposals are identified by resource area in table 2. Detailed information on Brookfield’s initial study proposals can be found in the PAD. Further studies may need to be added to this list based on comments provided to the Commission and Brookfield from interested participants, including Indian tribes.

Table 2. Brookfield’s initial study proposals for the Brunswick Project. (source: PAD)

Resource Area/Study Name	Brookfield’s Proposed Study
Aquatic Resources	
Impoundment Trophic State Study	Collect water quality data from the project impoundment from June through October to confirm compliance with state water quality standards.
Tailwater Temperature and Dissolved Oxygen Study	Collect water temperature and dissolved oxygen data from the project tailrace from July through August to confirm compliance with state water quality standards.
Tailwater Benthic Macroinvertebrate Study	Conduct a macroinvertebrate survey in the project tailrace.
Computational Fluid Dynamics Modeling- Upstream and Downstream Passage	Conduct CFD modeling in the vicinity of the project forebay/downstream fishway entrance, as well as in the project tailrace/near the entrance of the upstream fish passage facility.
Upstream and Downstream Passage Alternatives Study	Conduct an Upstream and Downstream Passage Alternatives Study that will include evaluations of previously conducted telemetry studies at the project, an evaluation of the existing upstream and downstream fish passage facilities at the project as compared to agency design criteria, a desktop evaluation of entrainment

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Resource Area/Study Name	Brookfield’s Proposed Study
	potential, as well as an evaluation of potential upstream and downstream passage alternatives.
Visual Eel Monitoring Surveys	Conduct twelve nighttime visual monitoring surveys for upstream-migrating eels.
Recreation Resources	
Recreation Use and Condition Assessment	Conduct a site inventory, condition assessment, and user survey at all project recreation sites.
Cultural Resources	
Historic Architectural Survey	Conduct archival research, a visual inspection of the project facilities including the dam, powerhouse, and all associated buildings and structures, as well as buildings and structures within the project boundary to identify and evaluate affected resources that have the potential for inclusion in the National Register of Historic Places.
Historic and Pre-historic Archeological Resources Survey	Conduct background archival research, a walkover of areas where previously reported archaeological sites or map-documented structures are identified, and a walkover of project facilities and the river corridor extending from the project dam to the upstream extent of the project boundary.

6.0 REQUEST FOR INFORMATION AND STUDIES

We are asking federal, state, and local resource agencies, Indian tribes, NGOs, and the public to forward to the Commission any information that will assist us in conducting an accurate and thorough analysis of the project-specific and cumulative effects associated with licensing the Brunswick Project. The types of information requested include, but are not limited to:

- information, quantitative data, or professional opinions that may help define the geographic and temporal scope of the analysis (both site-specific and cumulative effects), and that helps identify significant environmental issues;
- identification of, and information from, any other EA, EIS, or similar environmental study (previous, on-going, or planned) relevant to the proposed licensing of the Brunswick Project;

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- existing information and any data that would help characterize environmental conditions and habitats and in the assessment of project effects on environmental resources;
- the identification of any federal, state, or local resource plans, and any future project proposals in the affected resource area (e.g., proposals to construct or operate water treatment facilities, recreation areas, water diversions, timber harvest activities, or fish management programs), along with any implementation schedules);
- documentation that the proposed project would or would not contribute to cumulative adverse or beneficial effects on any resources. Documentation can include, but need not be limited to, how the project would interact with other projects in the area and other developmental activities; study results; resource management policies; and reports from federal and state agencies, local agencies, Indian tribes, NGOs, and the public;
- documentation showing why any resources should be excluded from further study or consideration; and
- study requests by federal and state agencies, local agencies, Indian tribes, NGOs, and the public that would help provide a framework for collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the NEPA document for the project.

All requests for studies filed with the Commission must meet the criteria found in Appendix A, *Study Plan Criteria*.

The requested information, comments, and study requests should be submitted to the Commission no later than **June 20, 2024**. All filings must clearly identify the following on the first page, as appropriate: **Brunswick Hydroelectric Project (P-2284-052)**. Scoping comments may be filed electronically via the Internet. See 18 C.F.R. 385.2001(a)(1)(iii) and the instructions on the Commission's website <https://ferconline.ferc.gov/FERCOOnline.aspx>. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at <https://ferconline.ferc.gov/QuickComment.aspx>. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at FERCOOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659. In lieu of electronic filing, you may submit a paper copy.

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Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

Register online at <https://ferconline.ferc.gov/FERCOOnline.aspx> 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 FERCOOnlineSupport@ferc.gov.

Any questions concerning the scoping meetings, environmental site review, or how to file written comments with the Commission should be directed to Ryan Hansen at (202)-502-8074 or ryan.hansen@ferc.gov. Additional information about the Commission's licensing process and the project may be obtained from the Commission's website, www.ferc.gov.

7.0 CURRENT PROCESSING SCHEDULE

The decision on whether to prepare and EA or EIS will be determined after the license application is filed and we fully understand the scope of effects and measures under consideration. The NEPA document will be distributed to all persons and entities on the Commission's service and mailing lists for the Brunswick Project. The NEPA document 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. The comment period will be specified in the notice of availability of the NEPA document.

A copy of the approved process plan, which has a complete list of licensing milestones for the project, including those for developing the license application, is attached as Appendix B to this SD1.

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. Commission staff has preliminarily identified and reviewed the plans listed below that may be relevant to the Brunswick Project. Agencies are requested to review this list and inform the 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

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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 <https://cms.ferc.gov/comprehensive-plans>.

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

Atlantic States Marine Fisheries Commission. 1992. Fishery management plan for inshore stocks of winter flounder. (Report No. 21). May 1992.

Atlantic States Marine Fisheries Commission. 1995. Interstate fishery management plan for Atlantic striped bass. (Report No. 24). March 1995.

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. 1998. Interstate fishery management plan for Atlantic striped bass. (Report No. 34). January 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.

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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.

Maine Atlantic Sea-Run Salmon Commission. 1984. Strategic plan for management of Atlantic salmon in the State of Maine. Augusta, Maine. July 1984.

Maine Department of Agriculture, Conservation, & Forestry. Maine State Comprehensive Outdoor Recreation Plan (SCORP): 2014-2019. Augusta, Maine.

Maine Department of Conservation. 1982. Maine Rivers Study-final report. Augusta, Maine. May 1982.

Maine State Planning Office. 1987. Maine Comprehensive Rivers Management Plan Vols 1-3. Augusta, Maine. May 1987.

Maine State Planning Office. 1992. Maine Comprehensive Rivers Management Plan. Volume 4. Augusta, Maine. December 1992.

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 Marine Fisheries Service. 2018. Recovery Plan for the Gulf of Maine Distinct Population Segment of Atlantic Salmon. Hadley, Massachusetts. January 2019.

National Marine Fisheries Service. 2020. Androscoggin River Watershed Comprehensive Plan for Diadromous Fish. Greater Atlantic Region Policy Series 20-01. NOAA Fisheries Greater Atlantic Regional Fisheries Office, Gloucester, MA. 2020.

National Park Service. 1993. The Nationwide Rivers Inventory. Department of the

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Interior, Washington, D.C.

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. 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.

9.0 MAILING LISTS

The list below is the Commission's official mailing list for the Brunswick Project. If you want to receive future mailings for this proceeding and are not included in the list below, please send your request by email to FERCOnlineSupport@ferc.gov. In lieu of an email request, you may submit a paper request. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. All written or emailed requests to be added to the mailing lists must clearly identify the following: **Brunswick Hydroelectric Project (P-2284-052)**. You may use the same methods if requesting removal from the mailing list below.

Register online at <https://ferconline.ferc.gov/FERCOOnline.aspx> to be notified via email of new filings and issuances related to these projects 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.

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Official Mailing List for the Brunswick Hydroelectric Project

Rachel Magnum Advisory Council on Historic Preservation 401 F Street N.W. Suite 308 Washington, DC 20001-2637	Ronald Diana Androscoggin Power Company Hearst Corporation 959 8th Ave New York, NY 10019-3737
Thomas C. Orvald Senior FERC Counsel Brookfield White Pine Hydro LLC 801 Pennsylvania Ave., N.W. Suite 220 Washington DC 20004	Kelly Maloney Manager, Licensing and Compliance Brookfield White Pine Hydro LLC 150 Main Street Lewiston, ME 04240
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Kathy Davis Howatt Hydropower Coordinator Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017	John Perry Environmental Review Coordinator Maine Department of Inland Fisheries and Wildlife 284 State Street 41 SHS Augusta, ME 04333-0041
Kathleen Leyden Director, Maine Coastal Program Maine Department of Agriculture, Conservation, & Forestry 93 State House Station Augusta, ME 04333-0038	Jay Clement U.S. Army Corps of Engineers 675 Western Avenue Manchester, ME 04351

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APPENDIX A
STUDY PLAN CRITERIA
18 CFR Section 5.9(b)

Any information or study request must contain the following:

1. Describe the goals and objectives of each study proposal and the information to be obtained;
2. If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
3. If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
4. Describe existing information concerning the subject of the study proposal, and the need for additional information;
5. Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
6. Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
7. Describe considerations of level of effort and cost, as applicable, and why proposed alternative studies would not be sufficient to meet the stated information needs.

**APPENDIX B
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.

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
Brookfield	NOI/PAD and Request to Utilize the Integrated Licensing Process filed	2/21/24	5.5, 5.6
FERC	Initiate Tribal Consultation	3/22/24	5.7
FERC	Issue Notice of Commencement of Proceeding and Scoping Document 1	4/21/24	5.8
FERC	Scoping Meetings and Project Site Visit	5/21/24	5.8(b)(viii)
All Stakeholders	File Comments on PAD/Scoping Document 1 and Study Requests	6/20/24	5.9
FERC	Issue Scoping Document 2 (if necessary)	8/4/24	5.10
Brookfield	File Proposed Study Plan	8/4/24	5.11(a)
All Stakeholders	Proposed Study Plan Meeting	9/3/24	5.11(e)
All Stakeholders	File Comments on Proposed Study Plan	11/2/24	5.12
Brookfield	File Revised Study Plan	12/2/24	5.13(a)
All Stakeholders	File Comments on Revised Study Plan	12/17/24	5.13(b)
FERC	Issue Director's Study Plan Determination	1/1/25	5.13(c)
Mandatory Conditioning Agencies	File Any Study Disputes	1/21/25	5.14(a)
Brookfield	File Comments on Study Disputes	2/15/25	5.14(i)

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
Dispute Panel	Issue Dispute Resolution Panel Findings	3/12/25	5.14(k)
FERC	Issue Director's Study Dispute Determination	4/1/25	5.14(l)
Brookfield	First Study Season	May to October 2025	5.15(a)
Brookfield	File Initial Study Report	1/1/26	5.15(c)(1)
All Stakeholders	Initial Study Report Meeting	1/16/26	5.15(c)(2)
Brookfield	File Initial Study Report Meeting Summary	1/31/26	5.15(c)(3)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	3/2/26	5.15(c)(4)
All Stakeholders	File Responses to Disagreements/Amendment Requests	4/1/26	5.15(c)(5)
FERC	Issue Director's Determination on Disagreements/Amendments	5/1/26	5.15(c)(6)
Brookfield	Second Study Season (if needed)	May to October 2026	5.15(a)
Brookfield	File Updated Study Report	1/1/27	5.15(f)
All Stakeholders	Updated Study Report Meeting	1/16/27	5.15(f)
Brookfield	File Updated Study Report Meeting Summary	1/31/27	5.15(f)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	3/2/27	5.15(f)
All Stakeholders	File Responses to Disagreements/Amendment Requests	4/1/27	5.15(f)
FERC	Issue Director's Determination on Disagreements/Amendments	5/1/27	5.15(f)
Brookfield	File Preliminary Licensing Proposal (or Draft License Application)	10/1/26	5.16(a)-(c)

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	12/30/26	5.16(e)
Brookfield	File Final License Application	2/28/27	5.17
Brookfield	Issue Public Notice of Final License Application Filing	3/14/27	5.17(d)(2)

Document Content(s)

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