

**Report to the Joint Standing Committee on Environment and
Natural Resources
129th Legislature, Second Regular Session**

Pending and Anticipated Water Quality Certification Applications for Hydropower Projects

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I. Executive Summary

The Maine Department of Environmental Protection (Department) is submitting this report to the Joint Standing Committee on the Environment and Natural Resources pursuant to 38 M.R.S. § 638. This statute requires the Department to list the applications pending for hydropower water quality certification (WQC), and for applications anticipated to be submitted to the Department in the next five years.

The Department is currently reviewing four WQC applications for hydropower relicensing projects.

During calendar year 2019, the Department issued one WQC within statutory deadlines for the following hydropower relicensing project:

- Lower Barker Hydro (WQC issued November 22, 2019; FERC deadline December 7, 2019)

The Department anticipates receiving twenty-two new WQC applications for FERC relicensing in the next five years.

In addition, the Department oversees two tidal energy projects (Cobscook Bay Tidal, and two installations in the Western Passage). One tidal energy project, Cobscook Bay Tidal, has a tidal power general permit that has a water quality certification expected to expire in 2022; the project in the Western Passage has a preliminary permit (which, as a developmental permit, does not include a water quality certification). The Department expects the preliminary permit for Western Passage to be replaced by a tidal power general permit when the project transitions to the in-water construction and testing phase.

II. Summary of FERC Relicensing Process

In Maine, there are 132 hydropower dams administered through 97 federal licenses or exemptions authorized by the Federal Energy Regulatory Commission (FERC). Per Section 401 of the federal Clean Water Act (33 U.S.C. § 1341), a federal license may not be issued for a hydropower project unless the state water quality certifying agency has either issued a water quality certification (WQC) for the project or has waived certification. This process affords the states and authorized tribes an opportunity to address the aquatic resource impacts of federally-issued permits and licenses. By Executive Order of the governor of the State of Maine, the Department is the State certifying agency for the federal licensing of hydropower projects in Maine. Section 401 provides up to one year for states to issue decisions on WQC applications.

Title 38, section 638 requires the Department to submit an annual report on the status of pending WQC applications and a list of the relicensing projects anticipated to be submitted to the Department in the next five years. Section 638 states:

“By January 15, 2015, and annually thereafter, the department shall submit to the joint standing committee of the Legislature having jurisdiction over natural resources matters a report describing all pending applications for water quality certification under Section 401 of the federal Clean Water Act for dams located in the State that are subject to the jurisdiction of the Federal Energy Regulatory Commission. The report submitted under this section must include, for each pending application, the filing date of the application, the respective response deadline for the department and a short statement describing the department’s plan to address that deadline. The report must also include a list of the licensing or relicensing deadlines for the dams described in this section that are anticipated to occur within 5 years after the date of the report and, if applicable, the department’s plan to address each deadline.”

III. Summary of Hydropower Projects Due for Relicensing in 2020-2024

The Department currently is reviewing four WQC applications for hydropower projects, listed below, with a brief statement of steps the Department is taking to achieve the WQC deadlines. Additional project details can be found in Appendix A.

- Goose River – The applicant submitted a WQC application on January 23, 2019, and the application is currently under review. A Department decision is expected to be issued prior to the statutory deadline of January 22, 2020.
- Ellsworth Hydro – The applicant submitted a WQC application on March 21, 2019, and the application is currently under review. A WQC decision will be issued prior to the FERC filing deadline of March 20, 2020.
- Mattaceunk – The applicant voluntarily withdrew and resubmitted its WQC application with the Department on March 27, 2019 to provide for Board of Environmental Protection and Legislative the time to a reclassification proposal that encompassed project waters, including portions of the East Branch Penobscot River and the mainstem Penobscot River. A draft WQC will be updated to reflect the changes approved by the Legislature. A WQC decision will be issued prior to the FERC filing deadline of March 26, 2020.

- Brassua – The applicant voluntarily withdrew and resubmitted its WQC application with the Department on September 18, 2019. The new WQC deadline for a Department decision is on or before September 17, 2020.

The Department maintains steps to improve the internal permitting process for hydropower WQC applications, including:

- Maintenance of a calendar identifying WQC milestones and statutory deadlines;
- Creation of project-specific Gantt charts, with milestones and timelines for each WQC application, using Microsoft Project software; and
- Increased communication and coordination among Department staff involved in the review of WQC applications.

The Department anticipates receiving twenty-two new WQC applications for FERC relicensing in the next five years for the following hydropower projects. The dates listed are the anticipated dates for receiving a WQC application:

- Rollinsford – 2020
- Squa Pan – 2020
- Shawmut – 2020
- Lower Great Falls – 2020
- Cobscook Bay (tidal hydropower project) - 2020
- Pejepscot – 2020
- Hiram – 2020
- Lower Mousam River – 2020
- Upper Barker – 2021
- Errol – 2021
- Pumpkin Hill – 2021
- Green Lake 2022
- West Enfield – 2022
- Hackett Mills – 2022
- Somersworth – 2022
- Rumford Falls – 2022
- Aziscohos – 2023
- Worumbo – 2023
- Lewiston Falls – 2024
- Penobscot Mills – 2024

- Ripogenous – 2024
- Eustis - 2024

Appendix A includes a spreadsheet listing all pending and anticipated WQC applications within the next five years, including a brief description of the steps the Department is taking to achieve the WQC deadlines.

APPENDIX A: Pending and Anticipated WQC Applications

Hydropower Licensing Actions Completed in 2019

FERC License Expiration Date	FERC #	Project / Dam	Subordinate Dams	WQC Application Filing Date	Department WQC Deadline	Licensing Action Completed	Comments
January 31, 2019	2808	Lower Barker*		December 7, 2018	December 6, 2019	2019	The WQC was issued on November 22, 2019 and filed with FERC on December 4, 2019, prior to the December 6, 2019 FERC statutory deadline.

Pending Hydropower Water Quality Certification Applications (As of 12/31/18)

FERC License Expiration Date	FERC #	Project / Dam	Subordinate Dams	WQC Application Filing Date	Department WQC Deadline	Anticipated FERC relicense date	Steps to Achieve WQC Deadline
February 29, 2020	2804	Goose River	Swan Lake Dam Mason's Dam Kelly Dam Mill Dam CMP Dam	January 23, 2019	January 22, 2020	2020	A Final License Application was filed with FERC in February 2018 and the Project found to be ready for Environmental Analysis in November 2018. An Environmental Assessment was completed by FERC in June 2019. An initial WQC application submitted to DEP on January 23, 2019 was returned for improper notice; the application was resubmitted on February 11, 2019. A DEP decision will be issued prior to January 22, 2020.
December 31, 2017	2727	Ellsworth*	Graham Lake Dam, Lake Leonard Dam	March 21, 2019	March 20, 2020	2020	A WQC application was withdrawn and a new application simultaneously submitted on March 20, 2019. In its reapplication, the applicant modified its proposed operations to address impoundment habitat criteria and proposed to collect additional BMI data. A DEP decision will be issued prior to March 19, 2020.
August 31, 2018	2520	Mattaceunk*		March 27, 2019	March 26, 2020	2020	The WQC application was withdrawn and simultaneously resubmitted on March 27, 2019. BEP approved a DEP proposal to correct an error in the water quality classification for the East Branch Penobscot River, and to upgrade the water quality classification in the purtenant segment of the main stem of the Penobscot River. DEP will issue the WQC by or before March 26, 2020.
March 31, 2012	2615	Brassua *		September 18, 2019	September 17, 2020	2021	WQC application voluntarily withdrawn and resubmitted by applicant on 9/18/2019; DEP is working with the project owner and EPA as part of the certification review process.

Anticipated Hydropower Water Quality Certification Applications in the Next Five Years

FERC License Expiration Date	FERC #	Project / Dam	Subordinate Dams	Anticipated WQC Application Filing Date	Anticipated Department WQC Deadline	Anticipated FERC relicense date	Steps to Achieve WQC Deadline
August 31, 2021	3777	Rollinsford		March 2020	March 2021	2022	DEP is coordinating study plans with NHDES, who also anticipates filing a WQC, as the Salmon Falls River is a border between the states. A Final License Application filed with FERC in August 2019 was found deficient and a request for more information and an extension issued by FERC in October. A WQC application is anticipated in spring 2020.
December 3, 2021	2368	Squa Pan		March 2020	March 2021	2022	The applicant filed a Draft License Application in July 2019; DEP filed comments on the DLA in October 2019. A Final License Application was filed in December 2019. DEP anticipates a WQC application in spring 2020.
January 31, 2022	2322	Shawmut		April 2020	April 2021	2022	DEP reviewed and provided comment on the draft license application in December 2018; FERC extended the current license term to January 31, 2022. The applicant is expected to submit a final license application in January 2020 and a WQC application in April 2020.
April 30, 2022	4451	Lower Great Falls		April 2020	April 2021	2022	Water quality studies were carried out during the 2018 field season; DEP anticipates review and comment on the study results in winter 2020.
January 31, 2022	12711	Cobscook Bay Tidal Energy Project		June 2020	June 2021	2022	In February 2012 FERC issued an 8-year pilot project license to Ocean Renewable Power Company (ORPC), with a license expiration date of January 31, 2020. In December 2015, FERC approved a request from ORPC to extend the term of the license to January 31, 2022. The applicant intends to re-install a fully optimized device in 2021 and to test alternative turbine devices.

August 31, 2022	4784	Pejepscot		August 2020	August 2021	2022	Water quality studies were carried out during the 2018 field season; DEP anticipates review and comment on the Final Study Report in winter 2020.
November 30, 2022	2530	Hiram		November 2020	November 2021	2022	Water quality studies were carried out during the 2018 field season; DEP anticipates review and comment on the Final Study Report in winter 2020.
March 31, 2022	14856	Lower Mousam	Kesslan Dam Twine Mill Dam Dane Perkins Dam	December 2020	December 2021	2022	Current owners of the dams voted to not relicense the Lower Mousam Project (P-5362). America First Hydro (AFH) applied to FERC to take up the license for this project, and is proceeding under FERC project numer P-14856. In December 2019 FERC suspended its licensing process pending determination that AFH intends to license all project facilities (recent filings by AFH indicated its intention to license just 2 of the 3 Project Dams). DEP awaits the FERC determination in spring 2020 and anticipates WQC application in winter 2020/21.
March 31, 2022	5362	Lower Mousam	Kesslan Dam Twine Mill Dam Dane Perkins Dam				Current owners of the dams voted in 2016 to not seek relicense; Pending a FERC determination on P-14856 (see below), the FERC may seek a surrender of the Lower Mousam Project under P-5362.
July 31, 2023	3562	Upper Barker		July 2021	July 2022	2023	Water quality studies were carried out during the 2018 field season, and DEP commented on the Initial Study Report in April 2019. The Department anticipates a Draft License Application will be filed in summer 2020 for agency comment.
August 29, 2023	3133	Errol		August 2021	August 2022	2023	The applicant filed a PAD and held a joint agency meeting in early 2019. DEP commented on the PAD and prepared study plan requests; water quality studies were carried out during the 2019 field season and a study progress report was made in December 2019. Additional studies will be completed in 2020, and the DEP anticipates a Final Study Report in winter 2020/21. DEP is not the certifying agency for Errol Hydro, as the project discharge is entirely in the state of New Hampshire; however, as a portion of the impoundment lies within the state of Maine the Department requested certain water quality study parameters be added to the study requested by NHDES.
September 30, 2023	4293	Pumpkin Hill		September 2021	September 2022	2023	The applicant filed a PAD and held a joint agency meeting in early 2019. DEP commented on the PAD and prepared study plan requests; water quality studies were carried out during the 2019 field season. The DEP anticipates a Study Report meeting in winter 2020 and additional studies to be conducted in field season 2020.
April 30, 2024	7189	Green Lake		April 2022	April 2023	2024	The applicant filed a PAD and held a joint agency meeting in fall 2019. DEP review the PAD and prepared study plan requests and comments; DEP anticipates water quality studies will be conducted during field season 2020.
May 31, 2024	2600	West Enfield		May 2022	May 2023	2024	The applicant filed a PAD and held a joint agency meeting in fall 2019. DEP reviewe the PAD and prepared study plan requests; DEP anticipates water quality studies will be conducted during field season 2020.
August 31, 2024	6398	Hackett Mills		August 2022	August 2023	2024	The applicant will filed a PAD and held a joint agency meeting in December 2019. DEP reviewed the PAD and prepared study plan requests and comments; DEP anticpates water quality studies will be conducted during field season 2020.
August 31, 2021	3820 / 15004	Somersworth		August 2022	August 2023	2024	Aclara Meters, LLC submitted an application to FERC to surrender its license to operate the project, citing excessive costs to repair the penstock. New Hampshire Renewables has applied to assume the Somersworth Hydro license; DEP is working with the new applicants to develop study plans to assess whether the project meets water quality standards. The new license will proceed under the federal docket P-15004.
September 30, 2024	2333	Rumford Falls		September 2022	September 2023	2024	The applicant filed a PAD and held a joint agency meeting in December 2019. DEP reviewe the PAD and prepared study plan requests and comments. DEP anticipates water quality studies will be conducted during field season 2020.
March 31, 2025	4202	Aziscohos		March 2023	March 2024	2025	Anticipate applicant will file a PAD and hold a joint agency meeting in 2020. DEP will review the PAD and prepare study plan requests as appropriate.

November 30, 2025	3428	Worumbo		November 2023	November 2024	2025	Anticipate applicant will file a PAD and hold a joint agency meeting in 2020. DEP will review the PAD and prepare study plan requests as appropriate.
August 31, 2026	2302	Lewiston Falls		August 2024	August 2025	2026	Anticipate applicant will file a PAD and hold a joint agency meeting in 2021. DEP will review the PAD and prepare study plan requests as appropriate.
October 1, 2026	2458	Penobscot Mills	North Twin Dam Millinocket Dolby Dam East Millinocket Millinocket Lake	October 2024	October 2025	2027	Anticipate applicant will file a PAD and hold a joint agency meeting in 2021. DEP will review the PAD and prepare study plan requests as appropriate.
October 1, 2026	2572	Ripogenous		October 2024	October 2025	2027	Anticipate applicant will file a PAD and hold a joint agency meeting in 2021. DEP will review the PAD and prepare study plan requests as appropriate.
November 31, 2026	11132	Eustis		November 2024	November 2025	2027	Anticipate applicant will file a PAD and hold a joint agency meeting in 2021. DEP will review the PAD and prepare study plan requests as appropriate.
Preliminary Permit	14743	Western Passage					A preliminary permit for the project was granted by FERC in July 2016. The applicant has worked with NMFS to complete a biological assessment, and with the University of Maine to identify further data needs to support licensing, including testing monitoring equipment and methodologies; the applicant is collecting environmental data to prepare an application for a Tidal Power Demonstration Project and WQC.
* Currently operating under an annual license.							

Section 15(a)(1) of the Federal Power Act requires FERC, at the expiration of a license term, to issue an annual license to the then licensee under the terms and conditions of the prior license until a new license is issued, or the project is otherwise disposed of as provided in Section 15 or any other applicable section of the Federal Power Act. If the project's prior license waived the applicability of Section 15 of the Federal Power Act, then, if the licensee of such project has filed an application for a subsequent license, the licensee may continue to operate the project in accordance with the terms and conditions of the license after the minor or minor part license expires, until the Commission acts on its application. If the licensee of such a project has not filed an application for a subsequent license, then it may be required to continue project operations until the Commission issues someone else a license for the project or otherwise orders disposition of the project.

Abbreviations							
FERC=Federal Energy Regulatory Commission							
WQC=Water Quality Certification							
DEP=Maine Department of Environmental Protection							
PAD=Pre-Application Document							
NMFS=National Marine Fisheries Service							
PSP=Proposed Study Plan							
NHDES=New Hampshire Department of Environmental Services							
NOI=Notice of Intent to File (an application)							
ILP=Integrated Licensing Process							