

Report to the Joint Standing Committee on Environment and Natural Resources 129<sup>th</sup> 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					
January 31, 2019	2808	Lower Barker*		December 7, 2018	December 6, 2019	2019	The WQC was issued on November 22, 2019 December 6, 2019 FERC statutory deadline.				
			Penc	ling Hydropower V	Vater Quality Certi	fication Applicat	ions (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				
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 FE Environmental Analysis in November 2018. June 2019. An initial WQC application subm improper notice; the application was resubr 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 ne In its reapplication, the applicant modified in criteria and proposed to collect additional B 2020.				
August 31, 2018	2520	Mattaceunk*		March 27, 2019	March 26, 2020	2020	The WQC application was withdrawn and sin approved a DEP proposal to correct an error Penobscot River, and to upgrade the water stem of the Penobscot River. DEP will issue				
March 31, 2012	2615	Brassua *		September 18, 2019	September 17, 2020	2021	WQC application voluntarily withdrawn and with the project owner and EPA as part of the project owner and EPA as part owner as part owner and EPA as part of the project owner and EPA as part owner and EPA as part of the project owner and EPA as part owner and EPA as par				
			Anticipat	ed Hydropower W	ater Quality Certif	ication Application	ons 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				
August 31, 2021	3777	Rollinsford		March 2020	March 2021	2022	DEP is coordinating study plans with NHDES is a border between the states. A Final Lice deficient and a request for more informatio application is anticipated in spring 2020.				
December 3, 2021	2368	Squa Pan		March 2020	March 2021	2022	The applicant filed a Draft License Application 2019. A Final License Application was filed in spring 2020.				
January 31, 2022	2322	Shawmut		April 2020	April 2021	2022	DEP reviewed and provided comment on th extended the current license term to Januar license application in January 2020 and a W				
April 30, 2022	4451	Lower Great Falls		April 2020	April 2021	2022	Water quality studies were carried out durin comment on the study results in winter 202				
January 31, 2022	12711	Cobscook Bay Tidal Energy Project		June 2020	June 2021	2022	In February 2012 FERC issued an 8-year pilo (ORPC), with a license expiration date of Jar request from ORPC to extend the term of th install a fully optimized device in 2021 and t				

#### Comments

19 and filed with FERC on December 4, 2019, prior to the e.

### to Achieve WQC Deadline

FERC in February 2018 and the Project found to be ready for 8. An Environmental Assessment was completed by FERC in bmitted to DEP on January 23, 2019 was returned for ibmitted on February 11, 2019. A DEP decision will be issued

new application simultaneously submitted on March 20, 2019. d its proposed ooperations to address impoundment habitat I BMI data. A DEP decision will be issued prior to March 19,

simultaneously resubmitted on March 27, 2019. BEP ror in the water quality classification for the East Branch er quality classification in the purtenant segment of the main ue the WQC by or before March 26, 2020.

nd resubmitted by applicant on 9/18/2019; DEP is working the certification review process.

## to Achieve WQC Deadline

ES, who also anticipates filing a WQC, as the Salmon Falls River cense Application filed with FERC in August 2019 was found ion and an extension issued by FERC in October. A WQC

ation in July 2019; DEP filed comments on the DLA in October ed in December 2019. DEP anticipates a WQC application in

the draft license application in December 2018; FERC Jary 31, 2022. The applicant is expected to submit a final WQC application in April 2020.

ring the 2018 field season; DEP anticipates review and 020.

ilot project license to Ocean Renewable Power Company January 31, 2020. In December 2015, FERC approved a the license to January 31, 2022. The applicant intends to red to test alternative turbine devices.

August 31, 2022	4784	Pejepscot		August 2020	August 2021	2022	Water quality studies were carried out duri comment on the Final Study Report in wint
November 30, 2022	2530	Hiram		November 2020	November 2021	2022	Water quality studies were carried out duri comment on the Final Study Report in wint
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 re Hydro (AFH) applied to FERC to take up the project numer P-14856. In December 2019 determination that AFH intends to license a intention to license just 2 of the 3 Project D and anticipates WQC application in winter 2
March 31, 2022	5362	Lower Mousam	Kesslan Dam Twine Mill Dam Dane Perkins Dam				Current owners of the dams voted in 2016 14856 (see below), the FERC may seek a su
July 31, 2023	3562	Upper Barker		July 2021	July 2022	2023	Water quality studies were carried out duri Study Report in April 2019. The Departmer summer 2020 for agency comment.
August 29, 2023	3133	Errol		August 2021	August 2022	2023	The applicant filed a PAD and held a joint and and prepared study plan requests; water quests and a study progress report was made in Da and the DEP anticipates a Final Study Report Errol Hydro, as the project discharge is entit the impoundment lies within the state of N parameters be added to the study requested
September 30, 2023	4293	Pumpkin Hill		September 2021	September 2022	2023	The applicant filed a PAD and held a joint a and prepared study plan requests; water q The DEP anticipates a Study Report meetin field season 2020.
April 30, 2024	7189	Green Lake		April 2022	April 2023	2024	The applicant filed a PAD and held a joint a prepared study plan requests and commen during field season 2020.
May 31, 2024	2600	West Enfield		May 2022	May 2023	2024	The applicant filed a PAD and held a joint apprepared study plan requests; DEP anticipa season 2020.
August 31, 2024	6398	Hackett Mills		August 2022	August 2023	2024	The applicant will filed a PAD and held a joi PAD and prepared study plan requests and conducted during field season 2020.
August 31, 2021	3820 / 15004	Somersworth		August 2022	August 2023	2024	Aclara Meters, LLC submitted an application citing excessive costs to repair the penstoch Somersworth Hydro license; DEP is working whether the project meets water quality st docket P-15004.
September 30, 2024	2333	Rumford Falls		September 2022	September 2023	2024	The applicant filed a PAD and held a joint a prepared study plan requests and commen during field season 2020.
March 31, 2025	4202	Aziscohos		March 2023	March 2024	2025	Anticipate applicant will file a PAD and hold and prepare study plan requests as approp

uring the 2018 field season; DEP anticipates review and nter 2020.

uring the 2018 field season; DEP anticipates review and nter 2020.

relicense the Lower Mousam Project (P-5362). America FIrst he license for this project, and is proceeding under FERC 19 FERC suspended its licensing process pending e all project facilities (recent filings by AFH indicated its t Dams). DEP awaits the FERC determination in spring 2020 er 2020/21.

.6 to not seek relicense; Pending a FERC determination on Psurrender of the Lower Mousam Project under P-5362.

uring the 2018 field season, and DEP commented on the Initial ent anticipates a Draft License Application will be filed in

agency meeting in early 2019. DEP commented on the PAD quality studies were carried out during the 2019 field season December 2019. Additional studies will be completed in 2020, port in winter 2020/21. DEP is not the certifying agency for ntirely in the state of New Hampshire; however, as a portion of Maine the Department requested certain water quality study sted by NHDES.

agency meeting in early 2019. DEP commented on the PAD quality studies were carried out during the 2019 field season. ing in winter 2020 and additional studies to be conducted in

t agency meeting in fall 2019. DEP review the PAD and ents; DEP anticipates water quality studies will be conducted

agency meeting in fall 2019. DEP reviewe the PAD and pates water quality studies will be conducted during field

oint agency meeting in December 2019. DEP reviewed the ad comments; DEP anticpates water quality studies will be

ion to FERC to surrender its license to operate the project, ock. New Hampshire Renewables has applied to assume the ng with the new applicants to develop study plans to assess standards. The new license will proceed under the federal

agency meeting in December 2019. DEP reviewe the PAD and ents. DEP anticipates water quality studies will be conducted

old a joint agency meeting in 2020. DEP will review the PAD opriate.

3428	Worumbo			November 2023	November 2024	2025	Anticipate applicant will file a PAD and hold and prepare study plan requests as appropr
2302	Lewiston Falls			August 2024	August 2025	2026	Anticipate applicant will file a PAD and hold
2302	Lewiston rans				1426512025	2020	and prepare study plan requests as appropr
2458	Penobscot Mills	Millinocket Dam Millinocl	Dolby East ket	October 2024	October 2025	2027	Anticipate applicant will file a PAD and hold and prepare study plan requests as appropr
2572	Ripogenous			October 2024	October 2025	2027	Anticipate applicant will file a PAD and hold and prepare study plan requests as appropr
11132	Eustis			November 2024	November 2025	2027	Anticipate applicant will file a PAD and hold and prepare study plan requests as appropr
14743	Western Passage						A preliminary permit for the project was gra NMFS to complete a biological assessment, needs to support licensing, including testing collecting environmental data to prepare ar WQC.
ler an annu	al license.						
any other a e to operate	applicable section of the e the project in accorda	Federal Power nce with the ter	Act. If the ms and co	e project's prior license anditions of the license a	waived the applicability o after the minor or minor p	f Section 15 of the part license expire	e Federal Power Act, then, if the licensee of such s, until the Commission acts on its application. I
	2302 2458 2572 11132 14743 ler an annu deral Powe any other a e to operate	2302 Lewiston Falls   2458 Penobscot Mills   2572 Ripogenous   11132 Eustis   14743 Western Passage   ler an annual license. Ilcense   deral Power Act requires FERC, at tany other applicable section of the set to operate the project in accorda	2302 Lewiston Falls   2458 Penobscot Mills   2458 Penobscot Mills   2572 Ripogenous   11132 Eustis   14743 Western Passage   ler an annual license. Image: Construction of the Federal Power et to operate the project in accordance with the term	2302Lewiston Falls2302Lewiston Falls2458Penobscot MillsPenobscot MillsNorth Twin Dam Millinocket Dam Millinocket Millinocket Lake2572Ripogenous11132Eustis14743Western Passageler an annual license.Image: Comparison of the Federal Power Act. If the te to operate the project in accordance with the terms and comparison	2302Lewiston FallsNorth Twin Dam MillinocketAugust 20242458Penobscot MillsNorth Twin Dam MillinocketOctober 20242572RipogenousOctober 202411132EustisOctober 202414743Western PassageNovember 2024ler an annual license.Icense term, to issue an annual any other applicable section of the Federal Power Act. If the project's prior license e to operate the project in accordance with the terms and conditions of the license at	2302Lewiston FallsNorth Twin Dam Millinocket Dolby Dam East Millinocket 	A constraintA constraint </td

Abbreviations				
FERC=Federal Energy Regulatory Cor	mmission			
WQC=Water Quality Certification				
DEP=Maine Department of Environn				
PAD=Pre-Application Document				
NMFS=National Marine Fisheries Ser	rvice			
PSP=Proposed Study Plan				
NHDES=New Hampshire Departmen	ces			
NOI=Notice of Intent to File (an appl				
ILP=Integrated Licensing Process				

old a joint agency meeting in 2020. DEP will review the PAD opriate.

old a joint agency meeting in 2021. DEP will review the PAD opriate.

old a joint agency meeting in 2021. DEP will review the PAD opriate.

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old a joint agency meeting in 2021. DEP will review the PAD opriate.

granted by FERC in July 2016. The applicant has worked with nt, and with the University of Maine to identify further data ing monitoring equipment and methodologies; the applicant is an appication for a Tidal Power Demonstration Project and

new license is issued, or the project is otherwise disposed of as uch project has filed an application for a subsequent license, I. If the licensee of such a project has not filed an application