

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

RUMFORD FALLS HYDRO LLC) MAINE WATER QUALITY PROGRAM
Rumford and Mexico, Oxford County) CLEAN WATER ACT
RUMFORD FALLS HYDROELECTRIC)
PROJECT)
L-024307-33-G-N (approval)) WATER QUALITY CERTIFICATION

Pursuant to the provisions of 38 M.R.S.A. §§ 464 *et seq.*, Section 401 of the Clean Water Act (CWA), 33 U.S.C. §§ 1251 *et seq.*, and Department Rules 06-096 CMR Chapters 579-582, the Department of Environmental Protection (Department) has considered the application of RUMFORD FALLS HYDRO LLC (Applicant or Rumford Falls Hydro) with all supporting data, agency review comments, and other related materials on file. Based on its professional judgment and expertise, the Department makes the following findings of fact and conclusions:

1. APPLICATION SUMMARY

A. <u>Application</u>

On August 22, 2023, the Applicant submitted an application to the Department for Water Quality Certification (WQC) pursuant to Section 401 of the CWA for the proposed relicensing and continued operation of the existing Rumford Falls Hydroelectric Project (Project) located on the Androscoggin River in the towns of Rumford and Mexico, Oxford County, Maine.

B. History

Construction of the Project began in 1890 and the Project first generated electricity in 1903. The Middle Dam, the Middle Dam Canal, and the Lower Station's headgate structure were built from 1890 to 1892. Construction of the Lower Station was completed in 1954. The concrete gravity dam in the Upper Station development was constructed in 1916. The Old Station in the Upper Station Development was constructed in 1910 and the New Station was completed in 1918. The Project was first licensed by FERC in 1965, for a term of 30 years. The current FERC license was issued on October 18, 1994, and it expires on September 30, 2024. The Applicant purchased the Project in 2006 and automated the Project for remote operation. From 2007 to 2010, the Applicant upgraded Units 1 and 2 in the Lower Station and Unit 3 in the Upper Station and installed the Obermeyer spillway system on the Upper Dam.

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C. Existing Project Features

The existing Project consists of two dams, two generating stations, two impoundments, and appurtenant facilities. The total generating capacity of the Project is 44.5 MW.

1) The Upper Station Development: The Upper Station Development consists of the Upper Dam, a forebay, a gatehouse, penstocks, and a powerhouse. The development has a total installed capacity of 29.3 MW and a maximum hydraulic capacity of 4,550 cubic feet per second (cfs). The concrete gravity dam utilizes 30-inch, pin-type, break-away flashboards, and a 271-foot-long Obermeyer spillway system. The crest of the dam is at elevation 598.74 feet¹ in normal operating mode, and spillage occurs when the water surface elevation exceeds 601.24 feet. The ogee-type spillway is 464 feet long and the concrete dam is 37 feet high and 42 feet wide at its base, and 10 feet wide at the rounded crest of the spillway. The downstream face of the dam slopes before reaching a lip at elevation 569.74 feet and then slopes sharply downward to the base of the dam.

The forebay is 2,300 feet long and 150 feet wide, and the gatehouse contains two headgates for each of the four penstocks², for a total of eight headgates, trashracks, and other appurtenant equipment. The four penstocks are steel plated, three of which are 12 feet in diameter, and one is 10 feet in diameter. Each penstock is approximately 110 feet in length, extending underground from the gatehouse to the powerhouse. The powerhouse consists of two adjoining sections. The Old Station measures 30 feet wide by 110 feet long by 92 feet high, and contains one horizontal generating unit with a capacity of 4.3 MW. The New Station is 140 feet by 60 feet and contains three turbines, two with a capacity of 8.1 MW, and one with a capacity of 8.8 MW. The Upper Station has four overhead 11.5 kilovolt (kV) transmission lines.

2) The Lower Station Development: The Lower Station Development consists of the Middle Dam, the Middle Canal headgate structure with a waste weir section, the Middle Canal, a gatehouse, two penstocks each with surge tanks, an impoundment, a short transmission line, powerhouse, and appurtenant facilities. The development has a total nameplate capacity of 15.2 MW and a total maximum hydraulic capacity of 3,100 cfs. The rock-filled timber-crib dam is

¹ All elevations described in this water quality certification are referenced to U.S. Geological Service (USGS) datum.

² There is an additional inactive penstock, which led to a second unit in the Old Station.

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capped, reinforced with concrete, and topped with 16-inch high, pin-type flashboards. The dam includes a 328.6-foot-long and 20-foot-high spillway that is approximately 105 feet wide at its base. The dam has a concrete apron on the downstream side that is approximately 38 feet wide, and a lip on the downstream face at elevation 490.74 feet.

The Middle Canal headgate structure is approximately 120 feet wide and contains a set of 10 headgates. The headgate structure is concrete masonry with steel gates, and a waste weir is perpendicular to the Middle Canal headgates. There are 12-inch-high flashboards on the crest of the waste weir which bring the typical water surface elevation up to 502.6 feet. The spillway of the waste weir is 120 feet long. The Middle canal is approximately 2,400 feet long with depths ranging from 8 to 11 feet, and widths ranging from 75 to 175 feet, widest at the upstream end.

The gatehouse contains two motorized gate hoists³ and headgates for Lower Station penstocks. Flow to the Lower Station is screened through bar racks. The canal level control transmitter to the Supervisory Control and Data Acquisition (SCADA) controls is located in the gatehouse. A selector switch is provided to allow for one of the units to supervise canal level control. Upstream of the gatehouse are trashracks and a power-driven trash rake. From the gatehouse, two 12-foot diameter, welded-plate, steel penstocks extend for approximately 815 feet to surge tanks and then an additional 77 feet downward to the powerhouse. The two steel surge tanks are 36 feet in diameter and 50.5 feet tall. The masonry powerhouse is equipped with two generating units, each with 7.6 MW generating capacity. The Lower Station development has 1,820-foot-long, 11.5kV leads.

- 3) Project Impoundments: The Upper Dam creates an impoundment with a surface area of about 419 acres at a normal full pond elevation of 601.24 feet. The estimated gross storage capacity of the Upper Dam Impoundment is 2,900 acre-feet with flashboards installed and the Obermeyer inflated. The Middle Dam creates an impoundment with a surface area of about 21 acres at a normal full pond elevation of 502.74 feet. The estimated gross storage capacity of the Middle Dam impoundment is 141 acre-feet with flashboards.
- 4) Appurtenant Facilities: On June 3, 2021, FERC amended the Applicant's license to include a battery storage system at the Project. The battery storage system is 8 MW and consists of 15 smaller battery enclosures with integrated heating/cooling and ventilation with a rating of 372.2 kilowatt-hours each. The

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³ There are provisions in place for a third motorized gate hoist.

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system includes DC-AC inverters, inverter step-up transformers, spill containment, and associated auxiliary equipment. This is a non-capacity amendment, and while it will increase Project efficiency, it will not change the Project's authorized installed capacity or hydraulic capacity.

- a. <u>Upper Station Appurtenant Facilities</u>: Includes switch boards, switchgear, transformers, turbine generators, and other auxiliary equipment required for control of the units.
- b. <u>Lower Station Appurtenant Facilities</u>: Includes switchgear, turbine governors, and auxiliaries required for control of the units.

D. Existing Project Operation

- Upper Dam: The Upper Dam is operated as a run-of river facility. The 1) Applicant maintains the impoundment within 1 foot of full pond elevation, 601.24 feet. The Applicant releases a minimum flow of 1 cfs from the Upper Dam into the bypass reach, and the minimum flow is provided via leakage from the flashboards. The head pond elevation is maintained through a combination of automated adjustments of the Project's Upper Station turbines and the Obermeyer spillway and flashboard system. Under normal river flows, the elevation is measured by an electronic differential pressure transmitter located in the forebay that monitors river height and inflow. The signal is transmitted simultaneously to the National System Control Center (NSCC) in Queensbury, New York. The NSCC regulates the wicket gate opening to the operating units to control the amount of water passing through the turbines and maintain the Upper Dam impoundment elevation at no more than the maximum pond level of 601.24 feet. Units can also be operated locally as needed for operations or maintenance activities. The Obermeyer spillway system can be operated remotely or locally and is set to automatically deflate if the impoundment elevation reaches two or more feet above the top of the gate or in the event of a station trip. The Upper Station is monitored and controlled remotely via the SCADA system 24 hours per day, seven days a week. In addition, three local technicians provide operation and maintenance support.
- 2) *Middle Dam:* The Middle Dam is operated as a run-of-river facility. The Applicant maintains the impoundment within 1 foot of full pond elevation, 502.74 feet. The Applicant releases a minimum flow of 21 cfs into the bypass reach, which is provided via a 12-inch-diameter and an 18-inch-diameter pipe located

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near the center of the dam, which is combined with leakage from the flashboards and pressure release vertical drain holes. Turbines in the Lower Station have the same capabilities as those in the Upper Station, and along with the Lower Station canal headgates and Middle Dam flashboards, maintain the impoundment elevations in the Middle Dam impoundment. Four of the ten headgates are operated remotely and can be operated locally; the remaining six are operated locally. There is a canal level control transmitter in the gatehouse and a selector switch which allows for one of the units to supervise canal level control. The Lower Station is monitored and controlled remotely via the SCADA system 24 hours per day, seven days a week. In addition, three local technicians provide operation and maintenance support.

- 3) Project Operation During Adverse, Mean, and High Flow: Run-of-river operations may be temporarily modified if required by operating emergencies beyond the control of the Applicant or for short periods if there is mutual agreement with the Applicant, the U.S. Fish and Wildlife Service (USFWS), the Maine Department of Inland Fisheries and Wildlife (MDIFW), and the Department. The minimum flows of 1 cfs from the Upper Dam and 21 cfs from the Middle Dam may be temporarily modified if required by operating emergencies beyond the control of the Applicant, or for short periods if there is mutual agreement with the Applicant, USFWS, MDIFW, and the Department.
 - a. <u>High Flows</u>: During high flows that are in excess of the hydraulic capacity of the generating units at the Upper (4,550 cfs) and Lower (3,100 cfs) Stations, flow passes over the spillways into each Station's bypass reach. The Obermeyer spillway system at the Upper Station lowers to support passing high flows and manage impoundment levels. At the Lower Station, the Middle Dam Canal headgates close to manage the canal elevation, which directs flow over the Station's spillway to manage impoundment levels. The wooden flashboards at the Upper and Middle Dams are designed to fall during high flow conditions, to support the passage of additional flows and the lowering of impoundment levels, eventually to the dam crest elevation once flows subside. If the flashboards at the developments are damaged during high flow events, they are replaced as soon as conditions safely allow.
 - b. <u>Low Flows</u>: During low flow conditions, the Applicant operates the Project to maintain the levels of the Upper and Middle Dam Impoundments and to provide the required downstream minimum flows, described above.

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4) Project Operation During Maintenance Activities: During both scheduled and unscheduled maintenance, the Applicant continues to pass inflow downstream through the operation of the remaining unit(s) or over the Stations' spillways. Order of operation or shutdown of units is based on flow conditions and the specific event taking place at that time. When debris needs to be cleared from the Stations' intakes, the Applicant continues to pass inflow over the spillway as necessary. The Applicant consults with the applicable state and federal agencies regarding any impoundment drawdowns required during maintenance of flashboards or other Project structures.

E. Project Proposals

No new power development structures or generating facilities are proposed in the license application⁴ for the Project.

F. Proposed Operation, Minimum Flow, and Impoundment Water Level

The Project is located at river mile 80 on the Androscoggin River in the Lower Androscoggin basin. The Applicant proposes the following regarding operation, minimum flow, and impoundment water levels:

- 1) Rumford Falls Hydro proposes to continue operating the Project in run-of-river mode where the Applicant maintains the Upper Dam and Middle Dam Impoundments within 1 foot of full pond elevation, 601.24 feet and 502.74 feet respectively.
- 2) Rumford Falls Hydro proposes the following minimum flows:
 - a. Continue to release a minimum flow of 1 cfs into the Upper Dam bypass reach;
 - b. Provide a minimum flow, primarily via notched flashboards, into the Middle Dam bypass reach of 95 cfs from May 1st to October 31st and 54 cfs from November 1st to April 30th;
 - c. If the Middle Dam requires flashboard maintenance or other work that requires the Middle Dam Impoundment to be drawn down temporarily below dam crest, the minimum flow during that period will be 21 cfs.
- 3) Rumford Falls Hydro proposes the following whitewater boating enhancements in the Middle Dam bypass reach:

⁴ The Final License Application is expressly incorporated into the WQC application, as supplemented by RFH filings with FERC on March 6, March 30, May 16 and June 9, 2023.

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a. Scheduled Project flow releases into the Middle Dam bypass reach for whitewater boating within the lower portion of the bypass reach if sufficient inflow is available. The Applicant would provide these releases to obtain flows within the targeted range of:

- 1,200 cfs to 1,500 cfs in the Middle Dam bypass reach during three days (total) June through August from 10 am to 3 pm, to be determined based on a consultation with the Town of Rumford and American Whitewater:
- b. In consultation with the Town of Rumford, build and maintain access and/or steps from behind the Rumford Public Library for river access;
- c. Provide public information regarding flow releases in the Middle Dam bypass reach via a publicly accessible website and tollfree phoneline operated by the Applicant, including scheduled releases, any cancellations, or any event in which sufficient flow or circumstances prevent the flow releases.
- 4) Rumford Falls Hydro proposes the following aesthetic flows in the Upper Dam bypass reach:
 - a. In addition to exceedance events and planned and unplanned station outages, if sufficient inflow is available, provide aesthetic flow releases in the Upper Dam bypass reach with a target flow ranging from 1,200 to 1,500 cfs for three days (total), June through August, 10 am to 4pm, to be determined based on consultation with the Town of Rumford;
 - b. Provide flood lighting of the falls at the upper station at river flows greater than 6,000 cfs between 8 pm to 12 am year round;
 - c. Provide public information on proposed scheduled aesthetic flow events via a publicly accessible website and tollfree phoneline operated by the Applicant, including any cancellations or event in which sufficient flow or circumstances prevent the flow releases.

G. Proposed Protection, Mitigation, and Enhancement Measures

The Applicant proposes the following measures to protect and enhance environmental resources:

- 1) Rumford Falls Hydro proposes the following recreation enhancements:
 - a. Enhance and maintain the West Viewing Area to provide public access from April 15th to October 31st, dawn to dusk;
 - b. Enhance and maintain the alternate trail segment, constructed by the Applicant in 2021;

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c. Maintain Rumford Falls trail segments which lead to the alternate trail from Route 108.

- 2) Rumford Falls Hydro proposes to finalize and implement a Recreation Management Plan that will be developed within six months of the issuance of a new license and will include proposed recreation site enhancements and maintenance activities.
- 3) Rumford Falls Hydro proposes to develop and implement a Historic Properties Management Plan to provide for the management of historic properties associated with the Project throughout the term of the license.
- 4) Rumford Falls Hydro proposes to develop an Operations Compliance Management Plan to confirm the Applicant operates the Project in compliance with the new FERC license.

2. JURISDICTION

The proposed continued operation of the Project qualifies as an "activity...which may result in (a) discharge into the navigable water (of the United States)" under the Clean Water Act, 33 USC 1251 *et seq.* (CWA). Section 401 of the CWA requires that any Applicant for a federal license or permit to conduct such an activity obtain a certification that the activity will comply with applicable State water quality standards. State law authorizes the Department to issue a WQC pursuant to Section 401 of the CWA when the standards of classification of the water body and the State's antidegradation policy are met. 38 M.R.S.A. § 464(4)(F)(3).

State WQC for the Project was last issued by the Department on December 17, 1992. Under a 1996 Executive Order of the Governor of the State of Maine, the Department is designated as the certifying agency for issuance of Section 401 WQC for all activities in the State not subject to Land Use Planning Commission (LUPC) permitting and review. Therefore, the Department is the certifying agency for the Project. Executive Order No. 3 FY 96/97.

The Project is licensed by FERC as a water power project under the Federal Power Act (FERC Project No. 2333). The initial FERC license was issued on May 14, 1965, and expired on December 31, 1993. The current FERC license was issued on October 18, 1994, and expires on September 30, 2024. The Applicant has filed an Application for New License with FERC to continue to operate the project for another 40 years. This application is currently pending before the FERC.

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3. APPLICABLE STATE WATER QUALITY STANDARDS

A. Classification

The Androscoggin River meets the definition of a river, stream, or brook pursuant to 38 M.R.S. § 480-B(9). The portion of the Androscoggin River at issue in the application is designated as Class C waters from its confluence with the Ellis River to the Worumbo Dam in Lisbon Falls. 38 M.R.S. § 467(1)(A)(2).

B. <u>Designated Uses</u>

The Applicant must demonstrate that the Upper Dam and Middle Dam Impoundments and Androscoggin River below the Project meet the Class C water classification standards and the designated uses described in 38 M.R.S. § 465(4)(A):

Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, Section 403; navigation; and as a habitat for fish and other aquatic life.

C. <u>Numeric Standards</u>

The Applicant must demonstrate that the Upper Dam and Middle Dam Impoundments and the Androscoggin River below the Project meet the following numeric Class C standard set forth in 38 M.R.S. § 465(4)(B):

The dissolved oxygen (DO) content of Class C water may not be less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained.⁵

D. Narrative Standards

The Applicant must demonstrate that the Androscoggin River below the Project meets the following Class C narrative standards:

⁵ The Rumford Project is not located in an identified salmonid spawning area.

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1) Discharges into Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. 38 M.R.S. § 465(4)(C).

2) Hydropower facilities managed under riverine classifications under 38 M.R.S. § 465 (such as the Upper Dam and Middle Dam Impoundments) are additionally subject to 38 M.R.S. § 464(10) in recognition of some changes to aquatic life and habitat that have occurred due to the existing impoundments of these projects. Under § 464(10), Class C riverine impoundments are generally deemed to meet classification standards if the aquatic life and habitat in those impounded waters achieve Class C aquatic life criteria found at 38 M.R.S. § 465(4)(C), provided that no changes can be made to improve such habitat that does not significantly affect existing energy generation capability. 38 M.R.S. § 465(4)(10)(C).

E. Antidegradation

The Department may only approve WQC if the standards of classification of the waterbody and the requirements of the State's antidegradation policy will be met. The Department may approve WQC for a project affecting a waterbody in which the standards of classification are not met if the project does not cause or contribute to the failure of the waterbody to meet the standards of classification. 38 M.R.S. § 464 (4)(F)(3).

F. Department Rules

Attainment of water quality standards is assessed through application of the following Department Rules:

1) 06-096 Chapter 579: Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams.

Criteria to quantify aquatic life standards for Classes AA, A, B, and C waters are defined in this chapter. The benthic macroinvertebrate community is used as a surrogate to determine conformance with statutory aquatic life standards, related statutory definitions, and statutory provisions for the implementation of biological water quality criteria that are provided in Maine's standards for classification of fresh surface waters. Methods described in this chapter are used to make decisions about classification attainment; however, it is important to note that the methods

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presented in Chapter 579 do not adequately assess mussels, although mussels are part of the macroinvertebrate community. In cases of large drawdowns, additional studies to assess the mussel community may be necessary.

2) 06-096 Chapter 580: Regulations Relating to Sampling Procedures and Analytical Procedures.

This rule establishes standards whereby all sampling and analysis is performed according to accepted technical procedures for chemical and biological analysis.

3) 06-096 Chapter 581: Regulations Relating to Water Quality Evaluations.

These rules provide for the maintenance of stream and lake classifications without violations by computing capacity of the waters to break down waste and shows fish, wildlife, and organisms in the receiving water to migrate both up and downstream in an undisturbed section of river adjacent to the waste discharge outfall. In addition, a scale of 0-100 is established in order to measure the trophic state or degree of enrichment of lakes due to nutrient input.

4. DEPARTMENT ANALYSIS

A. <u>Aquatic Habitat and Aquatic Life</u> (38 M.R.S. § 465(4)(A); § 465(4)(C); 38 M.R.S. § 464(10)(C))

The Applicant must demonstrate that the Rumford Falls Middle Dam and Upper Dam impoundments and the outlet streams below the dams are suitable for the designated use of habitat for fish and other aquatic life. Conformance with the aquatic habitat designated use is determined by methods described in the Department's Hydropower Project Flow and Water Level Policy, dated February 4, 2002 (Water Level Policy). Under this policy guidance, the Department operates under the rebuttable presumption that a flow providing wetted conditions in a weighted average of 3/4ths of the cross-sectional area of the affected river or stream, as measured from bank full conditions, or a water level that provides wetted conditions for 3/4ths of the littoral zone⁶ of a lake or

⁶ The 'littoral zone' of lakes and lake-like waterbodies is defined in limnology as the portion of a lake where light penetration allows plant growth on the bottom. The littoral zone extends from the shoreline to the maximum depth where plants on the bottom receive enough sunlight for photosynthesis. This depth, known as the euphotic zone, is commonly estimated as the depth which receives approximately 1% of incident light (Cole, 1979). While depth of the zone varies with many factors, it can be estimated as a multiple of the Secchi disk transparency (SDT). Based on Tyler (1968), for more than 20 years DEP has delineated the littoral zone using a depth two times the SDT for purposes of determining attainment of Maine's Water Quality Standards.

Cole, GA. (1978) *Textbook of Limnology*, 2nd Ed. 165, St. Louis, MO: The CV Mosby.

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pond, as measured from full pond conditions, will be needed to meet aquatic life and habitat standards. On a case-by-case basis, the Department may approve alternative flows or water levels under circumstances defined in the Water Level Policy, where the alternative flows or water levels can be shown to meet all applicable water quality standards.

The Applicant must also demonstrate that the impounded sections of the Androscoggin River and portions of the river below the dam are of sufficient quality to support all species of fish indigenous to the receiving waters and to maintain the structure and function of the resident biological community in accordance with applicable narrative and numeric aquatic life standards. The resident biological community means aquatic life expected to exist in a habitat which is free from the influence of the discharge of any pollutant. This shall be established by accepted biomonitoring techniques. 38 M.R.S. § 466(10). Accepted biological techniques with respect to rivers and streams are established in Department rule, 06-096 C.M.R. ch. 579, Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams (effective May 27, 2003) (Chapter 579). Criteria to quantify aquatic life standards for Class AA, A, B, and C waters use the benthic macroinvertebrate community as a surrogate to determine classification attainment. Chapter 579 addresses how benthic macroinvertebrate samples must be collected and the process for analyzing these samples using the linear discriminant model to evaluate whether the sampled river or stream is in attainment. The selection of sampling sites, as well as data collection and processing, must be in conformance with the Department's Methods for Biological Sampling and Analysis of Maine's Rivers and Streams. Ch. 579, § 3(A).

- 1) Aquatic Habitat Riverine Impoundments (38 M.R.S. § 465(4)(A); § 465(4)(C); 38 M.R.S. § 464(10)(C))
 - a. Existing Habitat and Resources

<u>Upper Dam Impoundment</u>: The Department finds that the Upper Dam Impoundment has a gross storage capacity of 2,900 acre-feet, surface area of approximately 419 acres, normal maximum headwater elevation of 601.24 feet, and tailwater elevation of 502.74 feet. The Applicant minimizes impoundment fluctuations to approximately 1 foot of normal full pond elevation by maintaining a discharge from the Project so that, at any point in time, flows immediately downstream from the Project tailraces approximate the sum of the inflows to the Project reservoir. The soils surrounding the Upper Dam Impoundment are poorly drained to well drained and formed in alluvium, with a loamy surface layer underlain by sandy material that is subject to occasional flooding. The

Tyler, JE. (1968) The Secchi disk, Limnology and Oceanography 13(1): 1-6.

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shoreline of the Upper Dam Impoundment is well vegetated, and more than a decade of annual erosion monitoring at the Upper Dam Impoundment has found no evidence of shoreline erosion.⁷

<u>Middle Dam Impoundment</u>: The Department finds that the Middle Dam Impoundment has a gross storage capacity of 141 acre-feet, surface area of approximately 21 acres, normal maximum headwater elevation of 502.74 feet, and tailwater elevation of 423.24 feet. The Applicant minimizes impoundment fluctuations to approximately 1 foot of normal full pond elevation by maintaining a discharge from the Project so that, at any point in time, flows immediately downstream from the Project tailraces approximate the sum of the inflows to the Project reservoir.

The Department finds that the run-of-river operations provide a relatively stable head pond elevation while passing inflows. Such operations protect existing littoral habitats from changes related to water level fluctuations.

b. Studies

The Applicant completed Impoundment Trophic State Studies in 2020 and 2022 to determine the extent to which Project operations may affect the littoral zone and to assess the ability of the riverine impoundments to support habitat for fish and other aquatic life. Studies were redone in 2022 because the laboratory used by the Applicant did not meet Department detection or reporting limits for total phosphorous, nitrate, and aluminum. The Applicant sampled at the same locations in 2020 and 2022 within the Upper and Middle Dam impoundments.

Secchi disk transparency (SDT), dissolved oxygen (DO), temperature and water chemistry data were collected twice monthly from June through October 2020. Water temperature and DO profiles were taken from just below the water surface (0.1 meter) and then at 1-meter intervals to 0.5 meter above the bottom depth. Integrated epilimnetic core samples were collected for total phosphorus, chlorophyll-a, color, pH, and total alkalinity through the monitoring period, and additional parameters were collected in August. In 2022, profile and trophic parameter monitoring was repeated.

The Applicant conducted a Trophic State Study in 2020 in accordance with the Department's *Sampling Protocol for Hydropower Studies* (September 2019). Chlorophyll *a* ranged from less than 1.0 to 2.7 µg/L in the Upper Dam impoundment and

⁷ The FLA notes (E-35) that monitoring occurred at the Project from 2010 to 2018 to determine whether erosion was affecting National Register-eligible archaeological sites on both sides of the Upper Dam impoundment. This monitoring now occurs biennially.

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from less than 1.0 to 3.4 μ g/L in the Middle Dam impoundment and suggested the impoundments were oligotrophic or mesotrophic. The laboratory reporting limit of 0.100 mg/L for total phosphorous exceeds the Department's thresholds for assigning trophic classes and was unable to be applied to the TSI. Secchi disk transparency (SDT) ranged from 2.7 to 5.0 meters in the Upper Dam impoundment and from 1.8 to 4.6 meters in the Middle Dam impoundment, which suggested the impoundments were eutrophic and mesotrophic. Secchi disk transparency measurements indicate no nuisance algal blooms were present.

In 2022, the Applicant conducted another Trophic State Study. Chlorophyll *a* ranged from 0.001 to 0.004 mg/L in the Upper Dam impoundment and from 0.002 to 0.003 mg/L in the Middle Dam impoundment, indicating mesotrophic waters. Total phosphorous concentrations in both the Upper Dam and Middle Dam impoundments were in the mesotrophic range. SDT ranged from 2.1 to 4.6 meters in the Upper Dam impoundment and 2.3 to 4.1 meters in the Middle Dam impoundment, indicating eutrophic and mesotrophic waters.

Trophic parameter results are summarized below:

	Upper Impoundment		Middle Impoundment	
Parameter	Range	Average	Range	Average
2020				
Secchi Disk Transparency (meters)	2.7 to 5.0	3.7	1.8 to 4.6	3.5
Color (Standard Platinum-Cobalt				
Units)	5 to 35	25	10 to 35	24
Chlorophyll-a (ug/L or ppb)	<1.0 to 2.7	1.6	<1.0 to 3.4	1.6
Total Phosphorus (ug/L or ppb) *	<100	<100	<100	<100
2022				
Secchi Disk Transparency (meters)	2.1 to 4.6	3.4	2.3 to 4.1	3.2
Chlorophyll-a (ug/L or ppb)	1.0 to 4.0	2.0	2.0 to 3.0	2.0
Total Phosphorus (ug/L or ppb)	10 to 20	13	10 to 22	13
* Analytical lab unable to analyze for low level phosphorus				

DO and temperature profiles indicate that the impoundments did not stratify. DO values in both impoundments were well above the Class C standard of 5 mg/L and 60% saturation throughout the water column at all sample dates. The lowest recorded values were 7.68 mg/L (85.3% saturation) in the Upper Impoundment and 7.62 mg/L (83.7% saturation) in the Middle Impoundment. Oxygen profiles obtained on October 13, 2020, were likely undersaturated due to the delay of reoxygenation as water was cooling in the fall.

In the FLA, the Applicant provides monthly and annual minimum, average, and maximum flows from 2000 through 2021, as well as the results of erosion monitoring at

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the Upper Dam impoundment. The data indicates that Project operations generally maintain consistent water levels and attenuate high-inflow events. Project Operations limit impoundment water level fluctuations to approximately 1 foot of normal pond elevation for the Middle Dam and Upper Dam impoundments.

c. Discussion and Findings

The Department finds that the Project is operated as a run-of-river facility and that the Applicant demonstrated this by providing monthly and annual minimum, average, and maximum flows. The Department further finds, based on data submitted by the Applicant, that Project operations do not cause the water level to fluctuate or draw down the riverine impoundment water levels for the purpose of hydropower generation. Run-of-river operations maintain relatively stable water levels with minimal impoundment fluctuation from full pond conditions, subject only to natural variations related to precipitation events.

Based on the sampling results and information contained in the WQC application, the Project impoundment meets applicable Class C water quality standards and is free of culturally induced algal blooms. Trophic data indicates that that the waters are in the meso-eutrophic range. The Department determines that the Middle Dam and Upper Dam impoundments meet the applicable aquatic habitat criteria.

2) Aquatic Habitat and Aquatic Life – Outlet Stream (38 M.R.S. § 465 (4)(A), (C))

To meet Class C aquatic life standards in the riverine outlet waters, the Applicant must demonstrate three things. First, the Applicant must show that the macroinvertebrate community attains Class C aquatic life criteria according to the Department's Chapter 579 rule. The benthic macroinvertebrate (BMI) community is an indicator of the general state of aquatic life for the purpose of attainment of outlet stream aquatic classification standards.

Second, the Applicant must show that the flow of water in the Androscoggin River is sufficient to support the designated use of habitat for fish and other aquatic life. The Department generally presumes, absent evidence to the contrary, that flow providing wetted conditions for at least 75% of the cross-sectional area of the affected river or stream, as measured from bankfull conditions, is needed to meet aquatic habitat standards. The Applicant can demonstrate attainment of these standards by providing evidence that 75% of the cross-section of the outlet stream is wetted at all times. This rebuttable presumption, as developed through the exercise of the Department's

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professional experience, expertise, and judgement is also reflected in the Department's Hydropower Project Flow and Water Level Policy.

Third, the Applicant must demonstrate that the water flowing through and over the Upper and Middle Dams, which discharge into the Androscoggin River, supports indigenous species and does not cause adverse impacts to aquatic life. This requires showing that the discharge from the dams support safe, timely, and effective upstream and downstream fish passage. Safe, timely, and effective fish passage is necessary to avoid detrimental changes in the resident biological community. This is discussed below in Section 4(A)(3).

a. Existing Habitat and Resources

The Upper Dam bypass reach (upper falls) is below the Upper Dam, and the Middle Dam bypass reach is below the Middle Dam. The upper falls is composed of high gradient bedrock over which water flows from spillage and leakage flows, which drops from elevation 566 feet to 502 feet above mean sea level at the Middle Dam. The Middle Dam bypass reach is 2,865 feet long, and includes pools, bedrock outcroppings, and steep cascades.

b. Studies

The applicant completed benthic macroinvertebrate sampling downstream of the Middle Dam consistent with MDEP's *Methods for Biological Sampling and Analysis of Maine's Rivers and Streams*.

The study included one sampling location, 200 feet downstream of the Middle Dam. Macroinvertebrate rock basket samplers were deployed at the designated station on July 30, 2020, and retrieved 29 days later on August 27, 2020. A second sample location was originally requested further downstream but was removed due to concerns about the influence of effluent from the ND Paper Mill. Department staff analyzed resulting data using its linear discriminant model and found that the macroinvertebrate community at this site met aquatic life criteria for Class A, and therefore also attained criteria for Class C.

To maintain adequate habitat for aquatic life, the Department's Hydropower Project Flow and Water Level Policy requires that a weighted average of 75% of an affected river/stream cross-sectional area as measured from bank full conditions be wetted at all times. On a case-by-case basis, alternative flows may be established if it can be demonstrated that all applicable water quality standards are met, including standards for aquatic life.

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In the Middle Dam bypass reach, the 75% wetted cross-sectional area policy is not met under the proposed flow regime. The Department recognized the site limitations associated with the steep channel gradient and morphology, and the Applicant conducted additional studies to explore potential site-specific alternative flows. Data to determine wetted cross-sectional area were initially collected at two transects established with the Department within the Middle Dam bypass reach for analysis. An additional study was completed at five transects using two approaches, Demonstrated Flow Analysis (DFA) and a one-dimensional (1-D) hydraulic model, to analyze flow-habitat relationships at a range of flow conditions using habitat suitability criteria for fish and macroinvertebrates developed for this study.

Both methods showed an average increase in BMI suitable habitat with increased flow up to the maximum flow values measured or modeled for the study (265 cfs for the DFA and 400 cfs for the 1-D model); however, the amount of optimal habitat was much lower than suitable habitat values at all flows. Overall, study results⁸ indicate that based on weighted average values for all five transects, some suitable habitat and a limited amount of optimal habitat occur at all measured flows, with the most habitat occurring at 265 cfs. One-Dimensional (1-D) Flow Modeling suggests that the rate of increase in suitable habitat declines at higher flows and begins to substantially level off at approximately 200 cfs. In addition to BMI, a comparison of the weighted average values between 90 cfs and 193 cfs indicates that suitable and optimal habitat increases for each of the three fish species included in the study.

Studies to determine aquatic habitat in the upper bypassed reach could not be completed because the reach is too dangerous to collect field data.

c. Applicant's Proposal

The Applicant proposes to continue to release a minimum flow of 1 cfs into the Upper Dam bypass reach and to provide a minimum flow, primarily via notched flashboards, into the Middle Dam bypass reach of 95 cfs from May 1st to October 31st and 54 cfs from November 1st to April 30th.

d. Findings and Discussion

The Department finds that the upper falls is composed of high gradient bedrock. This high gradient bedrock creates poor habitat conditions for fish and most aquatic invertebrates at any flow. High gradient bedrock is not characterized by a diverse and abundant vegetative and biotic community that support a resident aquatic community.

⁸ See Table 8 in the Updated Study Report (USR) dated August 5, 2022.

⁹ See Section 5.2 One-Dimensional (1-D) Flow Modeling in the USR.

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While increasing minimum flows in the upper falls may improve habitat conditions such that benthic high-gradient invertebrates could colonize, increasing flows will not alter the defining characteristics of the falls or enable the falls to support a resident aquatic community. Whether at the flows proposed by the Applicant or by higher flows, the water at the falls will be equally suitable for the designated use of habitat for fish or other aquatic life. The Department therefore finds that the proposed minimum flow of 1 cfs into the Upper Dam bypass reach will not cause adverse impacts to aquatic life. Due to the limited habitat potential in the upper falls, the Department further finds that the upper falls need not meet the 75% wetted cross-sectional area policy. Studies could not be completed to describe aquatic habitat in the upper falls because the reach is too dangerous to collect field data. The Department therefore determines that the proposed minimum flow of 1 cfs into the Upper Dam bypass reach meets Class C aquatic life and habitat criteria.

The Department finds that the Middle Dam bypass reach is composed of pools, bedrock outcroppings, and steep cascades. The Department finds that the macroinvertebrate community at this site met aquatic life criteria for Class A, and therefore also attained criteria for Class C.

The Department finds that in the Middle Dam bypass reach, the 75% wetted cross-sectional area policy is not met under the proposed flow regime. United States Geological Survey data indicates that the Aquatic Base Flow (ABF) for the site is 1,990 cfs. ¹¹ The Applicant's proposal allocates 2.7% or 4.8% of the ABF depending on the season. Given the drainage area and physical character of the Middle Dam bypass reach, the ABF may not be attainable while maintaining all designated uses at the Project. The proposed minimum flow, however, is not an alternative flow from the 75% wetted cross-sectional area that meets the water quality standard for aquatic habitat.

Based on studies conducted by the Applicant¹², modeling shows that the rate of increase in suitable BMI habitat begins to level off at approximately 200 cfs. Studies also modeled suitable and optimal habitat increases for three species of fish present in the Middle Dam bypass reach, showing an inflection point at approximately 193 cfs. In addition, 200 cfs is a minimum flow that would support the designated uses of recreation in and on the water, and fishing.¹³

¹⁰ See Final Environmental Assessment for Rumford Falls Hydroelectric Project (FEA), MDIFW FLA comments.

¹¹ ABF is commonly used by resource agencies to assess minimum flow requirements. See 06-096 Ch. 587.

¹² See USR.

¹³ See Section 4(C) below.

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The Department finds that the Applicant's proposed minimum flows of 95 cfs from May 1st to October 31st and 54 cfs from November 1st to April 30th will not meet Class C aquatic life standards and that a minimum flow of 200 cfs is necessary to meet the Class C aquatic life standards.

3) Aquatic Habitat and Aquatic Life – Fish Passage (38 M.R.S. § 465(4)(A), (C))

Rumford Falls is a run-of-river project with all the water of the Androscoggin River flowing through or over the dams, discharging to the river. By influencing the flow of water in the river, the dam and its discharge impacts the ability of fish to pass the section of the river where the dams are located. By influencing fish passage, the dams and their discharge affect the biological integrity¹⁴ of the waters in the river.

For the Applicant to satisfy applicable State water quality standards, the Applicant must demonstrate that the water flowing through and over the Upper and Middle Dams, which discharge into the Androscoggin River, supports indigenous species and does not cause adverse impacts to aquatic life. This requires showing that the discharge from the dams support safe, timely and effective upstream and downstream fish passage. Safe, timely, and effective fish passage is necessary to achieve Class C standards by ensuring the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

a. Existing Habitat and Resources

The Androscoggin River has a steep gradient, dropping more than 1,200 vertical feet from its origin at Lake Umbagog to tidewater. There are five major cascades in the drainage basin: Great Falls (Brunswick), Lewiston Falls, Rumford Falls, Snow Falls, and Biscoe Falls. These cascades exist as natural barriers to diadromous fish movement upstream within the watershed. Historically, Atlantic sturgeon, shortnose sturgeon, and rainbow smelt likely did not pass beyond Great Falls in Brunswick. Lewiston Falls stopped the upstream migration of alewife, American shad, blueback herring, striped bass, and possibly sea lamprey. Rumford Falls was the natural barrier to Atlantic salmon.¹⁵ The historical upstream limit of American Eels in unknown. However,

¹⁴ The department understands the biological integrity to generally mean the ability of an aquatic ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitats within a region.

¹⁵ Foster and Atkins, 1868 as cited in the Draft Management Plan for the Lower Androscoggin River, Little Androscoggin River and Sabattus River, 2017.

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MDIFW has documented the presence of this species in the last 35 years in lakes and ponds above both Rumford Falls and Snow Falls.¹⁶

b. Discussion and Finding

The Department finds that the water flowing through and over the Upper and Middle Dams, which discharges into the Androscoggin River, does not cause adverse impacts to fish passage. The Department further finds that the Project does not cause adverse impacts to fish passage due to its location on a natural falls that most anadromous species cannot reach and that Atlantic salmon cannot pass.

B. <u>Dissolved Oxygen</u> (38 M.R.S. § 465(4)(B))

For this standard, the Applicant must demonstrate that the dissolved oxygen (DO) content will not be less than 5 parts per million (ppm) or 60% saturation, whichever is higher. The Applicant must also demonstrate that DO will not be less than 6.5 ppm as a 30-day average based on a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less.

1) Existing Conditions

The Department finds that the Upper Dam impoundment has a surface area of 401 acres at full pond, with a headwater water surface elevation of 601.24 feet and a tailwater elevation of 502.74 feet. The Department finds that the Middle Dam impoundment has a surface area of approximately 21 acres, normal maximum headwater elevation of 502.74 feet, and tailwater elevation of 423.24 feet. The Androscoggin River below the Middle Dam receives flows released from the powerhouse and leakage flow from the dam. The Project is located on river mile 80 of the Androscoggin River.

2) Studies

The Applicant conducted a continuous DO and Temperature Study in the Middle Bypass Reach and Middle Dam Canal adjacent to the intake at the lower powerhouse in accordance with the Department's Sampling Protocol for Hydropower Studies between June and October 2020. Data were gathered downstream of Middle Dam in the bypass reach and in the power canal. DO concentrations recorded during the study ranged from

¹⁶ MDMR Draft Fisheries Management Plan for the Lower Androscoggin River, Little Androscoggin River and Sabattus River, 2017

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7.61 mg/L to 10.46 mg/L and between 92.5% and 106.4% saturation at both locations below Middle Dam.

Analysis of the sampling results indicates that DO concentration met applicable Class C water quality standards in the Middle Bypass and Middle Dam Canal. Based on the results of DO and temperature monitoring results, the Department concludes that the Applicant has provided sufficient information to demonstrate that the Project meets applicable Class C dissolved oxygen numeric criteria under critical water quality conditions.

3) Discussion and Findings

DO data collected by the Applicant in the Upper Dam and Middle Dam impoundments and submitted for Department consideration indicates that water in the Project riverine impoundment is sufficiently oxygenated. Based on evidence in the record, the Department finds that upstream of the dam, the Project meets Class C water quality standards under current and proposed operating conditions.

DO data collected by the Applicant indicates, and the Department finds, that water in the Androscoggin River downstream of the Project dam is sufficiently oxygenated. Based on evidence in the record, the Department finds that the Project meets Class C water quality standards for DO under current and proposed operating conditions.

C. <u>Fishing, Navigation, and Recreational Access and Use</u> (38 M.R.S. § 465(4)(A))

For this standard, the Applicant must demonstrate that the project waters are suitable for designated uses of recreation in and on the water, fishing, and navigation. It is the Department's longstanding position that a hydropower impoundment may be found suitable for recreation in and on the water if it has a stable or decreasing trophic state and is free of culturally induced algal blooms that impair its use and enjoyment.

The Department considers an impoundment to have a stable or declining trophic state unless it exhibits (1) a perceivable and sustained increase in its trophic state as characterized by its Trophic State Index or other appropriate indices, or (2) the onset of algal blooms.¹⁷ The trophic state is the ability of water to produce algae and other aquatic plants. The trophic state of a body of water is a function of its nutrient content and may be estimated using the Maine Trophic State Index (TSI), which includes measurements of chlorophyll, phosphorous or Secchi disk transparency.¹⁸ An algal

¹⁷ 06-096 C.M.R. Chapter 581 § 6(C).

¹⁸ 06-096 C.M.R. Chapter 581 § 6(A).

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bloom is defined as a planktonic growth of algae that causes Secchi disk transparency to be less than 2.0 meters.¹⁹

1) Existing Facilities and Use

The present recreational trout fishery is dependent upon annual stocking of hatchery brook trout, rainbow trout, and brown trout. MDIFW performs annual fish stocking of brook, brown, and rainbow trout in the mainstem of the upper Androscoggin River at three locations upstream of the Project (Gilead, Bethel, and Hanover) and one location downstream of the Project (Mexico).

The Project includes one FERC-approved recreation facility at the Project: a carry-in canoe facility at the Carlton Bridge, located on the eastern edge of the Swift River just upstream of its confluence with the Androscoggin River. In addition, the Applicant owns the following recreation facilities: Rumford Falls Trail, Logan Brook Access, West Viewing Area, ATV trail, Veteran's Park, and Wheeler Island. Non-FERC approved recreation sites that are not owned by the Applicant but provide access to Project lands and waters include: Hanover Boat Launch, Hastings Boat Launch, MDACF Boat Launch in Rumford, J. Eugene Boivin Park, Rumford Information Center, Chisholm Park and Trail, Chisholm Overlook, and MDACF Boat Launch in Mexico.

2) Water Quality Data

As discussed above in Section 4(A), sample results for chlorophyll *a*, total phosphorous, and SDT indicate that the Upper Dam and Middle Dam impoundments do not stratify and are mesotrophic. In addition, late summer sampling confirmed that readings for aluminum were below the State water quality maximum standard.

3) Fishing and Recreation studies

The Applicant filed the Recreation Study and Angler Creel Survey Reports in March 2023. In the Recreation Study, the Applicant conducted an inventory and assessment of recreation facilities in the Project area and vicinity, and characterized current recreation use and future demand for recreation facilities in the Project area and vicinity. Inventory

¹⁹ 06-096 C.M.R. Chapter 581 § 6(B).

²⁰ The Applicant has limited access to a portion of the Rumford Falls Trail due to public safety concerns but has opened an alternate trail parallel to the existing one.

²¹ Carry-in boat access off Logan Brook near its confluence with the Androscoggin River.

²² An overlook located at the Upper Dam powerhouse. The access is currently limited due to public safety concerns.

²³ In the Town of Rumford.

²⁴ An island located in the Upper Dam impoundment.

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and assessment occurred on June 21, 2022, and the Applicant noted the following recreation facilities:

- ATV Trail
- Carry-In Launch (Carlton Bridge)
- MDACF Boat Launch in Mexico
- Chisholm Overlook
- Chisholm Park and Trail
- Rumford Information Center
- J. Eugene Boivin Park
- Hastings Boat Launch
- Hanover Boat Launch
- Maine Department of Agriculture, Conservation, and Forestry (MDACF) Boat Launch in Rumford
- Logan Brook Access
- Rumford Falls Trail
- Veteran's Park
- Wheeler Island
- West Viewing Area

The Applicant convened a focus group to visit fourteen recreational facilities, conducted recreation observations, and conducted visitor and online surveys. The Focus Group suggested improvements be made to the West Viewing Area, Logan Brook Access, and Rumford Falls Trail. Visitor and online surveys showed unacceptable ratings at Logan Brook Access and Wheeler Island, but that overall, all recreation facilities surveyed were rated as acceptable.

In the Angler Creel Survey, the Applicant gathered information on the numbers of boat and shore anglers using the study area on randomly selected dates and times and interviewed as many angling parties as possible. The Applicant selected twelve index sites for counts and interviews in consultation with MDIFW. Instantaneous counts and angler interviews were conducted on 34 weekdays and 34 weekend days (68 total surveys) in the Rumford Project area between April 4 and November 27, 2022. The Applicant found that angler use of the Project area was primarily shore-based on the weekend, from the Chisholm Overlook site within the Middle Dam bypass reach, in the Upper Dam impoundment (MDACF boat launch in Rumford), and downstream from the MDACF boat launch in Mexico. The Applicant found that boat anglers primarily utilized the Upper Dam impoundment.

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The Applicant conducted an aesthetic flow study at the upper falls from 2021 to 2022. The Applicant examined historical flow data (2000 to 2021), a focus group, and an onsite flow assessment. Historical flows showed that daily average flows in the Androscoggin River have historically exceeded the hydraulic capacity of the Upper Station between 3.9 percent to 28.5 percent of the time. During the summer months of July, August, and September, the daily average flows in the Androscoggin River have only exceeded the hydraulic capacity 3.9 percent to 12.9 percent of the time. The focus group reviewed four established flows for the assessment: 500 cfs, 1,000 cfs, 1,500 cfs, and 2,000 cfs. The flows were observed by participants from three locations including the West Viewing Area, Rumford Falls Trail, and J. Eugene Boivin Park.

The focus group, consisting of the Town of Rumford, Inland Woods & Trails, MDIFW, and the MDACF Bureau of Parks and Lands (BPL), found that the aesthetic quality of the falls increased with the observed flows up to 1,500 cfs. Flows of 1,000 cfs and greater, as well as flows of 500 cfs and greater at the West Viewing Area, were considered aesthetically pleasing. All participants indicated that they would like aesthetic flows provided in July and August. There was also a preference for flow releases in June, September, and October with slightly less interest in April and May and little interest in the other months of the year. Generally, participants indicated they would like to have aesthetic releases on the weekend.

The Applicant conducted a whitewater boating study in 2022 to evaluate the feasibility of whitewater boating in the Middle Dam bypass reach. Participants were a variety of whitewater boaters including local residents, American Whitewater, the Town of Rumford, and MDIFW. Participants identified safety concerns and found that the Public Library Trail Access and the Rumford Town Office Access were the most accessible putin locations, and the Boat Launch in Mexico would be the preferred take-out location. Participants agreed that 1,500 cfs was the optimal flow for whitewater boating in the Middle Dam bypass reach. Focus group participants suggested that weekends in June through August, specifically between 10:00 am – 3:00 pm, would be an optimal release timeframe. Study group participants also suggested that a release schedule should be flexible and to coordinate with other whitewater releases in the region. Participants stated that a reliable release schedule would also be helpful to draw more boaters to the bypass reach.

4) Applicant's Proposal

Rumford Falls Hydro proposes angling access enhancements in the Middle Dam bypass reach by building and maintaining access and/or steps from behind the Rumford Public Library for river access.

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The Applicant conducted a Recreation Study to determine if there is a need for enhancements to the Project's existing formal recreation facility in support of a new license or the need for additional recreation facilities to support the current and future demand for public recreation at the site. The study included a recreation facility inventory and assessment; stakeholder site visit and focus group discussion; recreation observations; and visitor and online surveys.

Rumford Falls Hydro proposes to finalize and implement a Recreation Management Plan that will be developed within six months of the issuance of a new license and will include proposed recreation site enhancements and maintenance activities, including the following proposed recreation enhancements:

- Enhance and maintain the West Viewing Area and provide public access from April 15th to October 31st, dawn to dusk.
- Enhance and maintain the alternate trail segment, constructed by the Applicant in 2021.
- Maintain Rumford Falls trail segments which lead to the alternate trail from Route 108.
- Angling access enhancements at the Middle Dam bypass reach:
 - In consultation with the Town of Rumford, build and maintain access and/or steps from behind the Rumford Public Library for river access.
- Whitewater boating enhancements in the Middle Dam bypass reach:
 - Scheduled Project flow releases into the Middle Dam bypass reach for whitewater boating within the lower portion of the bypass reach if sufficient inflow is available. The Applicant would provide these releases to obtain flows within the targeted range of 1,200 cfs to 1,500 cfs in the Middle Dam bypass reach during three days (total) June through August from 10 am to 3 pm, to be determined based on a consultation with the Town of Rumford and American Whitewater;
 - In consultation with the Town of Rumford, build and maintain access and/or steps from behind the Rumford Public Library for river access;
 - Provide public information regarding flow releases in the Middle Dam bypass reach via a publicly accessible website and tollfree phoneline operated by the Applicant, including scheduled releases, any cancellations, or any event in which sufficient flow or circumstances prevent the flow releases.
- Aesthetic flows in the Upper Dam bypass reach:
 - In addition to exceedance events and planned and unplanned station outages, if sufficient inflow is available, provide aesthetic flow releases in the Upper Dam bypass reach with a target flow ranging from 1,200 to 1,500 cfs for three

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- days (total), June through August, 10 am to 4pm, to be determined based on consultation with the Town of Rumford;
- o Provide flood lighting of the falls at the upper station at river flows greater than 6,000 cfs between 8 pm to 12 am year round;

Provide public information on proposed scheduled aesthetic flow events via a
publicly accessible website and tollfree phoneline operated by the Applicant,
including any cancellations or event in which sufficient flow or circumstances
prevent the flow releases.

5) Discussion and Findings

The Applicant reports and the Department finds that two recreation sites could be improved: Logan Brook Access and the West Viewing Area. Logan Brook Access is not considered a formal recreation area under the Project; therefore, the Applicant does not maintain it. The Applicant proposes the following: to enhance and maintain the West Viewing Area to provide for public access from April 15th to October 31st, dawn to dusk; to enhance and maintain the Rumford Trail and the alternate trail; and to prepare and implement a Recreation Management plan to address management of the formal Project recreation sites over the term of a New License.

The Applicant reports and the Department finds that access to waters in the Project area and vicinity owned by the applicant include the Carry-In Launch (Carlton Bridge), Logan Brook Access, and Wheeler Island. Access to Project waters not owned by the applicant include Hanover Boat Launch, Hastings Boat Launch, MDACF Boat Launch in Rumford, J. Eugene Boivin Park, Chisholm Park and Trail, Chisholm Overlook, and MDACF Boat Launch in Mexico.

Ensuring this or alternative public access to the impoundments and the Middle Dam bypass reach through the term of any new license is necessary to ensure the riverine impoundments and outlet waters continue to meet the Class C designated uses of recreation in and on the water, fishing, and navigation.

Middle Dam Bypass Reach

MDIFW and BPL commented on the Applicant's Final License Application that the proposed flows of 95 cfs from May 1st to October 31st and 54 cfs from November 1st to April 30th are not sufficient to support the designated uses of recreation and fishing on the Middle Dam bypass reach. Trout Unlimited and American Whitewater also

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commented that proposed minimum flows are insufficient to support recreation and fishing in the Middle Dam bypass reach.

Further, the Department finds that MDIFW performs annual fish stocking of brook, brown, and rainbow trout in the mainstem of the upper Androscoggin River at three locations upstream of the Project (Gilead, Bethel, and Hanover) and one location downstream of the Project (Mexico). In 2023, MDIFW began stocking the Middle Dam Impoundment in Rumford to provide a local angling opportunity through shoreline access at Bovine Park. To meet the designated uses of recreation in and on the water and fishing, opportunities to access stocked fish must be sufficient in the Project area.

The Department finds that while the applicant has proposed to enhance angling access in the Middle Dam bypass reach by installing stairs behind the Rumford Public Library, the applicant has not proposed a sufficient minimum flow to support the designated uses of recreation in and on the water and fishing. MDIFW commented and the Department finds that increased minimum flows would provide improvements in recreation and fishing necessary to meet Class C standards for recreation in and on the water and fishing.

MDIFW stated, and BPL supported, that flows between 250-500 cfs would be appropriate to protect and enhance habitat for fish and other aquatic organisms. Trout Unlimited concurred with MDIFW and stated that 200 to 400 cfs is an appropriate minimum flow in the Middle Dam bypass reach.

As noted above, studies modeled suitable and optimal habitat increases for three species of fish present in the Middle Dam bypass reach, showing an inflection point at 193 cfs.²⁵ In light of the Flow Study for Aquatic Habitat included in the USR and FLA, as well as comments from State natural resource agencies and NGOs on the FLA, the Department finds that a minimum flow of 200 cfs will satisfy the designated uses of recreation in and on the water and fishing in the Middle Dam bypass reach.

Additionally, the Applicant proposed three flow days of whitewater boating releases throughout the summer, to be conducted in consultation with the Town of Rumford and American Whitewater. BPL, the Town of Rumford, American Whitewater, and Trout Unlimited stated in comments on the FLA that this proposal is insufficient to support recreation in the form of whitewater boating. The Department notes the Town of Rumford and American Whitewater were participants in the Applicant's whitewater boating study from 2022.

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²⁵ See Table 8 in USR.

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BPL and the Town of Rumford support whitewater boating flows at 1,200 cfs for ten weekend days total June through August, to be determined in consultation with the Town of Rumford and American Whitewater. American Whitewater and Trout Unlimited support weekly scheduled whitewater boating flows during recreational boating season whenever sufficient inflows are present.

The Department finds that the Applicant's proposal for whitewater boating releases into the Middle Dam bypass reach to obtain flows within the targeted range of 1,200 cfs to 1,500 cfs during three days (total) June through August from 10 am to 3 pm, to be determined based on a consultation with the Town of Rumford and American Whitewater, is insufficient to meet the Class C designated use of recreation in and on the water at the Middle Dam bypass reach. The Department finds that an increase in dates for whitewater boating releases is necessary to meet the standard.

To meet the Class C designated use of recreation in and on the water at the Middle Dam bypass reach, in addition to exceedance events and planned and unplanned station outages, if sufficient inflow is available, the Applicant must provide whitewater boating flow releases with a target flow ranging from 1,200 to 1,500 cfs for ten days (total), June through August, 10 am to 3pm, to be determined based on consultation with the Town of Rumford and American Whitewater.

Upper Dam Bypass Reach

Comments on the Final License Application by various parties including BPL, the Town of Rumford, American Whitewater, and Trout Unlimited noted the desire for aesthetic flows over the Upper Dam bypass reach. The Applicant has proposed improvements to the West Viewing Area to view aesthetic flow releases, along with flood lights. To utilize these improvements, the above commenting parties stated that the proposed aesthetic flow releases are insufficient.²⁶ The Applicant proposed three days throughout the summer months to provide aesthetic flow releases; however, the Town of Rumford and BPL support up to ten days of aesthetic flow releases. Trout Unlimited and American Whitewater support aesthetic flow releases every weekend in the summer.

The Department finds that the Applicant's proposal for aesthetic flow releases with a target flow ranging from 1,200 to 1,500 cfs for three days (total), June through August, 10 am to 4pm, to be determined based on consultation with the Town of Rumford is insufficient to meet the Class C designated use of recreation in and on the water at the Upper Dam bypass reach. The Department finds that an increase in dates for aesthetic flow releases is necessary to meet the standard.

²⁶ See MDACF comments on the FLA and Addendum to FLA, Town of Rumford comments on the FLA, American Whitewater Motion to Intervene, and Trout Unlimited Motion to Intervene.

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To meet the Class C designated use of recreation in and on the water at the Upper Dam bypass reach, in addition to exceedance events and planned and unplanned station outages, if sufficient inflow is available, the Applicant must provide aesthetic flow releases with a target flow ranging from 1,200 to 1,500 cfs for ten days (total), June through August, 10 am to 4pm, to be determined based on consultation with the Town of Rumford.

Impoundments

The Department finds that the Upper Dam and Middle Dam impoundments have a stable or decreasing trophic state and are free of culturally induced algal blooms that impair their use and enjoyment. Provided the Applicant complies with the requirements above and the conditions below, the Department finds that the Project meets the designated uses of recreation in and on the water, fishing, and navigation.

D. <u>Hydroelectric Power Generation</u> (38 M.R.S. § 465(4)(A))

For this standard, the Applicant must demonstrate that the Project waters are suitable for the designated use of hydroelectric power generation.

1) Existing Generation

The Department finds that the Project has a total authorized generating capacity of 44.5 MW and can produce a gross average energy output of 270,800 megawatt-hours (MWh) of electricity annually.

2) Energy Utilization

Rumford Falls Hydro is an independent power producer and member of New England Power Pool (NEPOOL) that currently sells power wholesale from the Project to ISO²⁷ New England. All primary transmission lines associated with the Project deliver electricity to the Rumford Falls Hydro Generator Step-Up (GSU) substation, where the voltage is stepped up from 11.5 to 115 kilovolts by passing through the 66 megavolt-amperes GSU transformer. This transformer is tied to Central Maine Power's transmission point of interconnect.

²⁷ ISO means Independent System Operator. ISO New England serves as the independent system operator of the regional bulk power system and administers the wholesale marketplace. Its primary responsibilities are to coordinate, monitor, and direct the operations of the major generating and transmission facilities in the region while its objective is to promote a competitive wholesale electricity marketplace while maintaining the electrical system's integrity and reliability.

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3) Discussion and Findings

The Applicant proposes to continue generating power under the current operational mode during the term of a new Project license, providing a dependable source of energy to the power grid. The Applicant proposes no changes or additions to the existing turbinegenerator units or other redevelopment activities. Based on the evidence in the record, the Department finds that the Project meets the Class C designated use of hydroelectric power generation.

E. <u>Drinking Water Supply</u> (38 M.R.S. § 465(4)(A))

Class C standards indicate that water must be of sufficient quality to be used as drinking water after disinfection.

1) Discussion and Findings

The Rumford Falls Project impoundments and the Androscoggin River are not used as a drinking water supply. However, water quality data collected for the Trophic State Study in the Project riverine impoundments and DO data collected downstream of the Project dams indicate that water quality meets State standards, and there are no culturally induced algal blooms. Based on the evidence in the record, the Department finds that the Project meets the Class C designated use of drinking water after disinfection.

F. Industrial Process or Cooling Water Supply (38 M.R.S. § 465(4)(A))

Class C standards indicate that water must be of sufficient quality to be used as industrial process or cooling water supply.

1) Existing Uses

Water uses within the Project boundary include hydroelectric power generation and industrial uses. Nine Dragons (ND) Paper, an operational pulp, packaging, and paper company, is located along the Androscoggin River next to the Project. ND Paper has rights to use up to 100 cfs of water for its operation and has two intakes located next to the Project's Lower Station intakes, which discharge at the tailrace of the Lower Station.

2) Discussion and Findings

The Department finds that water in the Androscoggin River and the Rumford Falls Project impoundments are used as a cooling water supply for energy generation L-024307-33-G-N 31 of 39

equipment at the Project and for industrial uses. Water quality data indicates the water is suitable as an industrial process water supply and a cooling water supply. Based on evidence in the record, the Department finds that the Project meets the Class C designated use of industrial process or cooling water supply.

G. Antidegradation (38 M.R.S. § 464(4)(F))

For this standard, the Applicant must demonstrate that the Project waters maintain existing in-stream water uses occurring on or after November 28, 1975. The Department may approve a WQC pursuant to Section 401 of the CWA if the standards of classification of the water body and the State antidegradation policy are met, or for a project affecting a water body in which the standards are not met, if the Project does not cause or contribute to the failure of the water body to meet the standards of classification.

1) Discussion and Findings

The Department finds that Construction of the Project began in 1890 and the Project first generated electricity in 1903. The Middle Dam, the Middle Dam Canal, and the Lower Station's headgate structure were built from 1890 to 1892. Construction of the Lower Station was completed in 1954. The concrete gravity dam in the Upper Station development was constructed in 1916. The Old Station in the Upper Station Development was constructed in 1910 and the New Station was completed in 1918. The Applicant purchased the Project in 2006 and automated the Project for remote operation. From 2007 to 2010, the Applicant upgraded Units 1 and 2 in the Lower Station and Unit 3 in the Upper Station and installed the Obermeyer spillway system on the Upper Dam.

While structures have been replaced and maintained over time, in-stream uses are generally the same on and after November 1975 and include hydropower generation, recreation in and on the water including fishing and navigation, and as habitat for fish and other aquatic life. Based on the evidence on record, the Department determines that Project operations will meet the requirement of the antidegradation policy provided the Project is operated in accordance with the requirements and conditions of this WQC.

H. Historic and Cultural Resources

Assessment of historic and cultural resources is not a statutory requirement for WQC. However, the National Historic Preservation Act at Section 106 requires FERC to account for the impact of hydropower facilities on historic properties. FERC requires the Applicant to prepare a Historic Properties Management Plan as a license condition, and the Maine Historic Preservation Commission (MHPC) reviews the impact of hydropower

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projects on cultural resources under agreement with the Advisory Council on Historic Preservation. Therefore, inclusion of MHPC review in the WQC is appropriate.

1) Discussion and Findings

The Applicant filed a Historic Architectural Survey Report with FERC, which was reviewed by MHPC. MHPC concluded that the proposed measures to the Project will have no adverse effect upon historic properties. The Department finds that the proposed enhancement, mitigation, and protection measures will have no adverse effect upon historic properties.

5. PUBLIC COMMENTS

On June 20, 2024, the Department issued a draft Order approving water quality certification for the continued operation of the existing Rumford Falls Hydroelectric Project. The deadline for comments was 5:00 P.M. on July 19, 2024.

Comments on the draft WQC were received from the Applicant, MDIFW, one citizen, and a collective comment from American Whitewater, Maine Rivers, and Maine Council of Trout Unlimited (NGOs). Comments were reviewed and incorporated into the final Order, as appropriate. Comments pertinent to water quality standards are addressed below.

The Applicant provided comments correcting language from application materials and clarifying terms, which are incorporated into the final Order, as appropriate.

The Applicant provided comments supporting their proposed minimum flow rate of 95 cfs in the Middle Dam bypass reach, instead of the year-round minimum flow of 200 cfs from the Middle Dam into the Middle Dam bypass reach listed in the Draft WQC by the Department. Additionally, the Applicant commented that their proposed minimum flow of 54 cfs during winter and early spring periods is justified and requests further consideration of the proposed minimum flows.

MDIFW provided comments in support of the 200 cfs minimum annual flow from the Middle dam into the Middle dam bypass reach. MDIFW requests a boat launch, parking, and portage area to be located on the Upper Impoundment near the boater barrier and requests clarification on the closure of the Logan Brook Access. MDIFW requests the Applicant develop or dedicate 4-6 of the existing parking spaces at the Rumford Public Library for additional recreational use. MDIFW recommends that one or two sets of

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stairways be required of the Applicant on the east side of the Middle dam bypass reach. The Department determined that the access improvements and Recreation Management Plan proposed by the Applicant and required by FERC²⁸ are sufficient to meet the Class C designated use of recreation in and on the water and fishing. These comments are incorporated into the final Order, as appropriate.

Comments from NGOs were similar to the citizen comment, and these comments will be addressed jointly (NGOs). NGOs request that comments submitted in connection with FERC's DEA be included in the administrative record for this matter. The NGOs comment that the Department's description of the composition of the upper falls does not adequately describe the entirety of the upper falls' geological composition. The NGOs disagree with the Department's statement that the upper falls conditions create poor habitat for fish and most aquatic invertebrates at any flow. The NGOs comment that increased flows would result in increased vegetation that would support a resident aquatic community. NGOs compare the upper falls to that beneath the Middle dam and Ripogenus Dam on the West Branch of the Penobscot River. The average gradient of the upper falls is 9% and steeper sections of the upper falls are 50%. The Middle dam bypass reach has an average gradient of 1.8%, and beneath Ripogenus dam has an average gradient of 3.6%. Requiring increased minimum flows would not alter the defining characteristics of the upper falls.²⁹ No studies were completed in the upper falls because the reach is too dangerous to allow sampling. The Department analyzed aquatic life and habitat conditions at the Project in Section 4(A) above. These comments are incorporated into the final Order, as appropriate.

NGOs comment that flows in the upper falls are insufficient to support the Class C designated use of recreation in and on the water. The Department disagrees. While aesthetics are not a statutorily designated use, Condition 3(C) requires ten days of aesthetic flow releases rather than the three proposed by the Applicant, as commented on and requested by the Town of Rumford, and supported by NGOs in their comment.

NGOs comment on the lack of fish passage for indigenous species provided by the project. NGOs requested smaller trash racks, adequate fish passage, and higher flows over the Upper Dam. Fish passage at the Project was evaluated above in Section 4(A)(3).

NGOs comment that the Project does not meet the Department's wetted width policy. The Department recognized the site limitations associated with the steep channel gradient and morphology and analyzed site specific conditions above in Section 4(A)(2).

²⁸ See FEA.

²⁹ See also MDIFW FLA comments.

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6. <u>DEPARTMENT CONCLUSIONS</u>

BASED on the above Findings of Fact and the evidence contained in the application and supporting documents, and subject to the conditions listed below, the Department CONCLUDES that the continued operation of the RUMFORD FALLS HYDROELECTRIC PROJECT, as described above, will result in all waters affected by the project being suitable for all designated uses and meeting all other applicable water quality standards, provided that:

- A. The Applicant provided sufficient evidence and the Department finds and determines that, as discussed in Section 4(B)(1) and (2) and provided the Applicant complies with Conditions 2(A)-(B) below, the Project meets the classification standards for aquatic habitat in the Project impoundment and in the outlet waters below the Project dam. The Department concludes that water discharged from the impoundment meets the classification standards for Class C waters. 38 M.R.S. § 465(4)(A).
- B. The Applicant provided sufficient evidence and the Department finds and determines that, as discussed in Section 4(A)(3) above, Project operations related to fish passage will meet the narrative classification standards related to the designated use of habitat for fish and other aquatic life. 38 M.R.S. §§ 465(4)(A), (C).
- C. The Applicant provided sufficient evidence and the Department finds and determines that, as discussed in Section 4(C) and provided the Applicant complies with Conditions 3(A)-(D), the Middle Dam and Upper Dam impoundments and outlet waters downstream of the Project dams meet the remaining narrative classification standards for Class C waters and are determined to be of such quality that they are suitable for the designated uses of drinking water after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation; and navigation. 38 M.R.S. § 465(4)(A).
- D. The Applicant provided sufficient evidence that DO concentrations in the Androscoggin River below the Upper and Middle Dams meet the applicable Class C DO standard. The Department concludes that the DO concentrations in the Androscoggin River meet applicable numeric Class C DO standards. 38 M.R.S. § 465(4)(B).
- E. The Applicant provided sufficient evidence and the Department finds and determines that existing in-stream uses which have actually occurred on or after November 28, 1975, and the level of water quality necessary to protect those uses are maintained. The Department concludes that the Project meets the state's antidegradation policy. 38 M.R.S. § 464(4)(F)(3).

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7. DECISION AND ORDER

THEREFORE, the Department APPROVES the water quality certification of RUMFORD FALLS HYDRO LLC and GRANTS certification pursuant to Section 401(a) of the Clean Water Act that there is a reasonable assurance that the continued operation of the RUMFORD FALLS HYDROELECTRIC PROJECT, as described above, will not violate applicable water quality standards, SUBJECT TO THE FOLLOWING CONDITIONS:

1) WATER LEVELS

- A. Except as temporarily modified by 1) approved maintenance activities, 2) extreme hydrologic conditions, 30 genergency electrical system conditions, 31 or 4) agreement between the Applicant, the Department, and appropriate state and/or federal agencies, Middle Dam impoundment water levels must be maintained within 1 foot of full pond elevation, 502.74 feet. Upper Dam impoundment water levels must be maintained within 1 foot of full pond elevation, 601.24 feet.
- B. These conditions regarding water levels are necessary to ensure that the discharge from the Project will comply with water quality requirements, including those found at 38 M.R.S. § 465(4)(A) and as discussed above at Section 4(A) and (C). The water levels of the impoundment, which are determined by the discharge, affect, among other things, the water quality requirements of the designated uses of fishing; recreation in and on the water; navigation; and habitat for fish and other aquatic life.

2) MINIMUM FLOWS

A. Except as temporarily modified by 1) approved maintenance activities, 2) extreme hydrological conditions (see footnote 30), 3) emergency electrical system conditions (see footnote 31), or 4) agreement between the Applicant, the Department and appropriate state and/or federal agencies, the Applicant must

³⁰ For the purpose of the certification and Order, extreme hydrologic conditions mean the occurrence of events beyond the Licensee's control such as, but not limited to, abnormal precipitation, extreme runoff, flood conditions, ice conditions, drought, or other hydrologic conditions such that operational restrictions and requirements contained herein are impossible to achieve or are inconsistent with the safe operation of the Project.

³¹ For the purpose of this certification and Order, emergency electrical system conditions mean operating emergencies beyond the Licensee's control which require changes in flow regimes to eliminate such emergencies which may in some circumstances include, but are not limited to, equipment failure or other temporary abnormal operating conditions, generating unit operations or third-party mandated interruptions under power supply emergencies, and orders from local, state, or federal law enforcement or public safety authorities.

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provide a year-round minimum flow of 1 cfs or leakage from the Upper Dam into the Upper Dam bypass reach and 200 cfs from the Middle Dam into the Middle Dam bypass reach.

B. These conditions regarding minimum flows are necessary to ensure that the discharge from the Project will comply with water quality requirements, including 38 M.R.S. § 465(4)(A) as discussed above at Section 4(A) and (C). The flow of the discharge from the Project affects, among other things, whether the receiving waters are of sufficient quality to support the designated uses of fishing; recreation in and on the water; navigation; and habitat for fish and other aquatic life.

3) RECREATIONAL ACCESS AND USE

- A. The Applicant must continue to provide formal and informal access to the Project waters upstream and downstream of the Project dam for the purpose of recreation in and on the water, for fishing, and for navigation to the extent possible, for the term of a New License.
- B. If sufficient inflow is available, the Applicant must provide whitewater boating flow releases into the Middle Dam bypass reach with a target flow ranging from 1,200 to 1,500 cfs for ten days (total), June through August, 10 am to 3pm, to be determined based on consultation with the Town of Rumford and American Whitewater.
- C. If sufficient inflow is available, the Applicant must provide aesthetic flow releases into the Upper Dam bypass reach with a target flow ranging from 1,200 to 1,500 cfs for ten days (total), June through August, 10 am to 4pm, to be determined based on consultation with the Town of Rumford.
- D. These conditions are necessary to ensure that the discharge from the Project will comply with water quality requirements, including 38 M.R.S. § 465(4)(A), as discussed above at Section 4(A) and (C). Because the discharge affects, among other things, the water level of the impoundment and the flow downstream of the dam, it necessarily affects the water quality requirements of the designated uses of fishing, recreation in and on the water, and navigation, among others.

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4) WATER QUALITY

Upon any future determination by the Department that operation of the Rumford Falls Project, as approved by the certification and as conditioned by FERC for the Project, may be causing or contributing to a decline in water quality or non-attainment of water quality standards, the Department reserves the right to, in its discretion and upon notice to the Applicant and opportunity for hearing in accordance with its regulations, reopen this certification to consider requiring modifications to the certification or additional conditions as may be deemed necessary by the Department to ensure that the Project does not cause or contribute to any decline in water quality or non-attainment of water quality standards.

5) STANDARD CONDITIONS

The Applicant must comply with all Standard Conditions attached to the certification, with such compliance to be determined by the Department.

6) LIMITS OF APPROVAL

This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to the Department by the Applicant. Any variations from the plans and proposals contained in said documents are subject to the review and approval of the Department prior to implementation.

7) COMPLIANCE WITH ALL APPLICABLE LAWS

The Applicant must secure and appropriately comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and Orders required for the operation of the Project, in accordance with the terms and conditions of the certification, as determined by the Department.

8) EFFECTIVE DATE

This water quality certification will be effective concurrent with the effective date of the New License issued by FERC for the Project.

9) SEVERABILITY

In the event any provision, or part thereof, of this certification is declared to be unlawful by a reviewing court, the remainder of the certification will remain in full force and

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effect, and will be construed and enforced in all respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

DONE AND DATED AT AUGUSTA, MAINE, THIS 16TH DAY OF AUGUST, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: May

For: Melanie Loyzim, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

LP/L02430733GN/ATS91382

FILED

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STANDARD CONDITIONS

Noncompliance. Should the project be found, at any time, not to be in compliance with any
of the conditions of this approval or should the permittee construct or operate this project in
any way other than specified in the application or supporting documents, as modified by
the conditions of this approval, then the terms of this approval will be considered to have
been violated.

- 2. Inspection and Compliance. Authorized representatives of the Commissioner or the Attorney General must be granted access to the premises of the permittee at any reasonable time for the purpose of inspecting the operation of the project and assuring compliance with the conditions of this approval.
- 3. Assignment of Transfer of Approval. This approval will expire upon the assignment or transfer of the property covered by this approval unless written consent to transfer this approval is obtained from the Commissioner. To obtain approval of transfer, the permittee must notify the Commissioner 30 days prior to assignment or transfer of property which is subject to this approval. Pending Commissioner determination on the application for a transfer or assignment of ownership of this approval, the person(s) to whom such property is assigned or transferred must abide by all of the terms and conditions of this approval. To obtain the or Commissioner's approval of transfer, the proposed assignee or transferee must demonstrate the financial capacity and technical ability to (1) comply with all terms and conditions of this approval and (2) satisfy all other applicable statutory criteria.

A "transfer" is defined as the sale or lease of property which is the subject of this approval or the sale of 50 percent or more of the stock of or interest in a corporation or a change in a general partner of a partnership which owns the property subject to this approval.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: August 2021 Contact: (207) 314-1458

SUMMARY

This document provides information regarding a person's rights and obligations in filing an administrative or judicial appeal of a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner.

Except as provided below, there are two methods available to an aggrieved person seeking to appeal a licensing decision made by the DEP Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

A person filing an appeal with the Board should review Organization and Powers, 38 M.R.S. §§ 341-D(4) and 346; the Maine Administrative Procedure Act, 5 M.R.S. § 11001; and the DEP's *Rule Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

Not more than 30 days following the filing of a license decision by the Commissioner with the Board, an aggrieved person may appeal to the Board for review of the Commissioner's decision. The filing of an appeal with the Board, in care of the Board Clerk, is complete when the Board receives the submission by the close of business on the due date (5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board, as determined by the received time stamp on the document or electronic mail). Appeals filed after 5:00 p.m. on the 30th calendar day from which the Commissioner's decision was filed with the Board will be dismissed as untimely, absent a showing of good cause.

HOW TO SUBMIT AN APPEAL TO THE BOARD

An appeal to the Board may be submitted via postal mail or electronic mail and must contain all signatures and required appeal contents. An electronic filing must contain the scanned original signature of the appealant(s). The appeal documents must be sent to the following address.

Chair, Board of Environmental Protection c/o Board Clerk 17 State House Station Augusta, ME 04333-0017 ruth.a.burke@maine.gov The DEP may also request the submittal of the original signed paper appeal documents when the appeal is filed electronically. The risk of material not being received in a timely manner is on the sender, regardless of the method used.

At the time an appeal is filed with the Board, the appellant must send a copy of the appeal to: (1) the Commissioner of the DEP (Maine Department of Environmental Protection, 17 State House Station, Augusta, Maine 04333-0017); (2) the licensee; and if a hearing was held on the application, (3) any intervenors in that hearing proceeding. Please contact the DEP at 207-287-7688 with questions or for contact information regarding a specific licensing decision.

REQUIRED APPEAL CONTENTS

A complete appeal must contain the following information at the time the appeal is submitted.

- 1. *Aggrieved status*. The appeal must explain how the appellant has standing to bring the appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
- 2. The findings, conclusions, or conditions objected to or believed to be in error. The appeal must identify the specific findings of fact, conclusions of law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
- 3. The basis of the objections or challenge. For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing criteria that the appellant believes were not properly considered or fully addressed.
- 4. *The remedy sought*. This can range from reversal of the Commissioner's decision on the license to changes in specific license conditions.
- 5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
- 6. Request for hearing. If the appellant wishes the Board to hold a public hearing on the appeal, a request for hearing must be filed as part of the notice of appeal, and it must include an offer of proof regarding the testimony and other evidence that would be presented at the hearing. The offer of proof must consist of a statement of the substance of the evidence, its relevance to the issues on appeal, and whether any witnesses would testify. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
- 7. New or additional evidence to be offered. If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed supplemental evidence must be submitted with the appeal. The Board may allow new or additional evidence to be considered in an appeal only under limited circumstances. The proposed supplemental evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Requirements for supplemental evidence are set forth in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made accessible by the DEP. Upon request, the DEP will make application materials available to review and photocopy during normal working hours. There may be a charge for copies or copying services.

- 2. Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing the appeal. DEP staff will provide this information upon request and answer general questions regarding the appeal process.
- 3. The filing of an appeal does not operate as a stay to any decision. If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a licensee may proceed with a project pending the outcome of an appeal, but the licensee runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will acknowledge receipt of an appeal, and it will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials admitted by the Board as supplementary evidence, any materials admitted in response to the appeal, relevant excerpts from the DEP's administrative record for the application, and the DEP staff's recommendation, in the form of a proposed Board Order, will be provided to Board members. The appellant, the licensee, and parties of record are notified in advance of the date set for the Board's consideration of an appeal or request for a hearing. The appellant and the licensee will have an opportunity to address the Board at the Board meeting. The Board will decide whether to hold a hearing on appeal when one is requested before deciding the merits of the appeal. The Board's decision on appeal may be to affirm all or part, affirm with conditions, order a hearing to be held as expeditiously as possible, reverse all or part of the decision of the Commissioner, or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the licensee, and parties of record of its decision on appeal.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board Clerk at 207-287-2811 or the Board Executive Analyst at 207-314-1458 bill.hinkel@maine.gov, or for judicial appeals contact the court clerk's office in which the appeal will be filed.

Note: This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, is provided to help a person to understand their rights and obligations in filing an administrative or judicial appeal. The DEP provides this information sheet for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.