



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

March 2, 2026

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: Brunswick Hydroelectric Project-Initial Study Report Comments (FERC No. 2284)

Dear Secretary Bose:

The Maine Department of Environmental Protection (Department) received and reviewed the Initial Study Report (ISR), submitted on December 31, 2025, by Brookfield White Pine Hydro LLC. Department staff reviewed appropriate Project documents to prepare the following comments and recommendations.

The Brunswick Project is subject to water quality certification provisions under Section 401 of the Federal Water Pollution Control Act (Clean Water Act). By Executive Order of the Governor of the State of Maine, the Department is the certifying agency for Projects located wholly or partially in organized towns and cities and, as such, has jurisdiction over the Project.

Comments on the Initial Study Report

Appendix A-Water Quality Assessment Initial Study Report

1. Introduction

- The first sentence of 1.1 Background, states: “Maine statute 38 Maine Revised Statutes Article (MRSA) §464-470 establishes the State’s classification system of surface waters”. The Department recommends the following revision: “Title 38, Article 4-A of the Maine Revised Statutes (38 M.R.S. §§464-470) establishes the State’s Water Classification Program.”
- In Table 1.1, the Department recommends adding “Discharges” in front of “May not cause” for the Aquatic Life parameter.
- It is of note that the pH criteria listed in Table 1.1 only applies to discharges. Although it has been proposed in the Triannual Review (TR) of Water Quality Standards, it is not currently a statewide ambient criterion. Reference 38 M.R.S.

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§464 4(A)(5). Table 1.1 Water Quality Standards should be adjusted accordingly. As a part of the Triannual Review, changes are being proposed for the Class B dissolved oxygen criteria. If adopted, these changes should be considered in the relicensing process and incorporated as needed into future documents. All license applications are subject to the substantive laws and rules in effect on the date the application is accepted as complete for processing. 06-096 C.M.R. Ch. 2.

- Chapter 583: Nutrient Criteria for Class AA, A, B, and C Fresh Surface Waters, went into effect on June 11, 2025, and includes numeric criteria for phosphorus (TP) and chlorophyll *a* collected from June through September. Table 1-1 and the analysis should be adjusted as follows.

The TP value listed in Table 1-1 aligns with the adopted Class B criteria for riverine impoundments, but it should be calculated as the geometric mean of all data collected in the applicable season (i.e., October values should not be included in the calculation). This information should be included in Table 1-1, and calculations should be included in the report.

The Chlorophyll *a* criterion should also be added to the table as follows: spatial geometric mean of £ 8.0 and no value > 10.0 mg/L. The chlorophyll *a* criterion is the spatial geometric mean, which in the rule is defined as the geometric mean of multiple measurements of chlorophyll *a* that were collected at different locations in an impoundment. This calculation may include data collected at different times during a season. In the Brunswick study, chl *a* was measured at one location throughout the season. The Department finds that it is adequate to calculate the seasonal geometric mean for that location. As noted above, October data should not be included in the calculation.

2. Impoundment Trophic State Study

- On Page 14, the web address in the citation for MDEP 1996 leads to a broken link. The correct link is:

<https://www.maine.gov/sos/sites/maine.gov.sos/files/content/assets/096c581.doc>

- The TSI equation for chlorophyll is incorrect. The correct equation to use for this calculation is:

$$TSI_{Chlorophyll} = 70 \times \log(\text{mean Chlorophyll} + 0.71)$$

Department Requests on the ISR

Appendix B- Tailwater Benthic Macroinvertebrate Study

The DEP Biological Monitoring Unit completed processing macroinvertebrate data from Station S-1298 below the Brunswick Falls dam, and an Aquatic Life Classification Attainment Report is now available. The macroinvertebrate community sampled at this station in 2025 attained aquatic life criteria for Class C ($p = 1.00$) but did not attain criteria for Class B. The community was dominated by highly tolerant genera, including two midges (*Dicrotendipes* and *Ablabesmyia*), a flatworm (*DugesIIDae*), two snail taxa (*Physella* and *Amnicola*), and a tolerant caddisfly (*Oecetis*), which together comprised approximately 73.5 percent of community abundance. Stonefly mean abundance was very low (1.33). EPT generic richness (mayflies, stoneflies and caddisflies) was 14, however many of the taxa present were either relatively tolerant or occurred in low numbers.

Substrate composition recorded by Normandeau Associates in the field was appropriate for macroinvertebrate rock basket sampling according to required DEP protocols and is not a likely factor in the class attainment result. The Initial Study Report states that the sampled area is tidally influenced, however specific conductance and total dissolved solids measurements recorded in the field at basket deployment (7/28/2025, 78.4 uS/cm, 51 PPM) and retrieval (8/26/2025, 93.2 uS/cm, 61 PPM) were not in the range to indicate brackish or saline conditions during the sampling period.

More information is needed regarding the range of any freshwater tidal fluctuations over the period when rock baskets were deployed to determine potential impacts on the macroinvertebrate community. The Department requests a Tailwater Benthic Macroinvertebrate Study to be repeated at a different sampling site. Please see the attached study request.

Thank you for the opportunity to comment on the ISR for the Brunswick Project. Please feel free to contact me at (207) 355-5307 or via email at Claire.Briggs@Maine.gov if you have any questions regarding these comments.

Sincerely,

Claire Briggs

Claire Briggs
Hydropower Specialist
Maine Department of Environmental Protection

Cc: Michael Scarzello, Brookfield White Pine Hydro LLC