

As homeowners on the Norwood Raquette River Impoundment we would like to offer public comment in regard to Brookfield's certification.

This impoundment is described by FERC as:

FERC Project No. 2330 - Norwood - Consists of a 24-foot-high by 188-foot-long dam with 1-foot-high wooden flashboards, a 350-acre reservoir, a gated concrete intake structure with trashracks and a log chute, a powerhouse containing a 2,000-kilowatt (kW) generating unit, a 3-mile-long transmission line, and appurtenant facilities.

We feel Brookfield's application for certification should receive extra scrutiny due to deficiencies and omissions in the following criteria categories:

6 3.2.1 Criterion A - Ecological Flow Regimes

6 3.2.2 Criterion B - Water Quality

9 3.2.5 Criterion E – Shoreline and Watershed Protection

11 3.2.8 Criterion H - Recreational Resources

As background this impoundment is relatively shallow and is impacted significantly by the 1-foot-high wooden flashboards that are put around Memorial Day and taken off around Labor Day and are for the recreational benefit during the summer.

Aside from the seasonal fluctuations from the flashboards, the last three years, there have been significant, extended duration drawdowns. The reservoir was lowered 10+ ft in September of 2017 with no notice to property owners. See video: https://youtu.be/L_Nq1d4mG-0?t=110. Again in September 2018, the reservoir was lowered several feet below the dam crest and stayed at lower levels until August 2019 with a brief change in water levels for the spring run-off. The brief change in levels is due to the reservoir operating in a "run of river" configuration.

As can be seen from the video, there was significant exposure of the reservoir bed during these drawdowns leading to extensive mollusk and fish kill, as well as degradation of the shoreline habitat and increased shoreline erosion from runoff. At the current time, visual inspection finds the mollusk level is reduced so as to be near non-existent.

An assessment by a local aquatic biologist estimated as many as 70 million mussels were killed as result of the 2017 drawdown alone.

It is especially concerning that these drawdowns are not mentioned in the applications. The third term certification (October 2015) provided by LIHI stated:

Facility owner shall provide annual reports to LIHI documenting operational deviations from instream flow or pond levels that occurred throughout each year of certification. The report shall describe all deviations that have occurred, regardless of whether the deviations were planned or unintentional or whether they are eventually deemed as not violating the license by FERC. The report is due at the same time as the annual compliance statement and payment of the annual certification fee.

We do not see any evidence of such reporting and the deviations are not documented in this year's application.

We recognize the need to maintain the dam, however, the lack of timely communication and information about remediation from these drawdowns is of concern. Brookfield has a local compliance officer but information requests from that individual generally go unanswered. The

infrequent and scant communication we do receive comes from a regional manager responsible for stakeholder relations.

We feel this lack of communication is inconsistent with the goals of the LIHI stating :

Goal: The facility accommodates recreation activities on lands and waters controlled by the facility and provides recreational access to its associated lands and waters without fee or charge.

*Introduction to Standards: To pass the recreation criterion for LIHI certification, the applicant shall demonstrate compliance with at least one of the following standards. In all cases, the **applicant shall demonstrate that flow-related recreational impacts are mitigated to a reasonable extent in all zones where there is flow-related recreation.** Where there is recognized, flow-related recreational use, **the facility shall provide the public with relevant and up-to-date information on reservoir levels and river flows, preferably real-time updates.** It is understood that recreational activities must be consistent with the assurance of reasonable safety of employees and the public, and with critical infrastructure protection dictated by state or federal authorities.*

This type of communication is not occurring.

In addition to the drawdown, concerns about water quality have also not been addressed. The following video: https://youtu.be/HceJEOWNJ_Y?t=159 was sent to Brookfield with concerns about the large quantities of foam observed on the reservoir, but no response was received from Brookfield.

From these drawdowns the following have gone unaddressed or, if addressed, have not been communicated.

Shoreline erosion

Ecological impact – there is a study from one of the drawdowns that 70 million mussels were killed.

Impact on the water quality

On-going concerns not related to the drawdowns:

Invasive milfoil – we are not aware of any efforts by Brookfield to address this issue with local communities other than to recognize that it is an issue.

Recreation – During the spring, summer and autumn, homeowners along the waterfront as well as non-residents who access the water at a public boat launch use the impoundment for fishing, swimming, and both motorized and non-motorized boating. A primary recreational use is crew rowing with a vibrant collegiate and community rowing program. There is no community input as to when the flashboards are put on and taken off and how the recreational community is affected.

Because of the shallow nature of the impound there are hazards that have not been identified and marked.

Please let us know if there are any questions.

Norwood Lakefront Owners' Assoc.

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