

# FISHER FORESTRY, LLC

72 Nashua Rd.  
Windham, NH 03087

January 5, 2019

Shannon Ames, Executive Director  
Low Impact Hydropower Institute  
329 Massachusetts Avenue, Suite 2  
Lexington, MA 02420

**Re:** Request to Appeal LIHI Recertification Decision on the Beaver River Project

Dear Ms. Ames,

I am requesting an appeal of LIHI's preliminary determination that the Beaver River Hydroelectric Project qualifies for recertification. My comments in support of the appeal are detailed below.

**Specific Flooding Concerns of Beaver Lake Property Owners:** Beaver Lake property owners are raising the same issues of flooding with associated environmental damage that was raised with FERC in 1996 resulted in FERC requiring a Settlement Agreement between Niagara Mohawk and the complainants before renewing Niagara Mohawk's license. Erie's operations are causing the same issues today that Niagara Mohawk caused in 1996 when their FERC License came up for . There is much discussion about causes of lake fluctuation associated with unregulated tributaries and the impact of precipitation events within the Beaver Lake watershed. LIHI's Condition #1 seeks to "...adequately identify the causes of fluctuation on Beaver Lake..." Condition #1 unnecessarily pushes this issue right back to 1996, which resulted in the USGS Study to identify sources of water in the Beaver Lake watershed during precipitation events that result in flooding. Beaver Lake property owners understand and are tolerant of flooding due to heavy rain events or spring thaws. Their complaint is twofold:

1. Flooding and damage caused by Erie's operations during times when there are no precipitation events.
2. The significant additional flooding and damage caused by Erie's operations during precipitation events.

Erie hydropower operations in and of themselves are causing significant flooding and environmental damage. Discussions about precipitation events, causes of adverse lake fluctuations are not pertinent. Beaver Lake property owners have already been dealing with these issues for well over 20 years and are well aware of natural and man-caused impacts. They are simply asking LIHI to hold Erie accountable for complying with FERC License No. 2645 and the associated Settlement Agreement, of which they are currently in violation. Supporting information is provided below.

**Eagle impoundment flashboards:** Mr. Maguire states that: "*Erie operates the Eagle impoundment with the addition of static one-foot tall flashboards year-round, a request made to Erie's predecessor by the Beaver Lake Association years ago. This additional flashboard elevation benefits the local wetlands and habitat and further improves boating and other recreational activities at Beaver Lake.*" There was no Beaver Lake Association prior to Erie taking over the Beaver River Hydroelectric project. Beaver Lake and its associated wetlands are a naturally occurring body of water. Artificially flooding natural wetlands with additional water is certainly not a wetlands benefit nor is it low impact. What authority does Erie have to intentionally raise the level of a naturally occurring lake and inundate its wetlands?

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**Beaver Lake Hydraulics and US Geological Survey Analysis:** The USGS study was limited to the hydrological relationship between Beaver Lake and the Moshier hydroelectric facility, upstream from Beaver Lake. It does not address operations of the Eagle impoundment or HRBR Regulating District operations at Stillwater reservoir. There are several points to be clarified here:

1. In regard to the USGS analysis, Mr. Maguire states: *“When both [Moshier] generating units are operating at full capacity, a rise of fifteen (15) inches can be expected. This is mainly due to Beaver Lake’s hydrological constraint at its outlet.*

There is no mention in the USGS study of a hydrological constraint at Beaver Lake’s outlet contributing to the rise in lake level. A “natural constriction” is also mentioned in other documentation associated with these analyses. In fact, there is no restriction in the outlet relevant to the issue being raised by Beaver Lake property owners. (See attachment #1). Raising the level of Beaver Lake by 15 inches certainly has an impact on nesting loons and shoreline erosion. Is this low impact in accordance with LIHI standards?

2. The study states: *“What the USGS measurements indicate is that there are significant flows into Beaver Lake from sources other than the Beaver River. Because these sources are unregulated, they tend to have a significant impact on Beaver Lake after storm events and during particularly wet season.* (emphasis by USGS).

As previously stated, Beaver Lake property owners understand and are tolerant of flooding due to heavy rain events or spring thaws. However, Beaver Lake is flooded by Erie when there are no storm events or wet seasons. For example, on December 10, 2018, resident Mr. Peter Miller found that the lake had risen a full foot. Upon investigation, Erie told him that the Eagle turbines had been shut down for maintenance. Erie took no action to increase bypass flows to mitigate the lack of flow through the turbines. They simply allowed the water level to rise without regard to ice and water damage upstream at Beaver Lake. Erie stated to Mr. Miller that the water level will come down once the maintenance was completed. Indeed, the water level did recede quickly once maintenance was completed. This further confirms that there is no relevant constraint at the outlet. This high water was directly caused by Erie’s operational actions at the Eagle impoundment. This demonstrates a lack of regard for their regulatory responsibility for managing the outflow from Beaver Lake. Erie has even stated that they will not open the Eagle sluice gate to increase bypass flows in managing their allowable reservoir area. Operations at Eagle are not mentioned in the USGS report even though they are a contributor to the flooding of Beaver Lake for which residents are seeking relief from LIHI. It is noteworthy that Mr. Maguire’s response references managing flows into Beaver Lake, but not outflows from Beaver Lake.

3. The USGS study also did not address the impact on flooding caused by HRBRRD releases from Stillwater Reservoir – a significant cause of flooding. Mr. Maguire states: *“Erie works diligently with the HRBRRD to coordinate releases into the Beaver River to meet all applicable regulatory requirements and to minimize downstream impacts. This coordination includes monthly meetings along with daily communication to discuss hydrological conditions.”*

In the late spring or early summer, HRBRRD regularly releases up to 900 cfs for weeks at a time. This release into the Beaver River far exceeds Erie’s outflow capacity (695 cfs) at its downstream Eagle impoundment, especially when they refuse to increase the Eagle bypass flow from the required 45 cfs. If Erie does *“...work diligently with the HRBRRD...”*, they are knowingly and willingly flooding Beaver Lake for weeks at a time. During this flooding at least two feet of water

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is flowing over the flashboards at the Eagle impoundment. As required by Erie's FERC License, maximum daily and seasonal Eagle reservoir fluctuation must be limited to 1.0 foot from the normal maximum headwater elevation. This fluctuation limit is between elevations 1,425.2 and 1,426.2 feet with flashboards installed. It is obvious that this level of man-caused flooding is a violation of Erie's license.

**Erie Letter Summary:** *"Erie remains cognizant of the well-known hydraulic challenges associated with Beaver Lake and Erie acts to minimize the impact of precipitation event on Beaver Lake residents through adjustments to flow from generation at the Moshier Facility and coordination with the HRBRRD."*

This only references "...impact of precipitation event...", which omits management of operational activity that results in man-caused flooding. It also ignores Eagle impoundment operations.

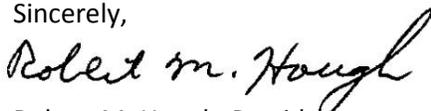
Contrary to Mr. Maguire's letter, Erie does not "...actively engage with Beaver Lake residents...". Since resident comments were sent to LIHI, Erie has not contacted a single resident to discuss this issue. Mr. Maguire has never even been to Beaver Lake to assess and understand the damage being done to the ecology. Nor does the Beaver River Advisory Council (BRAC) actively engage with Beaver Lake property owners. Most Beaver Lake residents are unaware of BRAC, what it has done, or how it has spent its money in support of Beaver Lake issues. Beaver Lake residents are not members of BRAC nor do they have representation on BRAC.

Given the unsupported nature of Eries's response to Beaver Lake residents' concerns, I again ask LIHI to deny Erie's application as did FERC in 1996 for the same issues. Unless their application is denied, there is no incentive for Erie to work honestly and transparently with Beaver Lake property owners to resolve the ongoing flooding problems.

Finally, given the number of complaints LIHI received against Erie, it is insufficient for Erie to merely state that they are compliant with flow and reservoir requirements. At a minimum, LIHI certification should require data for evidence of compliance, especially for the Eagle impoundment.

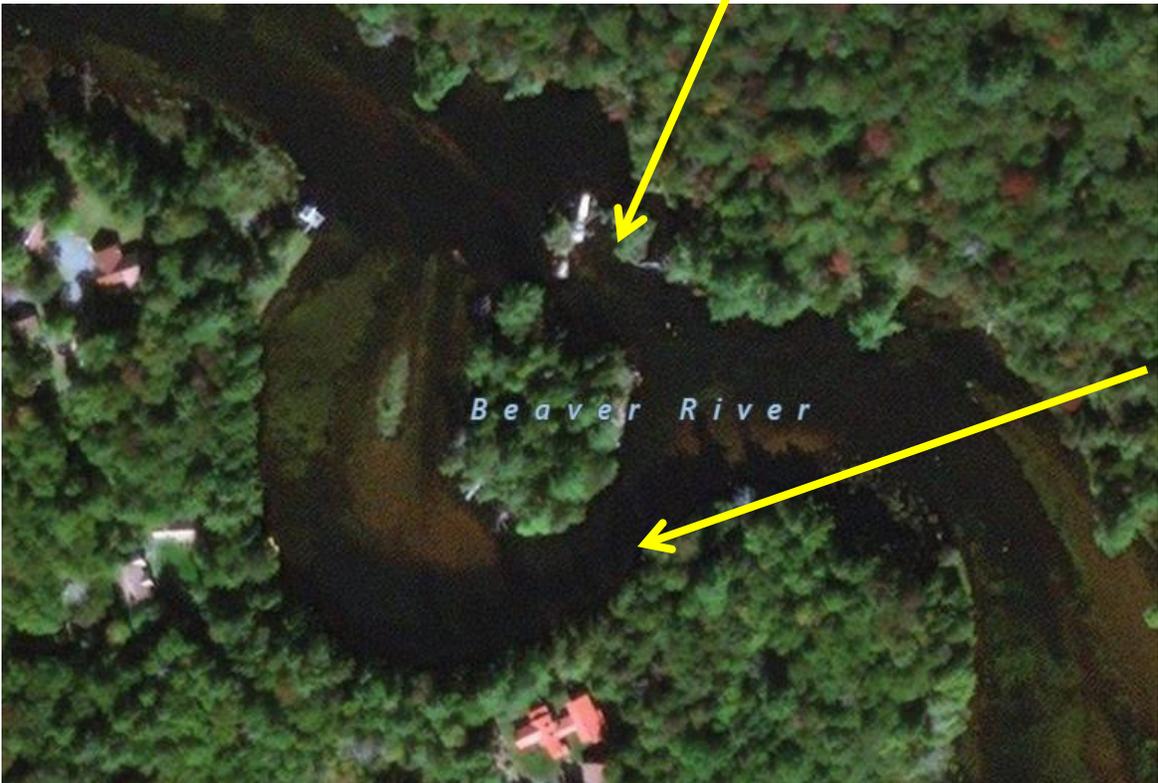
Thank you for your consideration of this request for appeal of the preliminary determination that the Beaver River Hydroelectric Project qualifies for recertification. I trust the information above provides clarification of the concerns of Beaver Lake property owners and the issues that indicate Erie is in violation of their FERC License and the associated Settlement Agreement.

Sincerely,



Robert M. Hough, President  
rmhough44@yahoo.com  
603-490-8215

Attachment #1



Water easily flows around this constriction and so it is not relevant to Beaver Lake property owners' concerns in regard to flooding.